



प्रज्ञानं ब्रह्म



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Evaluative Reports 2015

Vol. 2B

Health Sciences Program - Other institutions at Manipal (Except KMC)

Submitted to

**National Assessment and Accreditation Council (NAAC)
for Re-accreditation**



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1. **Name of the College:** School of Allied Health Sciences (SOAHS)

2. **Year of establishment:** 1999

3. **Is the department part of a school/faculty of the University?**

Yes, it is a part of Kasturba Medical College (KMC), Manipal

4. **Names of programmes/ courses offered (UG, PG, MPhil., PhD Integrated Masters; Integrated PhD etc.,)**

SI No.	Programmes Offered	Duration (Years)
1	Bachelor of Audiology & Speech Language Pathology (BASLP)	4
2	BSc Cardiovascular Technology (BScCVT)	4
3	BSc Clinical Optometry (BScOPTM)	4
4	BSc Health Information Administration (BScHIA)	3
5	BSc Medical Imaging Technology (BScMIT)	4
6	BSc Medical Laboratory Technology (BScMLT)	4
7	BSc Medical Radiotherapy Technology (BScMRT)	4
8	BSc Nuclear Medicine Technology (BScNMT)	4
9	Bachelor of Occupational Therapy (BOT)	4 ½
10	BSc Operation Theatre & Anesthesia	3 ½
11	Bachelor of Physiotherapy (BPT)	4 ½
12	BSc Respiratory Therapy (BScRT)	4
13	BSc Renal Replacement Therapy & Dialysis Technology (BScRRT & DT)	4
14	BSc in Perfusion Technology	4
15	Master of Audiology & Speech Language Pathology (MASLP)	2
16	Master of Clinical Optometry	
17	MSc Echocardiography	2
18	MSc Hospital & Health Information Administration (MScHHIA)	2
19	MSc Medical Imaging Technology (MScMIT)	2
20	MSc Medical Laboratory Technology	2
	MSc MLT Clinical Biochemistry	
	MScMLT- Microbiology & Immunology	
21	MSc Medical Radiation Physics (MSc MRP)	2
22	MSc Nuclear Medicine Technology (MSc NMT)	2
23	Master of Occupational Therapy (MOT)	2
	MOT - Child health	
	MOT – Musculoskeletal conditions	
	MOT– Neurosciences	
	MOT– Mental Health & Psychosocial rehabilitation	
24	Master of Physiotherapy (MPT)	2
	MPT – Cardio-pulmonary Sciences	
	MPT – Community based Rehabilitation	
	MPT - Neuro Sciences	
	MPT- Orthopedics	

SI No.	Programmes Offered	Duration (Years)
	MPT – Women Health & Pediatrics	
25	MSc Respiratory Therapy (MScRT)	2
	MSc RT – Adult Respiratory Care	
	MSc RT – Neonatal & Pediatric Respiratory Care	
26	MSc Renal Replacement Therapy & Dialysis Technology (MScRRT &DT)	2
27	MPT(Dual Degree) Sports and Clinical Biomechanics	2
28	MSc Cardiac Cath and Interventional Technology	2
29	Msc Clinical Psychology	2
30	MPhil Clinical Psychology	2
31	Anaesthesia/ OT Technician	2
32	Cardiovascular Technician	2
33	Dialysis Therapy Technician	2 or 3
34	Endoscopy Technician	2
35	EEG/Neurophysiology Technician	2
36	ENT Technician	2
37	Emergency Medical Technician	2
38	Medical Laboratory Technician	2
39	Operation Theatre Technician	2
40	Radiotherapy Technician	2
41	Radiodiagnosis and Imaging Technician	2
42	Medical Imaging Technology(X-Ray)	2
43	Postgraduate Diploma in Healthcare Counseling and Management (PGDHCM)	1
44	ECG technician	1
45	Hand Splinting	1 month
46	Laboratory safety	1 month
47	Medical records management	2 weeks
48	Optometry technician	1 ½
49	Pulmonary Function test technician	1
50	Physician Assistant	1
51	Respiratory Therapy	1
52	Respiratory Lab Technician	1
53	Transfusion Medicine (Blood Bank)	6 months
54	Medical Coding & Billing	6 weeks
55	Voice Rehabilitation after Laryngectomy	6 months
56	Emergency Medical Technology	1 year/6 months
57	MSc Exercise and Sports Sciences	2

5. Interdisciplinary courses and departments involved

Sl. No	Department at SOAHS	Course & Subject	Collaborative Department/Institution
1	Health Information Management	M.Sc. Health Informatics	School of Information Sciences

2	Department of Physiotherapy	of	MPT in clinical Biomechanics	Robert Gordon University, Scotland, UK
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6. Courses in collaboration with other universities, industries, foreign institutions, etc.

- MPT in Sports and Clinical Biomechanics in collaboration with Robert Gordon University, Scotland
- Bridge program for BPT
- Bridge Program for BSc RT

7. Details of programmes/ courses discontinued, if any, with reasons

Nil

8. Annual/ Semester/Choice Based Credit System

Under Graduate Programmes					
Sl. No	Programmes	Duration	Annual	Semester	Credit
1	Bachelor of Audiology & Speech Language Pathology (BASLP)	4		√	
2	BSc Cardiovascular Technology (BScCVT)	4	√		
4	BSc Clinical Optometry (BScOPTM)	4			√
5	BSc Health Information Administration (BScHIA)	3			√
6	BSc Medical Imaging Technology (BScMIT)	4	√		
7	BSc Medical Laboratory Technology (BScMLT)	4	√		
8	BSc Medical Radiotherapy Technology (BScMRT)	4	√		
9	BSc Nuclear Medicine Technology (BScNMT)	4	√		√
10	Bachelor of Occupational Therapy (BOT)	4 ½	√		
11	BSc Operation Theatre & Anesthesia	3 ½	√		
12	Bachelor of Physiotherapy (BPT)	4 ½	√		
13	BSc Respiratory Therapy (BScRT)	4	√		
14	BSc Renal Replacement Therapy & Dialysis Technology (BScRRT & DT)	4	√		
15	BSc In Perfusion Technology	4			√
16	Master of Audiology & Speech Language Pathology (MASLP)	2	√		
18	Master of Clinical Optometry	2	√		
19	MSc Echocardiography	2	√		
20	MSc Hospital & Health Information Administration (MSCHHIA)	2			√
21	MSc Medical Imaging Technology	2	√		

	(MScMIT)				
22	MSc Medical Laboratory Technology	2	√		
	MSc MLT Clinical Biochemistry		√		
	MScMLT– Microbiology & Immunology		√		
22	MSc Medical Radiation Physics (MSc MRP)	2		√	
23	MSc Nuclear Medicine Technology (MSc NMT)	1	√		
24	Master of Occupational Therapy (MOT)	2	√		
	MOT - Child health		√		
	MOT – Musculoskeletal conditions		√		
	MOT– Neurosciences		√		
	MOT– Mental Health & Psychosocial rehabilitation		√		
25	Master of Physiotherapy (MPT)	2	√		
	MPT – Cardio-pulmonary Sciences		√		
	MPT – Community based Rehabilitation		√		
	MPT - Neuro Sciences		√		
	MPT- Orthopedics		√		
	MPT – Women Health & Pediatrics		√		
26	MSc Respiratory Therapy (MScRT)	2	√		
	MSc RT – Adult Respiratory Care		√		
	MSc RT – Neonatal & Pediatric Respiratory Care		√		
27	MSc Renal Replacement Therapy & Dialysis Technology (MScRRT & DT)	2	√		
28	MPT(Dual Degree) Sports and Clinical Biomechanics	2		√	
29	MSc Cardiac Cath and Interventional Technology	2	√		
MPhil / PhD Programs					
30	Clinical Psychology	2	√		
31	MSc Exercise and Sports Sciences	2		√	√

9. Participation of the department in the courses offered by other departments

Sl. No.	Dept. at SOAHS	at	Courses & Subject	Dept. at SOAHS /other Institutions
1	Department of Nuclear Medicine	of	M.Sc. MIT, Postings at Nuclear Medicine Department	Department of Medical imaging Technology , SOAHS Manipal
			M.Sc. MRP Physics in Nuclear Medicine	Department of Radiotherapy , KMC Manipal
2	Dept. of Medical Imaging	of	B.Sc. NMT Introduction to CT/MRI/Ultrasound	Nuclear Medicine

		B.Sc. MRP M.Sc. MRP Physics of MIT	MSc. Radiation physics
		BASLP Basics of Radiology (CT/ MRI)	Speech and hearing
		Diploma in MLT - Physics	B.Sc. Medical Lab Technology
3	Clinical Psychology classes	BPT, BOT (I&IV), B.Sc RT, BASLP, CVT, BSc Optometry, Clinical Psychology, Psychology related to Speech and Hearing, General Psychology. Organizational Behavior. BSc Nursing, MSc Nursing BS Engg MPhil PSW	Department of Physiotherapy Department of Occupational Therapy Department of Respiratory Therapy Department of Speech and Hearing Department of Cardio Vascular Therapy Manipal College of Nursing International Centre for Applied Sciences (ICAS) KMC – Department of Psychiatry
4	Physiotherapy	Biomedical Equipment in in Physiotherapy	MIT – M.Tech & B.Tech
5	Speech and Hearing	Biomedical Equipment in in Speech and Hearing	Biomedical Engineering (5 th Semester), MIT
6	Respiratory Therapy	Mechanical Ventilation	Biomedical Engineering, MSc Nursing

10. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)

	Sanctioned	Filled
Professor	18	09
Associate Professors	37	22
Assistant Professors Selection Grade	59	72
Assistant Professors Senior Scale		
Assistant Professors		
Assistant Lecturer	0	15

11. Faculty profile with name, qualification, designation and specialization (DSc/DLit/ PhD/MPhil etc.) –

11 a. Physiotherapy

#	Name of the Teacher	Qualification	Designation	Specialization	Experience	No. of PhD student guided
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						for the last 4 years
1	Dr. Arun Mayya G MAHE0004282	B.Sc. BPT, MPT (Cardio), Ph.D.	Professor	Cardiopulmonary	18	10
2	Dr. Bhamini K Rao MAHE0004284	BPT, MPT (Cardio), Ph.D.	Professor	Cardiopulmonary	14	2
3	Dr. Vaishali MAHE0004333	BPT, MPT (Cardio), Ph.D	Professor	Cardiopulmonary	14	----
4	Dr. John Solomon M MAHE0004818	BPT, MPT (Neuro), Ph.D	Assoc. Prof.	Neuroscience	14	2
5	Dr. Manikandan N MAHE0004819	BPT, MPT (Neuro)	Assoc. Prof.	Neuroscience	16	----
6	Mr. Kalyana Chakravarthy MAHE0006018	BPT MPT (Cardio)	Assoc. Prof.	Cardiopulmonary	10	----
7	Dr. Prem V MAHE0005256	BPT, MPT (Cardio) Ph.D	Assoc. Prof.	Cardiopulmonary	09	----
8	Mr. Senthil Kumaran D MAHE0006447	BPT MPT (Neuro)	Assoc. Prof.	Neuroscience	14	----
9	Mr. Karthik Babu S MAHE0006451	BPT MPT (Neuro)	Asst. Prof. Selection Grade	Neuroscience	07	----
10	Mr. Ranganath Gangavelli MAHE0006108	BPT MPT (Ortho)	Asst. Prof. Selection Grade	Orthopaedics	09	----
11	Mr. Ganesh Balthillaya M MAHE0004672	BPT MPT (Ortho)	Asst. Prof. Senior Scale	Orthopaedics	14	----

12	Mr. Girish N MAHE00079 17	BPT MPT (CBR)	Asst. Prof. Selection Grade	Community Based Rehabilitation	07	----
13	Mr. Nafeez Syed MAHE00097 63	BPT MPT (Cardio)	Asst. Prof. Selection Grade	Cardiopulmona ry	03	----
14	Ms. Preetha R MAHE00053 56	BPT MPT (Pediatric)	Asst. Prof. Selection Grade	Pediatric	07	----
15	Ms. Niveditha S Kamath MAHE00078 11	BPT MPT (Cardio)	Asst. Prof. Senior Scale	Cardiopulmona ry	07	----
16	Mr. Abraham Samuel Babu MAHE00096 28	BPT MPT (Cardio)	Asst. Prof. Senior Scale	Cardiopulmona ry	05	----
17	Mr. Karvannan H MAHE00097 61	BPT MPT (Ortho)	Asst. Prof. Senior Scale	Orthopaedics	03	----
18	Ms. Anupama Prabhu B MAHE00108 18	BPT MPT (Ortho)	Asst. Prof.	Orthopaedics	02	----
19	Mr. Prateek Srivastav MAHE00113 99	BPT MPT (Exercise Therapy)	Asst. Prof.	Exercise Therapy	03	----
20	Ms. Deepalaxmi Poojary MAHE00130 16	BPT MPT (Pediatrics)	Asst. Prof.	Pediatrics	01	----
21	Mr. Y V Raghava Neelapala MAHE00130 34	BPT MPT (Orthoped ics)	Asst. Prof.	Orthopaedics	01	----
22	Ms. Sidhiprada Mohapatra MAHE00130 91	BPT MPT (Communi ty Physiother apy)	Asst. Prof.	Community Physiotherapy	01	----

23	Mr. Anup Bhat MAHE0013167	BPT MPT (Cardio)	Asst. Prof.	Cardiopulmonary	02	----
24	Ms. Shubha R Nayak MAHE0003859	BPT	Assistant Lecturer	NA	18	----
25	Mr. Rajesh Navada G V MAHE0006156	BPT (Bridge Course) BHIA (DE)	Assistant Lecturer	NA	09	----
26	Ms. Nirmala Nayak S MAHE0006157	BPT (Bridge Course)	Assistant Lecturer	NA	09	----
27	Mr. Srinivas Nayak MAHE0006685	BPT (Bridge Course)	Assistant Lecturer	NA	08	----
28	Ms. Veena Suresh Bhat MAHE0007195	BPT (Bridge Course)	Assistant Lecturer	NA	08	----
29	Mr. Vishweshwara Bhat MAHE0007226	BPT (Bridge Course)	Assistant Lecturer	NA	08	----
30	Ms. Triveni Bhat MAHE0007227	BPT (Bridge Course)	Assistant Lecturer	NA	08	----
31	Ms. Shalini H MAHE0008161	BPT (Bridge Course)	Assistant Lecturer	NA	06	----
32	Ms. Vanitha N Shetty MAHE0008162	BPT (Bridge Course)	Assistant Lecturer	NA	06	----
33	Ms. Flora Prateek Srivastav MAHE0012383	BPT	Assistant Lecturer	NA	02	----

Msc Exercise and Sport sciences

#	Name of the Teacher	Qualifications	Designation	Specialization	Experience	No. of PhD student guided for the last 4 years
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1	Dr Fiddy Davis	BPT, PG Dip in Sports Physiotherapy MPT, PhD	Assoc. Prof.	Exercise Therapy and Sports Science	16	1
2	Mr Prabu Raja	BPT, MPT, MSc Biology of Physical activity	Asst. Prof. Senior scale	NA	06	----

11b. Occupational Therapy

#	Name of the Teacher	Qualifications	Designation	Specialization	Experience	No. of PhD students guided for the last 4 years
1	Dr. Shovan Saha MAHE0003 962	Bachelor of OT M.Sc. (OT) Ph.D	Assoc. Prof.	Hand Rehabilitation	16	----
2	Dr. Sebestina Anita D'Souza MAHE0004 392	B.Sc (OT) M.Sc.(OT) Ph.D	Professor	Neuroscience	13	----
3	Mr. Sridhar D MAHE0004 919	BOT DROT MOT	Asst. Prof. Senior Scale	Musculoskeletal Conditions	10	----
4	Mr. Sanjiv Kumar MAHE0007 996	BOT MOT	Asst. Prof. Senior Scale	Musculoskeletal Conditions	05	----
5	Ms. Vinita A Acharya MAHE0006 856	BSc. (OT) MOT	Asst. Prof. Selection Grade	Neuroscience	06	----
6	Mr. Koushik Sau MAHE0009 185	BOT MOT	Asst. Prof. Senior Scale	Child Health	03	----
7	Ms. Banumathe K R MAHE0010 368	BOT MOT	Asst. Prof. Senior Scale	Paediatrics	03	----
8	Mr. Guruprasad V	BOT MOT	Asst. Prof.	Neuroscience	02	----

	MAHE0011 322					
9	Ms. Shalini Quadros MAHE0010 921	BOT	Assistant Lecturer	NA	02	----

11c. Speech & Hearing

#	Name of the Teacher	Qualifications	Designation	Specialization	Experience	No. of PhD student guided for the last 4 years
1	Dr. B Rajashekhar MAHE00003 27	MSc. (S & H) Ph.D (S & H)	Professor & Dean	NA	39	Comple ed Guide: 06 Co- guide: 08 Ongoing Guide:0 3 Co- Guide:0 3
2	Dr. Venkataraj Aithal U MAHE00039 40	BSc. (S &H) MSc. (S & H) Ph.D	Professor	NA	18	02 ongoing
3	Dr.Krishna Y MAHE00047 35	BSc. (S & H) MSc. (S & H) CCC - A Ph.D	Professor	NA	13	02 ongoing
4	Dr. Veena K D MAHE00041 18	BSc. (S & H) MSc. (S & H) Ph.D	Assoc. Prof.	NA	17	-----
5	Dr.G Kanaka MAHE00041 58	BSc. (S & H) MSc. (S & H) Ph.D	Assoc. Prof.	NA	17	-----
6	Dr. Usha Devadas MAHE00034 71	BASLP MASLP Ph.D	Assoc. Prof.	NA	20	-----
7	Dr. Gopee Krishnan MAHE00053	BSc. (S & H) MSc. (S & H) Ph.D	Assoc. Prof.	NA	11	01 ongoing

	13					
8	Dr. Shivani Tiwari MAHE0005500	BSc.(S & H) MSc.(S & H) Ph.D	Assoc. Prof.	NA	11	----
9	Mr. Hari Prakash P MAHE0006245	BSc.(S & H) MSc.(S & H)	Asst. Prof. Selection Grade	NA	09	----
10	Mr. Kishan M M MAHE0006870	BASLP M.Sc.(Audiology)	Asst. Prof. Selection Grade	NA	08	----
11	Dr. Sunila John MAHE0007026	BASLP MASLP Ph.D	Assoc. Prof.	NA	08	----
12	Ms. Archana G MAHE0009637	BASLP MASLP	Asst. Prof. Senior Scale	NA	05	----
13	Ms. Angel Mercy Ruby Selvakumar MAHE0010354	BASLP MASLP	Asst. Prof. Senior Scale	NA	04	----
14	Ms. Bhargavi P G MAHE0010793	BASLP MASLP	Asst. Prof.	NA	04	----
15	Ms. Rama Prabhu K MAHE0000486	BSc.(S & H)	Assistant Lecturer	NA	36	----
16	Ms. Sheela S MAHE0012271	BASLP MSLP	Asst. Prof.	NA	01	----
17	Ms. Rekha Patil S MAHE0013033	BASLP	Assistant Lecturer	NA	10	

11d. Medical Laboratory Technology

#	Name of the Teacher	Qualifications	Designation	Specialization	Experience	No. of PhD student guided for the last 4 years
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1	Dr. Saleena Ummer V MAHE0004786	Dip. In Medical Instrumentation Engg. BMLT MSc. (MLT) PhD	Assoc. Prof. and Head	Clinical Biochemistry	12	----
2	Mr. Vivek Raghavan MAHE0005366	BSc. (MLT) MSc. (MLT)	Asst. Prof. Senior Scale	Cytology & Cytologygenetics	10	----
3	Ms. Saritha Kamath U MAHE0006978	Dip. In MLT BMLT (DE) MSc. (MLT)	Asst. Prof. Selection grade	Clinical Biochemistry	07	----
4	Ms. Kusumakshi	BMLT MSc. (MLT)	Asst. Prof. Senior Scale	Microbiology & Immunology	09	----
5	Ms. Asha Patil	Dip. In MLT BMLT (DE) M.Sc. (MLT)	Asst. Prof. Senior Scale	Microbiology & Immunology	04	----
6	Ms. Anju. M	BMLT M.Sc. MLT	Asst. Prof.	Clinical Biochemistry	<01	----
7	Ms. Kalaivani M	B.Sc. M.Sc. MLT M.Phil	Asst. Prof.	—	<01	—

11e. Health Information Management

#	Name of the Teacher	Qualifications	Designation	Specialization	Experience	No. of PhD student guided for the last 4 years
1	Dr. Sabu K M MAHE0004396	BSc. M.App.Sc. (Medical Documentation) Ph.D	Professor	Health Information Management	15	01
2	Dr. Roopalekha Jathana P N MAHE0004745	BSc. MS (MTDM) Ph.D	Professor	Health Information Management	13	---
3	Dr. Rajesh Kumar Sinha MAHE0005031	BSc. MS (MTDM) Ph.D.	Assoc. Prof.	Health Informatics	11	---

4	Ms. Dola Saha MAHE0004375	B.Com. Dip. In Software Programming & Applications Medical Transcriptions MBA	Asst. Prof. Selection Grade	Health Information Management	15	---
5	Dr. Reshmi B MAHE0006402	MSc. (Agriculture) MSc. (HHIA) Ph.D	Assoc. Prof.	Health Information Management	09	---
6	Ms. Susanna Kurian	BSc.HIA	Asst. lecturer	Health Information Management	<01	---

11f. Optometry

#	Name of the Teacher	Qualifications	Designation	Specialization	Experience	No. of PhD student guided for the last 4 years
1	Mr. Ramesh S Ve MAHE0010845	B.Sc. (Optometry) M.Phil. PhD (Optometry)	Assoc. Prof.	NA	02	----
2	Ms. Jyothi Thomas MAHE0004837	BSc. (Optometry) MSc. (Optometry)	Asst. Prof. Selection Grade	NA	12	----
3	Mr. Chandan S MAHE0006294	BSc. (Optometry) MSc. (Optometry)	Asst. Prof. Senior Scale	NA	08	----
4	Mr. Premjit Bhakat MAHE0007725	B Optometry M Optometry	Asst. Prof. Senior Scale	NA	06	----
5	Mr. Nijilsanker A U MAHE0007810	BSc. (Optometry) M Optometry	Asst. Prof. Senior Scale	NA	06	----
6	Mr. Avik Ray MAHE0008538	B.Optom M.Optom	Asst. Prof. Senior Scale	NA	05	----
7	Ms. Krithica S MAHE00108	B.Sc. (Optometry) Mphil.	Asst. Prof.	NA	04	----

	11	(Optometry)	Senior Scale			
8	Ms. Judy Jose	BSc. (Optometry) MSc. (Optometry)	Asst. Prof.	NA	02	----
9	Ms. Preethi Naik	B.Sc. (Optometry)	Assistant Lecturer	NA	02	----
10	Mr. Avinash Prabhu MAHE00130 18	B.Optom M.Optom	Asst. Prof.	NA	01	----

11g. Cardiovascular Technology

#	Name of the Teacher	Qualifications	Designation	Specialization	Experience	No. of PhD student guided for the last 4 years
1	Mr. Umesh Pai M	BSc. MSc. (CVT)	Asst. Prof. Senior Scale	NA	06	----
2	Mr. Krishnananda Nayak	BSc. MSc.(CVT) MSc.(Phy),MPhil	Asst. Prof. Senior Scale	NA	06	----
3	Ms. Sridevi Prabhu	BSc. MSc. (CVT)	Asst. Prof.	NA	05	----
4	Ms. Vidya Nayak	BSc. MSc. (CVT)	Asst. Prof.	NA	05	----

11h. Respiratory Therapy

#	Name of the Teacher	Qualifications	Designation	Specialization	Experience	No. of PhD student guided for the last 4 years
1	Ms. Saumy Johnson MAHE0004 937	BRTT MSc.(RT)	Assoc. Prof.	NA	10	----
2	Mr. Abhishek V	BRTT	Asst. Prof.	NA	09	----

	Vaidya MAHE0005 286					
3	Mr. Ramesh Unnikrishna n MAHE000978 0	B.Sc. (RT) M.Sc. (RT)	Asst. Prof. Senior Scale	Adult Respiratory Care	05	----
4	Ms. Tisha Ann Skariah MAHE0011 423	BSc. RT MSc. RT	Asst. Prof.	Neonatal & Paediatrics	01	----
5	Mr. Geoffrey George Roy MAHE001160 8	BSc. RT MSc. RT	Asst. Prof.	Neonatal & Paediatrics	01	----
6	Mr. Heera Lal Mahto	BSc. RT MSc. RT	Asst. Prof.	Adult Respiratory Care	02	----
7	Mr. Praveen Jacob John	Dip(RT)(Chri stian medical college) BSc.Psycholo gy(madras university) BSc.RT(mani pal) MSc.RT(mani pal)	Asst. Prof.	Adult Respiratory Care	02	

11i. Medical Imaging Technology

#.	Name of the Teacher	Qualifications	Designation	Specialization	Experience	No. of PhD student guided for the last 4 years
1	Mr. Sushil Yadav MAHE00063 19	BSc. (MIT) MSc. (MIT)	Asst. Prof. Senior Scale	NA	09	----
2	Mr. Suresh S MAHE0007893	B.Sc. (MIT) MSc. (MIT)	Asst. Prof. Senior Scale	NA	07	----
3	Mr. Rahul P Kotian MAHE00084	B.Sc. (MIT) MSc. (MIT)	Asst. Prof. Senior	NA	06	----

	97		Scale			
4	Ms. Winniecia Dkhar MAHE00113 51	B.Sc. Radiography M.Sc. (MIT)	Asst. Prof.	NA	03	----
5	Ms. Dolly Anil Sharma MAHE00129 76	B.Sc. (MIT) M.Sc. (MIT)	Asst. Prof.	NA	01	----

11j. Nephrology

#	Name of the Teacher	Qualifications	Designation	Specialization	Experience	No. of PhD student guided for the last 4 years
1	Ms. Veena N K MAHE00106 61	BSc. (Botany, Zoology, Chemistry) Diploma in Dialysis Therapy M.Sc in RRT & DT	Asst. Prof.	NA	03	----
2	Ms. Megha Nayak MAHE00106 62	BSc. (Botany, Zoology, Chemistry) Diploma in Dialysis Therapy M.Sc in RRT & DT	Asst. Prof.	NA	03	----

11k. Clinical Psychology

#	Name of the Teacher	Qualifications	Designation	Specialization	Experience	No. of PhD student guided for the last 4 years
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1	Dr. N Dinesh MAHE00024 74	B.Sc. (Zoology) MA (Psychology) M.Phil (Medical & Social Psychology) Ph.D	Assoc. Prof.	NA	24	----
2	Dr. Johnson Alex MAHE00051 62	BA (Psychology) MA (Psychology) M.Phil (Clinical Psychology) Ph.D	Assoc. Prof.	NA	11	----
3	Ms. Sahana Madhyastha MAHE00051 45	BA (Psychology) MA (Psychology) M.Phil (Clinical Psychology)	Asst. Prof. Selection Grade	NA	11	----
4	Dr. Sweta Rai MAHE00805 4	BA Honors (Psychology) MA (Psychology) PGDCP (Clinical Psychology) Ph.D (Psychology) M.Phil (Clinical Psychology)	Assoc. Prof.	NA	06	----
5	Dr. Sebastian Padickapara mbil MAHE00085 87	BA Psychology MA Applied Psychology MPhil Clinical Psychology PhD Clinical Psychology	Assoc. Prof.	NA	05	---
6	Ms. Indu Toby MAHE00104 49	BA Psychology MA Applied Psychology M.Phil (Learning Disability)	Asst. Prof.	NA	04	----

7	Ms. Nitha Thomas MAHE0011390	M.Sc.(Applied Psychology) M.Phil	Asst. Prof.	NA	03	----
8	Mr. Dan Isaac Pothiyil MAHE0012751	BA Psychology MSc. Psychology MPhil Clinical Psychology	Asst. Prof.	NA	<01	--
9	Dr. Urvashi Anand MAHE0012781	BA (Honours) Psychology MA Applied Psychology MPhil Clinical Psychology PhD Clinical Psychology	Asst. Prof.	NA	<01	--
10	Mr. Geo A Joseph MAHE0013059	BA Psychology MA Applied Psychology MPhil Clinical Psychology	Asst. Prof.	NA	<01	--

11I. Nuclear Medicine

Sl. No.	Name of the Teacher	Qualifications	Designation	Specialization	Experience	No. of PhD student guided for the last 4 years
1	Dr. Shivanand Bhushan MAHE0008298	B.Sc.(Zoology) M.Sc.(Zoology) Ph.D(Zoology)	Asst. Prof. Senior Scale	NA	06	----
2	Ms. Vasumathi MAHE0003476	B.Sc. Dip. in Nuclear Medicine Technology M.Sc. (Mathematics)	Asst. Prof.	NA	20	----

3	Ms. Sibi Oommen MAHE00055 12	B.Sc.(NMT) Bridge Course (NMT) M.Sc.(NMT)	Asst. Prof.	NA	11	----
4	Ms. Ramandeep Bhalla MAHE00119 39	B.Sc. NMT + DNMT M.Sc.(NMT)	Asst. Prof.	NA	02	----

11m. Perfusion Technology

#	Name of the Teacher	Qualifications	Designation	Specialization	Experience	No. of PhD student guided for the last 4 years
1	Mr. B. Shivashankar Pai	BSc.	Asst. Prof.	NA	03	----
2	Dr. Kumud G Lonkar	B.H.M.S. PG Dip. In Clinical Research M.Sc. Perfusion Technology	Asst. Prof.	NA	02	----

12. List of senior Visiting Fellows, Faculty members, Adjunct faculty members, Emeritus professors.

#	Name of the faculty	Qualification	Year	University	Designation	Department
1	Mr M M Kuriakose	BA Diplomain Respiratory Therapy Associate Degree in Respiratory Therapy	1979 1991 1993	University of Kerala NBRC, USA NBRC, USA	Adjunct Visiting Faculty	Respiratory Therapy
2	Prof Vijay Deshpande	BSc MSc Diplomain RT	June 1967 June 1971 1972	University of Bombay University of Missouri University of Chicago	Adjunct Visiting Faculty	Respiratory Therapy

3	Dr. Lalitha Raja	B.Sc B.Ed. B.Ed. in Special Education M.A. Linguistics M.A. Psychology Ph.D. in Linguistics Cert. in. French, Cert. in. Sanskrit, P.G. Diploma in Guidance and Counseling Diploma in MS – Office Diploma in Sanskrit, P.G. Diploma in Computational Linguistics	-	Fatima College, Madurai. Annamalai University Tamil Nadu Open University Annamalai University Annamalai University Annamalai University Annamalai University Annamalai University CSC - Computer Education Center Annamalai University	Visiting Faculty	Speech and Hearing
4.	Prof Ramanan	BABT, ELT	1955	Madras University	Guest Faculty	Speech and Hearing
3	Mr. Jay Krishnan Swain	Orthotic & Prosthetic Engineer	2013 2015	Father Muller Medical College, Mangalore	Guest Faculty	Physiotherapy
4	Ms. Laxmi Bai	BPT and BPT bridge		Retired Principal	Guest Faculty	Physiotherapy
5	Mr. Kiran Challagundla	BPT & MPT	2012 2014	Hyderabad	Guest Faculty	Physiotherapy
6.	Mr. Sri Ram Bhat	MPT	2012	Mumbai	Guest Faculty	Physiotherapy

7	Dr. Deepak Kumar	MPT	2012		Guest Faculty	Physiotherapy
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13. Percentage of classes taken by temporary faculty members – programme-wise information

NA

14. Programme-wise Student Teacher ratio

Sl. No.	Department	Teacher Student Ratio
1.	Physiotherapy	1:9
2.	Occupational Therapy	1:10
3.	Speech and Hearing	1:8
4.	Respiratory Therapy	1:15
5.	Optometry	1:9
6.	Medical Laboratory Technology	1:16
7.	Medical Imaging Technology	1:25
8.	Nuclear Medicine	1:13
9.	Health Information Management	1:8
10.	Cardiovascular Technology	1:20
11.	Clinical Psychology	1:4
12.	Renal Replacement Therapy & Dialysis Technology	1:19
13.	Perfusion Technology	1:18

14. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Sanctioned: - 130

Filled: - 125

15. Research thrust areas recognized by funding agencies:

Physiotherapy, Speech and Hearing, Health Information Management, Clinical Psychology

16. Number of faculty with ongoing projects from a) National b) Total grants received. Give the names of the funding agencies and grants received project-wise. –

a. National: Eight (8), International: Nil

b. Total Grant Received

Principal Investigator	Remitter Name	Total-Received(Rs)
Dr. Arun Maiyya	ICMR, New Delhi	221,519.00
Ms. B Reshmi	ICMR, New Delhi	531,557.00
Dr. Bhamini K Rao	ICMR, New Delhi	151,644.00
Mr. Johnson Alex	ICMR, New Delhi	476,638.00

Dr. Gopeekrishnan	Department of Science and Technology, New Delhi	7 3,17,200.00
Dr. Shivani Tiwari	ICMR	23,44,316.00
Dr. Venkataraja Aithal U	BoP MU-Philips	10000.00
Dr. Veena K D	ICSSR	5,00,000.00
Dr. John Solomon	Grand challenges, Canada, McGill University, Canada	17,96,881.00
Mr. Abraham Samuel Babu (Co principal investigator)	ICMR	Rs. 59,29,000
Mr. Kalyan	Manipal university seed money	25,000.00
Dr. Manikandan	DST-IDP	Rs. 11,75,200.00
Total by December 2014		Rs. 20,47,8955.00

17. Inter-institutional collaborative projects and grants received

a. Indian collaboration

#	Name of the Research Project	Name of the donor / grantor	Principal Investigator	Amount approved	Duration of the Project	Amount Received		Total grants received
						Operating	Capital	
ICMR Project:								
1	Photostimulatory and Photoinhibitory Effect of Low Energy Laser Therapy in diabetic Wound Healing Dynamics - A Preclinical Study	ICMR, New Delhi	Dr Arun Maiyya	1167896	3 years	1162196	5700	1167896
2	Improving rehabilitation services through evidence based practice assessing neurological recovery	Mc Gill University	Dr. John Solomon/ Mindy		1 ½ years			16,81,200
2	Acceptability and effectiveness of two community based health insurance schemes in Karnataka, India	ICMR, New Delhi	Ms B Reshmi	1282200	2 years	839945	57362	897307
3	Prevalence and Physiotherapy Intervention for pelvic floor dysfunction in women of Udupi Taluk	ICMR, New Delhi	Dr Bhamini K Rao	1487199	3 years	151644	-	151644
4	Development of learning strategy	ICMR, New Delhi	Mr Johnson Alex	1862571	2 years	416638	60000	476638

	Inventory and Cognitive Behavior Therapy (CBT) based stress Management Intervention							
DST Project:								
5	Validation of the Physiological Cost Index by comparison to oxygen consumption and its potential as an outcome measure of ambulation among children with cerebral palsy	Department of Science & Technology, New Delhi	Dr Kavitha Raja	2650000	3 years	1237638	1412362	2650000
6	The Central alexias and agraphias in semi syllabic orthography	Department of Science & Technology, New Delhi	Dr Gopeekrishnan	2700000	3 years	829348	113052	942400
7	Reading related eye movements in semi syllabic and alphabetic orthographies	Department of Science & Technology, New Delhi	Dr Gopeekrishnan	4617200	3 years	204000	3211000	3415000
WHO Grant								
8	Integrated community Based Rehabilitation for people affected by leprocy, Filariasis and other locomotor disabilities in Udupi District	WHO, New Delhi	Dr Kavitha Raja	438660	6 months	438660	-	438660
NCERT Grant								
9	Development of an assessment tool and integrated management protocol for children with developmental coordination disorder	NCERT, New Delhi	Dr Kavitha Raja	353220	2 years	249700	4200	253900
Grand Total				16558946		5529769	4863676	12,074,645
ICSSR Grant								
10	Development and standarisation of phonological process analysis test in Tulu	ICSSR	Dr. Veena KD	500000	2 years	250000	150000	350000
ARF, Mysore								

Profiling anxiety-depressive and personality correlates of individuals with Tinnitus	ARF, Mysore	Dr. Venkataraja Aithal U	3,71,000	12 months	50,000	Details unavailable	3,71,000
Grand Total			17429946		5829769	5013676	15,945,645

b. International

UKIERI grant received from British Council in the field of collaborative education and research 2012. Total grant amount was 2 Lakh 65 Thousand.

17. Departmental projects funded by, ICMR, DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, UAB-NIH USA, UKIERI. Total grants received.

#	Name of the Research Project	Name of the donor / grantor	Principal Investigator	Amount approved	Duration of the Project	Year		
						2012	2013	2014
1	Photostimulatory & Photoinhibitory Effect of Low Energy Laser Therapy in diabetic Wound Healing Dynamics - A Preclinical Study	ICMR, New Delhi	Dr. Arun Maiya G	1167896	3 years	221519		
2	Acceptability & Effectiveness of two community based health insurance schemes in karnataka, India	ICMR, New Delhi	Ms B Reshmi	1282200	2 years	531757		
3	Prevalence and Physiotherapy Intervention for pelvic floor dysfunction in women of Udipi Taluk	ICMR, New Delhi	Dr Bhamini K Rao	1487199	3 years	151644		
4	Development of learning strategy Inventory & Cognitive Behavior Therapy (CBT) based stress Management Intervention	ICMR, New Delhi	Mr Johnson Alex	1862571	2 years	476,638		
5	Validation of the Physiological Cost Index by comparison to oxygen consumption and its potential as an outcome measure of ambulation in children with cerebral palsy	DST, New Delhi	Dr Kavitha Raja	2650000	3 years			
6	The Central alexias and agraphias in semi syllabic orthography	DST, New Delhi	Dr Gopeekrishnan	2700000	3 years			

7	Reading related eye movements in semi syllabic and alphabetic orthographies	DST, New Delhi	Dr Gopeekrishnan	4617200	3 years	3415000		
8	Integrated community Based Rehabilitation for people affected by leprosy, Filariasis and other locomotor disabilities in Udupi District	WHO, New Delhi	Dr Kavitha Raja	438660	6 months			
9	Development of an assessment tool and integrated management protocol for children with developmental coordination disorder	NCERT, New Delhi	Dr Kavitha Raja	353220	2 years	253900		
10	Design and Development of Portable Pain Relieving Instrument	DST, New Delhi	Dr. Arun Maiya G	2735200	2 years	1740000		
	Unraveling the overlapping features of Autism Spectrum Disorders and Specific Language Impairment	ICMR	Dr. Shivani Tiwari	23,44,316	3 years			5,22,290 received in 2014
	Development and standardisation of phonological process analysis test in Tulu	ICSSR	Dr. Veena KD	500000	2 years		3,50,000 received in 2013	
Total						2602610	3,50,000	5,22,290

18. Research facility/ center with

a. State recognition: NIL

b. National recognition: The audiology lab of Department of Speech and Hearing, SOAHS is recognized by Department of Science and Technology and ICMR. Department of Speech and Hearing rated as outstanding performance by Rehabilitation Council of India. Department of Clinical Psychology is recognized by Rehabilitation Council of India (RCI)

c. International recognition:

19. Special research laboratories sponsored by/ created by industry or corporate bodies

Not Applicable

20. Research output in last three years

		2012	2013	2014
Completed funded research projects		09	01	05
Completed non-funded research projects		00	00	01
Completed PhD research projects		04	02	06
Completed PG research projects		81	76	85
Completed UG research projects		54	35	62
Publications	National	28	41	33
	International	93	35	26
Books		03	00	00
Chapters in books		00	00	01
Conference presentations	National	49	22	26
	International	21	22	13

22A. Completed Funded Research Projects

Department of Physiotherapy

Year 2012 (05 numbers)

1. Dr. G Arun Maiya, Development of pain relieving instrument, DST
2. Mr. Abraham Samuel Babu, Pulmonary Hypertension Manual, Tom Lantos innovation in community service award, Pulmonary Hypertension Association, USA
3. Dr.Kavitha Raja, Effect of an exercise programme on neural plasticity in children with CP, DST
4. Dr. Kavitha Raja, Standards of care for individuals with CP, ICMR
5. Mr. N. Manikandan, Designing of Sensor Based Sole, DST

Year 2013 (01 number)

1. Dr. John Solomon, Virtual reality stroke rehabilitation, Grand Challenges, Canada

Year 2014 (03 numbers)

1. Dr. John Solomon, Virtual rehabilitation training for Balance in Adults, DST
2. Mr. Abraham Samuel Babu, Prevalence of PAD and interrelated risk factor in Udupi district, ICMR
3. Mr. Kalyam Chakravarthy, Seed money, Manipal University, Development of Chest expansion analyser

Dept. of Speech & Hearing

Year 2012 (02 Numbers)

1. Ms. Shivani Tiwari - Reading Acquisition in Children Learning Two Distinct Orthographies Malayalam and English AIISH, Mysore
2. Dr.Aithal U.V - Development of a computer-based aphasia therapy module in Kannada to enhance auditory verbal comprehension - BoP MU-Philips.

Year 2014 (02 Numbers)

1. Dr. Usha Devadas- Prevalence and risk factors in primary school teachers of one district of Karnataka, AIISH, Mysore
2. Dr. Aithal U. V - Profiling anxiety-depressive and personality correlates of individuals with Tinnitus, AIISH, Mysore

Dept of Nuclear Medicine

Year 2012 (01 Numbers)

1. Dr Shivanand Bhushan, “ To develop the Prototype for Radioactive Anatomical Land Marker” SPICE grant of VGST, DST Govt Of Karnataka

Dept of Clinical Psychology**Year 2012 (01)**

1. Dr. Johnson Alex, “Development of Learning Strategy Inventory and CBT based Stress Management Intervention”. ICMR, New Delhi.

22B. Completed Non-Funded Projects**Dept. of Medical Imaging Technology****Year 2014 (01 Number)**

1. Radiological age & Sex Determination from Sternum

22C. Completed Ph.D. Research Projects**Department of Physiotherapy****Year 2012 (01 Numbers)**

1. **Dr. Ajay Prasad Gautam-** Title “Effect of Low Level Helium Neon (He-Ne) Laser Therapy in the prevention and treatment of radiation/chemoradiotherapy induced oral mucositis in head and neck cancer patients- A Randomised Controlled Trial”.

Year 2013 (02 numbers)

1. **Dr. Fiddy Davis** – Title: “Does response relationship between exercise intensity and C – Reactive protein in healthy individuals”
2. **Dr. Snehil Dixit** – Title: “Effects of aerobic exercise training on Diabetic peripheral neuropathy – A Randomised controlled trial”

Year 2014 (02 numbers)

1. **Dr. Ravi Shankar Reddy:** Title: “Effectiveness of Kinesthetic rehabilitation on proprioception in patients with Cervical Spondylosis”
2. **Dr. Manikandan N:** Title: “Development & validation of a mobility disability scale for Community Dwelling individuals”

Dept. of Speech & Hearing**Year 2012(02 Numbers)**

1. **Ms. Usha Devadas-** Prevalence and nature of voice problems in call center operators
2. **Mr. Gopee Krishnan** - An appraisal of lexical retrieval skills in subjects with right hemisphere damage

Year 2014 (01 Number)

1. **Ms. Sunila John** - Developmental changes in verbal fluency output of Malayalam speaking children

Dept of Occupational Therapy

Year 2012 (01 Number)

1. Sebestina Anita D'souza Title: the effectiveness of postural training under dual task conditions with graded sensory context in older adults at risk for fall.

Year 2014 (02 Numbers)

1. Chavan Shashidhar Rao awarded PhD degree from Manipal University for his research work "Adaptive Responses to Swing in Normal Children and Their Cross-Validation" on 28th January, 2014.
2. Shovan Saha awarded PhD degree from Manipal University for his research work "Outcomes of Assistive Technology in Indian Population with Locomotor Disability" on April 19th, 2014.

Department of Medical Laboratory technology:

Year 2014: (01 number)

1. Saleena Ummer Velladath. Title: Evaluation of biomarkers for the early diagnosis of Acute Kidney Injury due Cisplatin chemotherapy

22D. Completed PG Research Projects

Department of Physiotherapy

Year 2012 (18 Numbers)

1. Effects of manual hyperinflation and suctioning on mechanically ventilated patients with ARDS- A cross over study.
2. Metabolic demands & costs in various modes of aerobic exercises across various intensities.
3. Exercise training and vagal modulation/Dose response relationship between HRV exercise intensity.
4. Functional status index in patients with coronary artery diseases – cross sectional study. / Functional status following coronary Artery bypass surgery.
5. Effects of epicardial fat thickness on heart function in sedentary adult population/ Relationship/ Relationship of epicardial adipose tissue thickness with post exercise cardiac output.
6. Normative values of figure of 8 walk test in geriatrics population./Predictive validity, concurrent validity and responsiveness of Figure-8 walk test in older adults.
7. Correlation of foot pressure with lower quadrant Dysfunction in sewing machine operators/ Prevalence of Lower Quadrant Dysfunction in sewing machine operators and the effect of pedaling pressure on lower Quadrant Dysfunction. .
8. Trunk muscle activation during functional activities of the extremities in stroke patients.
9. Effects on transcutaneous electrical nerve stimulation and Functional Electrical stimulation on lower limb spasticity in patients with spinal cord injury- A randomized cross-over trial/comparison of TENS (Infrastructure Electrical Nerve Stimulation) and FES (Functional Electrical Stimulation) on lower limb spasticity in patients with spinal cord injury.
10. Effects of dual task training on balance and gait in patients with stroke/ Effect of dual-task training on postural control & balance in stroke patients-A randomized controlled trial.

11. Effects of seat surface on reaching in children with spastic diplegia/ Influence of seat surface on Upper limb function in children with spastic diplegic cerebral palsy.
12. Effects of prolonged standing on tone, proprioception and gait in cerebral play children/ Effects of single session standing on sustenance of change in muscle tone & on proprioception in spastic cerebral palsy.
13. Range of motion and strength profiles in asymptomatic recreational overhead athletes.
14. Effects of core muscle activation on balance.
15. Development of an assessment format for lumber spine.
16. Effects of upper limb neural tissue mobilization on vibration perception threshold with type ii diabetes mellitus/ Mechanosensitivity of upper extremity during ULNTI in individual with Type II Diabetics mellitus –A matched ease control study.
17. Exercise testing of pre-school children using the Bruce treadmill protocol/ Exercise testing in children with Bruce treadmill protocol in children 8-14 years.
18. Levels of physical fitness and health consciousness amongst female health care students – a cross sectional study/Prevalence of obesity and Levels of physical activity amongst female health professional students of Manipal University – A cross sectional survey.

Year 2013 (20 Numbers)

1. Effect of Aerobic Exercise Training on Lipid Profile and Homocysteine in Coronary Artery Disease
2. Body Mass Index, Waist Circumference and Waist to Height Ratio as Predictors of Cardiovascular Disease Risk
3. Heart Rate Variability in Young Adults: Relations to Adiposity, Physical Activity and Exercise Capacity
4. Influence of Video Based Education on Self-Efficacy in Post Pulmonary Surgery
5. Measurement of Muscle strength with Dynamometer in Intensive Care Unit
6. Work Ability Index Among Construction Workers
7. Lifting Analysis Using High Definition Web Camera and Standard Definition Digital Camera
8. Stroop Interference Effect and Walking Speed in Persons with and Without Dementia
9. Analysis of Balance and Function in Different Peripheral Vestibular Disorders
10. Influence of post exercise Fatigue on Postural Sway in Children with Cerebral Palsy
11. Functional Status and Factors Influencing Functional outcome in Patients with Stroke
12. Influence of Optic Flow Guided Treadmill Walking on Gait in Children
13. Influence of Posterior Leaf Spring Ankle Foot Orthosis on Balance and Gait Parameters in Hemiparetic Patients
14. Effect of Box Kinect Games Training on Lower Limb Reaction Time in Patients with Hemiparesis
15. Effect of Sub Occipital Muscle Stretching in Forward Head Posture
16. Pragmatic Rehabilitation Program in Participants with Shoulder Impingement Syndrome: A Case Series
17. Relationship Between Core Endurance and Low Back Pain in Recreational Athletes
18. Effect of Kinesio Taping Versus Athletic Taping on Pain and Muscle Performance in Patients with Lateral Epicondylalgia

19. Effect of Low intensity Aerobic Exercise Training on Glycemic Control in Gestational Diabetes Mellitus
20. Validity of Ages and Stages Questionnaire with Test of Infant Motor Performance to Detect Developmental Delay Among Infants At 2 and 4 Months of Age

Year 2014 (18 numbers)

1. Effect of individualized home based exercises on quality of life of ICU survivors
2. Heart rate and blood pressure response to incremental exercise in Smokers and non-smokers
3. Gait parameters, balance and risk of falls in COPD: A cross sectional study
4. Correlation of physical activity level with bone mineral density, cardio-respiratory fitness and body composition in post-menopausal women
5. Physical activity measurement using accelerometer in Phase I cardiac rehabilitation
6. Effect of Kinect based training on trunk control in patients with stroke
7. Influence of theraband application on kinematics of Gait in patients with stroke
8. Effect of Kinect based virtual reality game training on balance and function in persons with unilateral vestibular hypofunction
9. Effect of functional electrical stimulation on standing posture in children with spastic diplegia.
10. Eye hand coordination, reaction time and dynamic balance in children with and without karate training
11. Effect of thoracic spine manipulation on shoulder pain range of motion and function in adhesive capsulitis
12. Effectiveness of muscle energy techniques (MET) on range of motion and pain in individuals with acute elbow stiffness
13. Relationship between core stability and athletic performance measures in collegiate athletes
14. Prevalence of sciatic nerve dysfunction in collegiate athletes with hamstring tightness in Manipal university
15. Immediate effect of heat and cold. Application on isometric grip strength in healthy individuals
16. Single and dual task activity on gait variables among older adults
17. Effect of antenatal exercises on the Birthing experience and coping strategies in the immediate postpartum phase
18. Neurophysiological facilitation on respiratory parameters neonates with respiratory problems in NICU

Dept. of Medical Laboratory Technology

Year 2012 (02 Numbers)

1. Evaluation of urinary Gamma-glutamyl transpeptidase in patients with acute febrile illness
2. Comparative study of hematological and biochemical parameters in P.vivax and P. falciparum malaria patients

Year 2013 (03 Numbers)

1. The proportion of kidney injury in post cardiac surgery - A comparison of eGFR with AKIN criteria
2. Anemia in Diabetic patients with nephropathy
3. Risk factors and outcome of Acute Kidney Injury in post cardiac surgery patients
4. Anemia in chronic hemodialysis nephropathy

Year 2014 (01)

1. The proportion of acute kidney injury in critically ill patients in a tertiary care center.

Dept. of Clinical Psychology

Year 2012 (10 Numbers)

1. Rumination, Co-rumination and Mindfulness in Recurrent Depressive Disorder and Dysthymia- Aparna S Menon
2. Sexual Schema, Dysfunctional Sexual Belief and Sexual Self Concept in Erectile Dysfunction- Ansha Patel
3. Association Between Functional Status of Children With Cerebral Palsy and Caregivers Perception and Burden – An Exploratory Study- Pallavi Tomar
4. Body Image Disturbance and Illness Cognition in Relation to Health Cognitions in Acne Vulgaris- Gayathri Mammen
5. Temperamental Traits and Digit Ratio as Predictors of Academic Performance- Syam K R
6. Neuropsychological Correlates of Threat Perception in Social Anxiety Disorder-Anjali C Thomas
7. Influence of Stage and Treatment on the Psychological Sequelae in Cancer Patients- Aiswarya Wilson
8. Safety Behaviours as Modulated by Post – Event Processing and Worry in a Sample of Individuals with Social Phobia and a Non – Clinical Sample-Suchitra Banerjee
9. Erectile Dysfunction and Marital Quality of Life among Chronic Obstructive Pulmonary Disease (COPD)- Sinoj M T
10. Modulatory Influence of early Maladaptive Schemas in the Manifestation of Somatic and Depressive Psychopathology in Relation to Life events- Sweta Bothra

Year 2013 (08 Numbers)

1. The impact of Video/Internet games on the Self-Regulation of Adolescents modulated by their temperament. – Ms. Dharani Devi
2. Influence of Attachment Styles and Self-Regulation on smoking among college students. – Ms. Sharine Jacob Kuruvely
3. Dysfunctional Attitudes and sociotropy autonomy in relation to the course of Bipolar Affective Disorder – Ms. Poornima Mahindru
4. Executive functions and its correlation with performance on Object Sorting Test in patients with Schizophrenia as compared to healthy subjects. – Ms. Sahithya B R
5. Relationship of parental responses to pain catastrophisation, pain intensity and functional limitations in children with functional pain. – Mr. Jim Vargese
6. Influence of perceived parenting styles and early maladaptive schemas on the body esteem among young women. – Ms. Mrudula Mathew
7. The efficacy of mindfulness based stress reduction program in prehypertension: A Randomized control trial. – Lahti Shruthi Deepak
8. Influence of Parenting Style of working mothers and temperament on behavioral problems among school children. – Shwetha Jha

Year 2014 (07 Numbers)

1. An Exploratory Study on Developmental Psychopathology problems among Legg-Calve-Perthes' Disease - Ms. Nisha John
2. Relationship of illness Representation, Health Anxiety and Perfectionism with Adherence to medications in type 2 Diabetes Patients - Mr. Sudeep P. K

3. Influence of Resilience and Optimism on Relapse and Perceived Stigma in Patients with Psoriasis - Ms. Aman Gouri
4. Comparison of Neuropsychological Correlates of emotional threat Perception in Schizophrenia versus Bipolar Disorder - Ms. Rekha P
5. Association of Pre Academic skills and problem Behaviours in Kindergarten Children - Ms. Amritha Mohan
6. Influence of Mindfulness Training on Clinical and Biochemical Correlates of attention deficit Hyperactivity Disorder - Mr. Mahesh M. M.
7. Relationship between preferred Learning Style, Learning and Memory in Undergraduate Health Science Students - Ms. Meenakshi Moorjani

Department of Health Information Management

Year 2012 (07 Numbers)

1. Development of Simulated RIS Module using Clearcanvas Platform
2. Cancer Patient Care Givers Perceptions of Health Information and Patient Care at KIMS cancer center, Hyderabad
3. Impact of Hospital Information System on Healthcare Professionals at Tertiary care center
4. Evaluation and Development of an effective antibiotic policy in Prince Ali Khan Hospital, Mumbai
5. Assess the quality of life of nurses
6. Scope of E-codes in Trauma Documentation
7. Knowledge, Practice and Attitude towards SOP amongst non-clinical professionals

Year 2013 (04 numbers)

1. Analysis of bed turnover time and devising a procedure for reducing bed turn over time.
2. Awareness, practice, attitude and knowledge towards informed consent for healthcare professionals.
3. Hazard identification and risk analysis
4. An assessment of adherence to safety protocol in the operating room.

Year 2014 (06 numbers)

1. Perception of mHealth among doctors
2. Attitude of Ayurveda Doctors about Health Information Technology
3. Perception and Knowledge about infection control practices among nurses
4. A study to screen the completeness of initial assessment of inpatient
5. Patient satisfaction of VAS insurance scheme
6. Practice of health information system among PHC staff

Dept. of Speech & Hearing

Year 2012 (23 Numbers)

1. The importance of temporal envelope and fine structure cues in identifying gender using simulated cochlear implant processing strategies on normals
2. Auditory processing abilities in amateur music learners
3. Knowledge and attitude of pediatric hearing impairment among medical interns and general physicians in Udupi taluk
4. Assessment of middle ear function in two different ethnic population using Immittance measures - a comparative study

5. Latency – intensity function of speech evoked auditory brainstem responses in individuals with moderate sensorineural hearing loss
6. Neural encoding of speech at the level of brainstem in hearing aid users
7. Knowledge, attitude and practices among mainstream primary school teachers of selected schools of Kottayam district of Kerala towards auditory processing disorders in children
8. Latency intensity function of speech evoked auditory brainstem responses in normal hearing population
9. Translation of ‘tinnitus handicap inventory’ in Kannada language
10. Maturation of P1 response in pediatric hearing aid user
11. Comparison of performance of individuals with sloping sensorineural hearing loss in perception of redundant and non redundant speech material using frequency transposition and conventional amplification
12. Voice problems in primary school teachers: prevalence, associated risk factors and symptoms
13. Effect of phonological awareness training on auditory processing in poor readers
14. Outcome of awareness training on feeding strategies in parents of cerebral palsy children
15. Development of computer based therapy module in Kannada to enhance auditory verbal comprehension of persons with aphasia
16. Comparison of communication acts and functions in typically developing children and children with autism spectrum disorders
17. Efficacy of vocal awareness education in school teachers
18. Phonological development in Tulu Kannada sequential bilinguals children between 4 to 6 years
19. Prevalence of voice problems in school children of age range 5 – 12 years in Manipal and Udupi towns
20. Time extended verbal fluency in Konkani – English bilinguals
21. Normative data for MSP (Motor Speech Profile) in Kannada speaking adults
22. Vocal loading in dubbing artist : a preliminary study
23. Clustering and switching processes of verbal fluency in Kannada English bilinguals

Year 2013 (22 Numbers)

1. Measurement of public attitudes towards stuttering in Hindi speaking population
2. Tympanometric measures in infants using high frequency probe tones
3. Communication profile for hearing impaired population in Indian context
4. Subcortical Processing of Speech in the presence of background noise by using speech evoked Auditory Brainstem Responses in normal individuals
5. Understanding of speech, spatial and quality of hearing in older adults: a questionnaire method
6. General physicians knowledge, attitude, and practice to hearing rehabilitation in elderly people
7. Latency – Intensity function for speech evoked late latency responses in normal hearing individuals
8. High pitch phonation – As a method of clinical evaluation of voice in trained singers – A preliminary study
9. Identifying speaker from disguised speech using aural perception and Mel – Frequency Cepstral coefficient
10. Rate of speech in typically developing Malayalam Speaking children between 5 – 7 years
11. Rate of speech in 3- 5 years typically developing Malayalam speaking children
12. Spelling development in Malayalam alphasyllabary
13. Efficacy of vocal function exercise in school teachers

14. Comparison of Narrative skills in typically developing (TD) children and children with cerebral palsy (CP) in Malayalam
15. Prevalence and influencing risk factors of voice problems in priests
16. Developmental changes in Fo of pre adolescent children in Indian population
17. Measurement of knowledge and attitude towards stuttering using POSHA – S in Udupi district
18. Comparing the outcome of perceptual and acoustic analysis of speech among identical speakers
19. Emergence of morphological markers in Malayalam English sequential bilingual children
20. Spelling development in Hindi alphasyllabary
21. Adaptation of Stroke – Aphasia Quality of Life (SAQOL – 39) in Hindi Scale
22. Adaptation of Stroke – Aphasia Quality of Life (SAQOL – 39) in Malayalam Scale

Year 2014 (23 Numbers)

1. Effect of Literacy on P300 & MMN
2. Short term effects of amplification on working memory in the elderly
3. Professional quality of life in audiologist & speech language pathologist working in India
4. Impact of tinnitus in Hindi speaking population
5. Awareness attitudes and stigmas attached towards hearing aids by hearing impaired population
6. Adaptation of tinnitus handicap inventory in Malayalam language
7. Measuring satisfaction with amplification in kannada speaking population : A Questionnaire method
8. Acoustic change complex through channel & channel free hearing aids
9. Compilation and Validation of a short version of Bilingual Aphasia Test (BAT) (PART B) in Malayalam
10. Accuracy of perceptual evaluation of perturbation measures in synthesized voice by qualified speech language pathologists
11. Prosthetic aspects & quality of life in Indian Tracheo – Oesophageal` speakers
12. A Comparative study of vocal characteristics between normally aged males and dysarthrophonia
13. Verbal Fluency in Kannada - English Bilingual Adults : effects of language proficiency, usage and age of L2 acquisition
14. Disfluencies in typically development Bengali speaking children between 3 to 8 years
15. Adaptation and Validation of MacArthur Communicative Developmental Inventory (MCDI) Part 1 – Words and gestures in Kannada
16. Development of Prime Target Stimulus material (prime-target) for visual confrontation naming task
17. To adapt and validate English version of Pediatric Voice Handicap Index into Malayalam Language
18. Development of video modeling material to improve socio-communicative skills
19. Adaptation and Validation of MacArthur Communicative Developmental Inventory (MCDI) Part 1 – Words and gestures in Malayalam
20. Rate of speech in konkani speaking adults of Udupi District
21. Speech based gender identification Pre – adolescents
22. A Comparison of literacy measures in good and poor readers of Malayalam Alphasyllabary
23. Comparison of types and frequency of occurrence Phonological process in Kannada speaking down's syndrome and normal children

Dept of Nuclear Medicine

Year 2012 (05 Numbers)

1. Preparation and Quality control of Radiolabelled Meals used for Gastric Emptying Studies.
2. Comparative Study of GFR calculation Using Single Plasma Technique and Gamma Camera based Technique.
3. Importance of Peritoneal Cavity Scintigraphy for Peritoneal Dialysis Patients Comparative study of Tc-99m Thyroid uptake Measured with Scintillation Pro and Gamma Camera.
4. Intervention of Six Minute Walk Test (6MWT) exercise on 99mTc-Technitium labeled Methylene Diphosphonate Musculoskeletal imaging in Healthy human.
5. Evaluation of binding efficiency of Tc99m labeled to red blood cells in the presence of Cocoa.

Year 2013 (04 Numbers)

1. An investigative study on altered biodistribution of Tc-99m Bone seeking radiopharmaceuticals.
2. Gastric Emptying time for solids in normal South Indian population.
3. Effect of pH on the stability of radiolabelled solid meal used for gastric emptying scintigraphy an invitro study.
4. Epidemiological study of thyroid cancer patients in Kasturba Hospital.

Year 2014 (06 Numbers)

1. Scintigraphic evaluation of Salivary gland functions in differentiated thyroid carcinoma patients undergoing 131I treatment.
2. Extraction and quality check of 99mTc-Sodium pertechnetate from large alumina column using low specific 99Mo-sodium molybdate activity.
3. Standardisation of dose calibrator for measuring activity of 131I sample with gamma ray spectrometer.
4. Agreement between the 24hour fractional thyroid uptake values calculated from 131I scans obtained using gamma camera and thyroid uptake values obtained from Probe: A retrospective study.
5. Estimation of effective half life of 131I inpatients treated for differentiated thyroid carcinoma.
6. Role of thyroid parotid ratio in the diagnosis of various suspected thyroid disorders.

Dept of Occupational Therapy

Year 2012 (07 Numbers)

1. Comparing the performance of children identified with deficit by teachers on a standardized test of Attention (TEA-Ch) between 6 to 11 year
2. Sensory problems in children with epilepsy
3. Modified Jebsen Test of Hand Function: Test-retest reliability & normative values for Indian adults of 20 to 59 years

4. Effect of Multimodal Stimulation on Neurobehavioral Organization in Medically-Stable Preterm Infants
5. Effect Of age and activity on performance of floor-sitting in Indian adults
6. Modified Falls Behavioral Scale for Indian Community Dwelling Older Adults
7. Bimanual coordination and its impact on functional performance in adults with epilepsy

Year 2013 (08 Numbers)

1. Effectiveness of Sensory Motor Intervention to Improve Attention and Organization Skills in Children with Attention Deficit Hyperactivity Disorder in a School Setting: A Case Study Approach.
2. An exploratory study on the Graphesthesia Performance in Children aged 6-10 years.
3. Performance of Indian children on the TEA-Ch And its comparison with the Norms of Australian Children from 6-16 years age group
4. Comparison of fall risk in rural and urban community dwelling Indian older adults.
5. Impact of Motor recovery and functional dependence in chronic young stroke survivors on caregiver burden
6. A cross sectional study on fall related injuries and hospital admissions in Indian elderly
7. A cross sectional study of employment pattern in patients with severe mental illness
8. Effectiveness of buttoning activities on upper body buttoning speed of patients with hand injuries

Year 2014 (08 Numbers)

1. Comparison of compliance to manual and video-based home program in parents of children with motor developmental delay
2. Effectiveness of Sensory Motor Based strategies on Organizational Skills in Children with Attention Deficit Hyperactivity Disorder (ADHD)
3. Leisure participation in academically good and poor performing children
4. Test of shopping skills for children and its Reliability
5. Perspectives of Older Adults on Community Mobility in an Indian Metropolis
6. A cross-sectional study on bathroom hazards in urban community dwelling older adults
7. Normative performance of Indian Older Adults in Modified Jebsen Hand Function Test
8. Impact of upper extremity injuries on two-wheeler driving

Dept of Respiratory Therapy

Year 2012 (03 Numbers)

1. Comparison of pressure support ventilation with proportional assist ventilation in weaning of critically ill patients
2. Efficacy of recruitment manuevre with or without antidercruitment strategy in ARDS patient a prospective study.
3. Evaluation of five weaning indices in mechanical ventilated patients

Year 2013 (02 Numbers)

1. Clinical features, management and outcome in patients admitted with liver cirrhosis to the ICU – A retrospective Study

2. Comparison of endotracheal cuff pressure measurement techniques in critically ill patients

Department of Optometry

Year 2012 (06 Numbers)

1. Comparison and quantification of signs and symptoms with reading text: Hard copy v/s soft copy
2. Awareness, knowledge and barriers to low vision services among eye care practitioners in India
3. Normative data for near point of convergence, amplitude of accommodative and phoria in Indian population
4. Study the effect on intraocular pressure and central corneal thickness due to a tight necktie among obese and normal adults
5. Knowledge, awareness and perception towards eye donation among literate working population
6. Efficacy of tele-based (remotely operated) visual acuity examination & training video on vision examination using landolt 'C' in a hospital based population

Year 2013 (05 Numbers)

1. To develop & validate automated E-Amsler for sight threatening eye (macula) diseases
2. To compare the visual performance and reading speed between multifocal contact lens And spectacle wearers among presbyopes
3. Validation of plusoptix among school going children in Udupi taluk
4. Impact of non-strabismic binocular vision anomalies on academic performance in primary school children at Udupi
5. Sensitivity and specificity of different visual acuity charts and stereoacuity charts

Year 2014 (06 Numbers)

1. Influence of Lasik on orthoptic parameters.
2. Comparison of the visual skills between higher order and tail end Batsman
3. Comparison of Computerized Binocular vision test using VTS 3.0 and standard Binocular Vision testing methods
4. Development and repeatability of visual acuity chart using vanishing optotypes
5. Ophthalmic anthropometry measurement's in South Indian children between 3-9 years of age.
6. A Comparison of Subjective Refraction of Subjective Refraction during and post Cycloplegic using different sizes of pupil

Department of Renal replacement therapy and Dialysis technology:

Year 2014 (02 Numbers)

1. Study of dialysis central venous catheter related blood stream infection among the patients undergoing hemodialysis treatment in Kasturba hospital, Manipal
2. Profile of Anemia management among chronic kidney disease patients under regular hemodialysis in Kasturba hospital, Manipal

Dept of Medical Imaging Technology

Year 2014 (08 Numbers)

1. Comparison of Multiplanar HRCT & VR CT in depiction of Microanatomy of the Temporal bone
2. Radiographer's Knowledge, Awareness & Practice towards Nosocomial Infection during Radiography
3. Evaluation of factors Effecting Intravenous CT Contrast Medium Kinetics
4. Estimation of range of Hounsfield unit on CT for different grades of fatty infiltration of liver categorized using ultrasound
5. Comparison of MIP & VR with Average at various slab thickness in MCDT for detecting Pulmonary Nodules
6. Radiographer's Knowledge, Awareness & Practice towards Nosocomial Infection during Radiography
7. Evaluation of factors Effecting Intravenous CT Contrast Medium Kinetics
8. Estimation of range of Hounsfield unit on CT for different grades of fatty infiltration of liver categorized using ultrasound

22E. Completed UG Projects

Department of Physiotherapy

Year 2012 (20 Numbers)

1. Muscular endurance among Malaysians and Indians normative data
2. Effectiveness of ultrasound and laser for treatment of trigger points: A Randomized clinical trial
3. Changes in peak expiratory flow rate in individuals with type-2 diabetes
4. Prevalence of Neck pain among desktop and laptop computer users in university staff and students
5. Effect of Laser and tests in treatment of patients with Fibromyalgia – A pilot study
6. Short term Effects of Low Level Laser Therapy on Pain and Symptoms with patients with Chronic Sinusitis: A randomised controlled placebo study
7. Immediate effects of Kinesiotaping on postural control in low back pain
8. Effect of thumb hyperextension on pad to pad pinch strength
9. Effect of Isometric neck Muscle training on Cervical Core Endurance
10. Comparison of Transversus abdominis muscle endurance between women with and without dysmenorrhoea in various phases of menstrual cycle
11. Awareness of foot problems and care among diabetic population in India- A questionnaire based survey
12. Effect of low cost modified peripheral input device for training upper limb function in patients with stroke using computer games – A pilot study
13. Functional Activity quality rating
14. Association of physical activity and sleep habits – construction and validation of questionnaire
15. Measurement of Shoulder Alignment in Bowlers
16. Postural Sway In Patients with Low Back Pain
17. Validation of Neumatic Jacket for Inspiratory Muscle Testing In COPD and Healthy Subjects
18. Relation Between Foot Discomfort and Footwear A Cross Sectional Study
19. Awareness and Knowledge about antenatal exercise program - a cross sectional study
20. Qualitative video analysis of cricket pace bowlers with and without shoulder pain

Year 2013 (03 numbers)

1. Attitude and Perception of Physical Activity Towards Allied Health Science Female Students

2. Perception about Activities of Daily Living Among Pregnant Women
3. Assesment of Weight Bearing status in Spastic Diplegic Children Using Foot Scanner

Year 2014 (16 numbers)

1. Observed versus perceived barriers among institutionalized older adults
2. Acute Heart rate response to diving in male recreational drivers
3. Body Composition, Framingham Risk Score And Parameters Of Metabolic Syndrome In Overweight And Obese Indians
4. Use of theraband in phase 1 cardiac rehabilitation and its effect on performance.
5. Role of mirror therapy on muscle activation in patients with stroke : A preliminary study
6. Inter-examiner reliability in diagnosing neck dysfunction
7. The effect of static stretch and PNF stretch on Hamstring length : Comparative study
8. Prevalence of Musculoskeletal and foot complications in patients with type 2 diabetes mellitus
9. Effect of video assisted home based program in subjects with peripheral vestibular disorders
10. Influence of mirror feedback on postural sway in normal young adults
11. Inter – rater reliability of inch tape measurements for flexion and extension on range of motion of thoracic spine
12. Effects of aerobic exercise using large therapeutics rolls on exercise capacity of overweight and obese individuals.
13. Reliability of assessing end feel in subjects with painful elbows
14. Determining the dimensions of L5-S1 intervertebral disc
15. Risk factor and injury profile in recreational basketball players
16. Designing and development of portable frame with caliper for chest expansion measurement

Department of Health Information Management

Year 2012 (06 Numbers)

1. Summarizing the outcome of care of infectious diseases as per ICD-10
2. Knowledge and Experience of health insurance product among the policy holders
3. Perception of allied health professionals towards health application Study of job satisfaction among the health information management professionals working in the front office
4. Trends of communicable diseases among teenagers
5. A study on awareness, practice and perception among students about delivery healthcare services using mobile phone
6. A quantitative study on wastage of medical records forms Perception of Allied Health and Nursing Students towards eHealth application

Year 2013 (11 Numbers)

1. Assessment of HIS in PHCs of Udupi District
2. Assessment of HIS in PHCs of Patna District
3. Assessment of HIS in PHCs of Mallapurum District
4. Assessment of HIS in PHCs of Goa
5. Assessment of HIS in PHCs of Sikkim
6. Nurses attitude towards EMR
7. Perception, need & expectation of Healthcare professionals towards CDSS
8. Community based assessment of NCD in Sikkim
9. Corporate patient satisfaction with Health Insurance package

10. Utilization of primary healthcare service by community in rural area of Sikkim
11. Study on Greenhealth Insurance claim process

Year 2014 (06 Numbers)

1. End-User satisfaction of HIS
2. Communication system among nurses
3. Awareness of MHIS in Meghalaya
4. Implementaton of ICD 10 in LM Hospital, Udupi
5. Health information documentation in private hospital in Meghalaya
6. A compliance audit of initial nursing assessment

Dept of Occupational Therapy

Year 2012 (05 Numbers)

1. Time Taken for Upper Body Dressing in Young Normal Adults
2. A Study on the Leisure Interest of Indian Undergraduate Students
3. An Observational Study on Sensory Based Outdoor Play Preferences in Children Aged Between 3-12 Years- A Preliminary Study
4. Barriers to Wheelchair Accessibility in Private Schools
5. A Retrospective Study on Fall Related Injuries and Hospital Admissions in Indian Elderly

Year 2013 (02 Numbers)

1. The use of public transport by Osteoarthritis patients: A Descriptive Study.
2. A study on the Risk Factors Related to Lifestyle Disease among College Going Students.

Year 2014 (03 Numbers)

1. A Comparative study to assess the Quality of Life satisfaction of elderly residing in old age home and home setting in and around Udupi.
2. The level of performance in BADL and IADL in elderly: A self-report measure.
3. Relationship between homemaking performance mode and body mass index in housewives within Shivalli area using a rater administered questionnaire

Department of Respiratory Therapy

Year 2012 (13 Numbers)

1. Incidence of Ventilator associated Pneumonia
2. Efficacy of Pulmonary Rehabilitation in Patients with COPD & Asthma –
3. Health care Professionals Burden while treating critically ill-patients –
4. Comparison of Invasive & Non-invasive Mechanical ventilation in critically ill patients –
5. Effectiveness of Chest Physiotherapy & Breathing exercises in critically ill patients –
6. Scrub typhus at tertiary hospital in Udupi District: Clinical profile and complication in patient who required mechanical ventilation. –
7. Comparison of Down score with Silverman Anderson score in Respiratory Distress –
8. Clinical outcome of HFOV in neonates –
9. Clinical outcome of H1N1 in mechanically ventilated patients –
10. Assessment of FDO₂ by preterm self inflating bag with leak –
11. Clinical outcome of Nitric oxide in neonates –

12. Curb 65 scoring in pneumonia –
13. Calculation of the APACHE II score of patients who have sustained Cardiac arrest –

Year 2013 (06 Numbers)

1. Reliability of Shunt Table with respect of different disease conditions
2. The APACHE – IV prognostic system – predicting mortality and length of stay
3. NIV as a weaning tool – observational study
4. Outcome of non-invasive ventilation (NIPPV v/s VCPAP) in neonates with apnea of prematurity receiving methylxanthines in NICU – A retrospective study
5. An awareness study of prevention of ventilator associated pneumonia among health care professionals
6. Outcome assessment in neonates with congenital diaphragmatic hernia during mechanical ventilation

Year 2014 (18 numbers)

1. Assessment Of Rapid Shallow Breathing Index As A Predictor Of Failure Of Noninvasive Ventilation For Patients With Acute Respiratory Failure
2. . Effect Of Oxygen Injection Sites On Fraction Of Delivered Oxygen (Fdo₂) During Non-Invasive Ventilation: An Experimental Lung Model Study
3. Non Invasive Ventilation In Acute Respiratory Failure Patients
4. Modified Early Warning Score In High Dependency Unit
5. High Flow Nasal Cannula Versus Nasal Continuous Positive Airway Pressure For Neonates- A Prospective Interventional Study
6. Comparison Of Automatic Tube Compensation And Pressure Support Ventilation In Weaning From Mechanical Ventilation
7. . Assessment Of Mean Airway Pressure And Rapid Shallow Breathing Index For Preterm Neonates Diagnosed With Respiratory Distress Syndrome
8. Sporadic Cases Admitted In Both Adult And Neonatal Intensive Care Unit Of Kasturba Hospital- A Retrospective Case Study
9. Arterial Sampler Filling Time During Arterial And Venous Puncture An Observational Study
10. To Study The Relationship Between Haemoglobin Value And Weaning From Mechincal Ventilation In Simple Difficult And Prolonged To Wean Patients A Pilot Study
11. Pulmonary Function Test Normal Values In Adult South Indian Population
12. Case Series Of Myasthenia Gravis
13. Case Series Of COPD
14. Case Series Of ARDS
15. Case Series Of Pulmonary Tuberculosis
16. . Case Series Of Pulmonary Edema
17. . Case Series Of Ventilatory Associated Pneumonia
18. Case Series Of Organophosphorous Poisoning

Department of Optometry

Year 2012 (08 numbers)

1. Comparison of contrast sensitivity visual acuity & various stages of visual field losses in glaucoma patients
2. Comparison of the tear film clinical parameters of two different times of the day
3. Comparison of near vision quality among presbyopes using different forms of optical correction
4. A comparison of tear film characteristics in Kajal wearers & non-kajal wearers

5. Study of anthropometric measurement in South Indian population at Manipal University
6. Effect of cumulative near work on accommodative facility and asthenopia among 18-24 years old young adult
7. Awareness of diabetic eye diseases among diabetic patients in a tertiary health care hospital in coastal Karnataka
8. Prescribing art of spectacle for hyperopia among eye care practitioners

Year 2013 (10 Numbers)

1. Accommodative and vergence facility before and after the use of video display terminals
2. The relationship among iris colour central corneal thickness and intraocular pressure.
3. The effect of vertical case position on t but and Nibut in normal individuals
4. Prevalence of Convergence insufficiency using ELSS symptoms survey questionnaire
5. Awareness and knowledge of common eye disorders among the academic staff (Non medical faculties of Manipal University.
6. Major ocular Biometric Parameters and Binocular vision status in young Adult Myopes
7. Comparison of Ocular Parameters between Mongoloids and Dravidian race in a university population in south India
8. Awareness of smoking related blinders among health sciences students in Manipal University
9. Contact lenses versus spectacles in Myopes is there any differences in Accomodative and Binocular Function
10. Corneal staining and comfort with silicone Hydrogel lens using two multipurpose solutions

Year 2014 (12 numbers)

1. Comparison of Orthoptic parameters before and after A 3D movie using computer based freely available software
2. Normative data for reading speed in school going children using mooread chart
3. Comparison of schirmer test with and without anaesthesia in open and closed eye condition.
4. Axial, length, anterior chamber depth and lens thickness changes during accommodation in myopes
5. Comparative study of visual skills on batting performance of high order and tail ender batsman
6. Effect of induced Astigmatic Axis Orientation on low contrast visual Acuting
7. Effect of warm compression tear quantity in normal population
8. Comparison of the subjective measurement of the Amplituded of Accomodation in different body postures
9. Normative Data for critical print size in school going children using MNREAD Chart
10. The effects of Music on visual memory
11. The effect of base in prism on stereoacuity during vergnce adaptation
12. Comparison of high and low contrast visual acuity with induced Astigmatic Axis Orientation

Department of Cardiovascular Technology

2012: (02)

- 1) A study of ventricular function on angiographic ally proven slow flow /normal epicardial coronaries using newer indices of Echocardiography—Thara Shetty 2012.
- 2) A study on prevalence of cardiac dysfunction in septicemia patients by Echocardiography Soumya Jose 2012.

2013 (03 numbers)

- 1) Clinical profile and outcome of patients with implanted IVC filter for DVT-Elisha Paul
- 2) Biventricular function assessment in isolated Mitral regurgitation by using newer Doppler indices of Echocardiography-----Roshini Thomas
- 3) Biventricular function assessment in isolated AS by newer Doppler indices of ECHO.—Kiran Rai

2014 (07)

- 1) A study of LV and RV function in pre and post BMV patients using newer ECHO techniques---Udaya Prabhu.
- 2) Clinical follow up in patients undergoing Carotid Artery Stenting—Ramya Nayak.
- 3) A follow of study of prognosis of patients with renal artery stenosis-Pema Wanchuk Lepcha
- 4) Comparative study on biventricular function in pre and post ASD device closure by newer Doppler indices—Mohammed Safeer.
- 5) Peripheral angio plasty-: clinical follow up---Naveena.
- 6) Dyysnchrony correlation of new Doppler Indices to ECG QRS duration in DCM – LBBB and non LBBB patterns-Sridevi
- 7) Comparison of biventricular function between pregnant and non-pregnant women by conventional and newer Echocardiographic indices—Priyanka Antony 2014.

22F. Publication

22Fi. National

Department of Physiotherapy

Year 2012 (05 Numbers)

1. Roopa RD, Ranganath G, Ravi SR. Role of Mettler's Release as an Adjunct in the Management of Post-Immobilization Knee Stiffness- A pilot study. IJOPT 2012;5(1):133-135
2. Hiral Gandhi, Vaishali K, V Prem, K Vijayakumar, PrabhaAdikari, B UnniKrishnan. A Survey on Physical Activity and Non-Communicable Disease Risk Factors among Physicians in Tertiary Care Hospitals, Mangalore. National J Community Medicine 2012;3(1):7-13
3. Karvannan H, Maiya AG, Chakravarthy RD, Prem V, Syed N, Babu K, Rajashekar R. Effectiveness of behavior graded activity on exercise adherence and physical activity in hip and knee osteoarthritis – A systematic review. Indian J Rheumatol 2012 (Epub ahead of print) July 6
4. Dixit S, Maiya A, Rao L, Rao MA, Shastry BA, Ramachandra L. Photobiomodulation by helium neon and diode lasers in an excisional wound model: A single blinded trial. Adv Biomed Res 2012;1:38
5. Davis FJ, Vidyasagar S, Maiya GA. C-reactive protein and coronary heart disease - risk marker or risk factor? J ClinSci Res 2012;1:178-86

Year 2013 (13 Numbers)

1. Babu AS. Acute exacerbations of COPD – Will on-call physiotherapy allow for early initiation of rehabilitation? *Chest* 2013;143:280-281
2. Kanagasabai PS, Mohan D, Lewis LE, Kamath A, Rao BK. Effect of Multisensory Stimulation on Neuromotor Development in Preterm Infants. *Indian J Pediatr.* 2013 Jan 4. [Epub ahead of print]
3. Dixit S, Maiya A, Umakanth S, Borkar S. Photobiomodulation of surgical wound dehiscence in a diabetic individual by low-level laser therapy following median sternotomy. *Indian J Palliat Care.* 2013 Jan;19(1):71-5
4. Raja K, Gupta S. Goal oriented activity towards life skill training: preliminary indications of a task-intensive approach to manage cerebral palsy. *Disability, CBR & Inclusive Development*, 23, Feb. 2013. Available at: <<http://dcidj.org/article/view/161>>. Date accessed: 01 Apr. 2013
5. Samuel AJ, Solomon J, Kumaran S, D'souza N. A Report of Body weight Supported Overground Training in Acute Traumatic Central Cord Syndrome. *IJPOT* 2013;7(1):96-98
6. Raju N, Maiya AG, Manikandan N. Reliability and Feasibility of Community Balance and Mobility Scale (CB&MS) in Elderly Population. *IJPOT* 2013;7(1):131-135
7. Babu AS, Arena R, Maiya AG, Padmakumar R Guazzi M. Should cardiopulmonary exercise testing become a part of regular evaluation for patients with a family history of pulmonary hypertension? Regarding “Cardiopulmonary exercise testing reveals onset of disease and response to treatment in a case of heritable pulmonary arterial hypertension” *Pulm Circ* 2013;3(1):121-122
8. Jingar A, Alaparathi GK, Vaishali K, Krishnan S, Z, Unnikrishnan B. Clinical management practices adopted by physiotherapists in India for chronic obstructive pulmonary disease: A national survey. *Lung India* 2013;30:131-8
9. Samuel SR, Maiya AG, Babu AS, Vidysagar MS. Effect of exercise training on functional capacity & quality of life in head & neck cancer patients receiving chemoradiotherapy. *Indian J Med Res* 2013;137(3):515-520
10. Babu AS, Padmakumar R, Maiya AG. A review of on-going trials in exercise based rehabilitation for pulmonary arterial hypertension. *Indian J Med Res* 2013;137(4):900-906
11. Babu AS, Myers J, Arena R, Maiya AG, Padmakumar R. Evaluating exercise capacity in patients with pulmonary arterial hypertension. *Expert Rev Cardiovasc Ther* 2013;11(6):729-737
12. Kulkarni S, Darshana NG. Musculoskeletal Risk Assessment among Nurses in Patient Manual Handling in Hospital Wards – A Cross Sectional Study. *Curues* 2013;5(8):e137 doi:10.7759/cureus.137
13. Syed N, Maiya AG, Hanifa N, Goud S. Plantar pressures in diabetes with no known neuropathy. *Journal of Diabetes* 2013;5: 302–308

Year 2014 (18 Numbers)

1. Babu AS, Madan K, Veluswamy SK, Mehra R, Maiya AG. Worksite health and wellness in India. *Prog Cardiovasc Dis* 2014; 56(5):501-507
2. Madan K, Babu AS, Contractor A, Prabhakaran D, Gupta R, Sawheny JPS. Cardiac rehabilitation in India. *Prog Cardiovasc Dis* 2014;56(5):543-550
3. Babu AS, Veluswamy SK, Rao PT, Maiya AG. Clinical Trial Registration in Physical Therapy Journals: A Cross-Sectional Study. *Phys Ther* 2014;94(1):83-90

4. Unnikrishnan R, Babu AS, Krishna HM. Cardiac arrest in acute respiratory distress syndrome – is it time to focus? *Indian J Respir Care* 2014; 3(1):347-349
5. Neha Dewan, Kavitha Raja, Ganesh Balthillaya Miyaru, and Joy C. MacDermid, “Effect of Box Taping as an Adjunct to Stretching-Strengthening Exercise Program in Correction of Scapular Alignment in People with Forward Shoulder Posture: A Randomised Trial,” *ISRN Rehabilitation*, vol. 2014, Article ID 510137, 12 pages, 2014. doi:10.1155/2014/510137
6. Dixit S, Maiya A. Diabetic peripheral neuropathy and its evaluation in a clinical scenario: A review. *J Postgrad Med* 2014;60:33-40
7. Thakrar R, Alaparthy GK, Kumar SK, Vaishali K, Zulfeequer CP, Aanad R. Awareness in patients with COPD about the disease and pulmonary rehabilitation: A survey. *Lung India*. 2014 Apr;31(2):134-8
8. Manikandan, N., Kumar, K., Rajashekhar, B. Generation and Content Validation of Mobility Domains and Item Pool for Community-dwelling Individuals. *Disability, CBR & Inclusive Development* 2014; 25(1): 40-54
9. Dixit S, Kumar S. Awareness of Diabetic Foot Complications in Type 2 Diabetes Population in Rural India: Are we doing enough? *J Diabetes Metab* 2014, 5:4 <http://dx.doi.org/10.4172/2155-6156.1000363>
10. Shah A A, Chakravarthy K B, Maiya A G, Vora V, Gopee M. Epicardial adipose tissue thickness in young Indian overweight and obese individuals. *Ann Med Health Sci Res* 2014;4:56-7
11. Dixit S, Maiya AG, Shastry BA. Effect of aerobic exercise on peripheral nerve functions of population with diabetic peripheral neuropathy in type 2 diabetes: A single blind, parallel group randomized controlled trial. *J Diabetes Complications*. 2014;28(3):332-9
12. Bhat A, Chakravarthy K, Rao BK. Chest physiotherapy techniques in neurological intensive care units of India: A survey. *Indian J Crit Care Med* 2014;18:363-8
13. Samuel SR, Maiya AG, Vidyasagar MS. Quality of life in head and neck cancer patients: A physiotherapist's perspective. *Indian J Cancer* 2014;51(1):86
14. Dixit S, Maiya AG, Shastry B. Effect of aerobic exercise on quality of life in population with diabetic peripheral neuropathy in type 2 diabetes: a single blind, randomized controlled trial. *Qual Life Res* 2014;23(5):1629-1640
15. Davis FJ, Vidyasagar S, Maiya AG. Effect of Eight Weeks of Walking on High Density Lipoprotein Cholesterol. *IJPOT* 2014;8(3):176-181
16. Saxena S, Rao BK, Kumaran S. Analysis of Postural Stability in Children With Cerebral Palsy and Children With Typical Development: An Observational Study. *Paed Phys Ther* 2014;26(3):325-330
17. Babu AS, Veluswamy SK, Myers J, Lavie CJ. Metabolically healthy obese versus cardiorespiratory fit obese - is it time to bring them together? *J Am Col Cardiol* 2014;64(11):115-116 Indexed: *PubMed*, Impact factor: 14.7
18. Babu AS, Veluswamy SK, Arena R, Guazzi M, Lavie CJ. Virgin, Coconut oil and its potential cardio protective effects, *Postgrad Med*.2014

Department of Health Information Management

Year 2012 (10 Numbers)

1. Jathanna, Roopalekha PN and Latha, KS and Prabhu, Swetha (2012) Occupational Stress and Coping among Nurses in a Super Specialty Hospital. *Journal of Health Management*, 14 (4). pp. 467-479.

2. Saha, Dola and Nur, Ibrahim Mohammed (2012)Perception of Medical Students about Electronic Discharge Summaries. Research & Reviews: A Journal of Health Professions, 2 (3). pp. 18-29. ISSN 2277-6192
3. Saha, Dola (2012)Management of Health Information Technology in Indian Hospitals. Research & Reviews: A Journal of Health Professions, 2 (1). pp. 12-16. ISSN 2277-6192
4. Mary, Geena S and Nair, SN and Roopalekha, J (2012)Analysis of the satisfaction profile of patients using a hospital based health insurance scheme: A cross sectional study. Management in Health, 16 (2). pp. 32-35.
5. Reshmi, Bhageerathy and Nair, Sreekumaran N and Sabu, KM (2012)Awareness, attitude and their correlates towards health insurance in an urban south Indian population. Management in health, 16 (1). pp. 32-35.
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6. Sunila John and B Rajashekhar. Word retrieval ability on semantic fluency task in typically developing Malayalam-speaking children. *Child Neuropsychology: A Journal on Normal and Abnormal Development in Childhood and Adolescence*, 20(2), 182-195.
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Dept. of Medical Laboratory Technology

Year 2012 (04 Numbers)

1. Saleena U V, M S Athiyaman, Donald F, BM Vadhiraja, R Prabhu, Nalini K. Evaluation of urinary tubular enzymes for the detection of early kidney injury due to cisplatin chemotherapy. *Int J Biol Med Res*. Vol 3, (2012). ISSN: 0976 – 6685
2. Saleena Ummer V, Asha Das, Biomarkers for therapeutic response in cervical cancer, *IJPSR* (2012), vol. 3, issue 9
3. Saleena U V, Athiyamaan M S, Vadhiraja B M, R Prabhu, Nalini K. Urinary α -Glutathione-s-transferase variations in cisplatin treated cancer patients with and without kidney injury, *IPCBE* (2012), vol. 31 pp. 32-36, ISSN: 2010-4618
4. Saleena U V, M S Athiyamaan, B M Vadhiraja, R Prabhu, K Nalini. Evaluation of urinary α -glutathione -s-transferase(α -GST) as a marker of early cisplatin induced kidney injury, *IJBBS* (2012), vol. 2(4)

Year 2013: (06 Numbers)

1. Maya Roche, Ronald A Roche, Saritha Kamath. U. Immunoreactive α 2-macroglobulin in tubal pregnancy: A possible tool for early diagnosis. *International Journal of A J Institute of Medical sciences* 2 (2013), 13-16
2. Kamath SarithaU, Prabhu Ravindra A, Patil Asha, Bandreddi Suprabha; Prevalence Of Anemia In Patients Undergoing Maintenance Hemodialysis In A Tertiary Care Setting; *Int j clin surg adv* 2013; 1(2):16-21
3. Patil A, Nayak DM, Belurkar SV. Internal Quality control of erythrocyte sedimentation rate with patient blood sample. *Int J Cur Res Rev*, March 2013; 5(05): 105-110.
4. Patil A, Nayak DM, Belurkar SV, Verma S. Assessment of Diesse Vesmatic 80/20 plus with modified Westergren method, *IJSRP* 2013 (accepted)
5. Nayak DM, Manohar C, Saroja, Patil A. Comparison of Photo-Optical and Mechanical Methods for Prothrombin Time Test, *IJAR* 2013; 3(9):457-458.
6. Sinha, Rajesh Kumar, Vivek M. Raghavan, and Sunronce Pias. "Quality Evaluation of Clinical Biochemistry Laboratory against ISO 15189: 2007

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Year 2014: (07)

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5. Saritha Kamath U, Nalini Bhaskaranand, Anjali Rao. Spectrum of Clinical Symptoms in Children with Elevated Lactate : Pyruvate Ratio in a Tertiary Care Setting. Asian Journal of Biomedical and Pharmaceutical Sciences 4 (29) 2014: 34-38.
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Dept. of Medical Imaging Technology

Year 2012 (13 Numbers)

1. Sukumar, Suresh and Yadav, Sushil (2013) CT Scan automatic tube current modulation. International Journal of Pharmacy and Biological Sciences, 3 (1). pp. 511-520. ISSN 2230-7605
2. Sukumar, Suresh and Yadav, Sushil and Sahana, S and David, Leena R and Kumari, Mona (2012) X Ray image reject analysis in OPD X ray Department- A pilot study. International Journal of Medical and Pharmaceutical Sciences , 3 (2). pp. 33-
3. Sukumar, Suresh and Yadav, Sushil and Manju, HB (2012) 3D Reconstruction computer tomography of foramen magnum and fronto nasal junction for sex determination in south indian population. International Journal of Pharma and Bio Sciences, 3 (4B). pp. 615-619. ISSN 0975-6299
4. Sukumar, Suresh and Yadav, Sushil (2012) Does Radiographer Aware of Hospital Acquire Infection in Radiology Department-A case Report. International Journal of Current Research and Review , 4 (19). pp. 150-153.
5. Sukumar, Suresh and Yadav, Sushil and Paliwal, Karuna (2012) Infection in Radiology Department. International Journal of Pharmacy and Biological Sciences , 2 (4). pp. 119-122. ISSN 2230-7605

6. Sukumar, Suresh and Yadav, Sushil (2012) *Infection risk control in "Computer Radiography imaging plate" in diagnostic radiology department.* International Journal of Current Research and Review, 4 (17). pp. 139-143.
7. Sukumar, Suresh and Yadav, Sushil and Ismail, Afra (2012) *Quality assurance procedure for diagnostic X-Ray machines (Test followed in India).* International Journal of Medical and Pharmaceutical Sciences, 3 (1). pp. 25-30.
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9. Kumar, Vimal M and Sukumar, Suresh and Mamatha, H (2012) *Computed Tomographic Studies on Sphenoid Sinus Variants.* Int J Pharm Bio Sci, 3 (3). pp. 482-486.
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12. Sukumar, Suresh and Yadav, Sushil (2012) *Study on Sphenoid Sinuses Variants in Magnetic Resonance Imaging of South Indian Population.* International Journal of Scientific Research, 1 (2). pp. 147-148. ISSN 2277 - 8179
13. Sukumar, Suresh and Yadav, Sushil and Vipinkumar, G (2012) *Sex Determination by Mastoid Process in South Indian Population by 3d Computer Tomography Imaging.* International Journal of Pharmacy and Biological Sciences, 2 (4). pp. 193-195.

Year 2013 (02)

- 1) Sukumar, Suresh and Yadav, Sushil and Paliwal, Karuna (2013) *Comparison between CT Scan and manual method of area measurement of mastoid process in sex determination of south indian population.* International Journal of Pharmacy and Biological Sciences, 3 (1). pp. 536-539. ISSN 2230-7605
- 2) Winneciadkhar, * (2013) *Mammography.* International Journal of Pharma and Bio Sciences, 4 (2). pp. 1106-1111. ISSN 0975-6299

Dept of Occupational Therapy

Year 2012 (07 Numbers)

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3. Mrs. KR. Banumathe, V. Guruprasad, Leena Ann Lukose A Study to find out the Prevalence and effectiveness of Occupational Therapy intervention for pain and activity performance in mobile users with risk of repetitive strain injury, *International journal of scientific research*, Vol:1, Issue: 2, ISSN No. 2277- 8179, 149-151, July 2012
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5. K.R Banumathe, Vineeta I. Ram, Alzeena Pinto, Samuel Jonathan An observational study on sensory based outdoor play preference in children aged between 3 to 12

- years : a preliminary study, International journal of current research and review , Vol: 04, Issue 17, pissn2231-2196, Page 20 to 28, September ,
6. V. Guruprasad, Mrs. KR. BanumatheDr. E Sinu Leisure and its impact on well being in school children , International journal of scientific research Vol:1, Issue: 5, ISSN No. 2277- 8179, 114, October
 7. Guruprasad V, Banumathe KR Application of occupational performance model in occupational therapy for rehabilitation in medical conditions – a case study., International journal of health Science and research Vol 2 , Issue 8 ISSN 2249-9571, 111 113, Nov 2012

Year 2013 (06 numbers)

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2. Sau, Koushik and Guruprasad, V (2013) Facebook and Occupational Therapy Profession. International Journal of Medical Research & Health Sciences, 2 (3). pp. 660-661. ISSN 2319-5886
3. Guruprasad, V and Sau, Koushik and Vidyasagar, Sudha and Varma, Muralidhar (2013) Functional Rehabilitation of a Patient with Post Stroke Cerebellar Cognitive Affective Syndrome - A Single Case Study. International Journal of Health Sciences and Research, 3 (5). pp. 107-110. ISSN 2249-9571
4. Sau, Koushik (2013) Facts About Journal Publishing in Open Access Policy. Indian Journal of Medical Research, 138. pp. 1029-1030.
5. D'souza, Sebestina A (2013) An Integrated Multimodal Intervention of Remedial and Adaptive Approaches in Secondary Dystonia of Hand: A Case Report. Disability, CBR and Inclusive Development, 24 (2). pp. 100-110.
6. Sau, Koushik (2013) Occupational Therapy Marketing Indian Prospective. Scientific Research Journal of India, 2 (3). pp. 59-66. ISSN 2277-1700

Year 2014 (5 numbers)

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2. Sau, Koushik and Sridhar, D and Kumar, Sanjiv (2014) Ethical Challenges for Occupational Therapist in India to Use Social Media. Scientific Research Journal of India, 3 (1). pp. 52-57.
3. D'souza, Sebestina A and Rajashekar, B and D'souza, HS (2014) Falls in Indian Older Adults: A Barrier to aActive Ageing. Asian Journal of Gerontology & Geriatrics, 9 (1). pp. 33-40.
4. D'souza, Sebestina A and Saha, Shovan (2014) Impact of International Collaborative Project on Cultural Competence among Occupational Therapy Students. The Open Journal of Occupational Therapy, 2 (3). pp. 1-18.
5. Acharya, Vinita (2014) preparing for motherhood: a role for occupational therapy. WFOT Bulletin, 70 (1). pp. 16-17. ISSN 1447-3828

Dept of Optometry

Year 2012 (05)

1. Krithica Srinivasan ,Ramesh SV, Babu N, Sanker N, Ray A, Karuna SM -Efficacy of a remote based computerised visual acuity measurement - British Journal Ophthalmology, Volume 96- page no. 987-990
2. Nijil Sankar Prabhu A, Ray A -A comparison of near dissociated heterophoria tests

in free space-Clinical and experimental Optometry –Volume 95-issue-6,page no. 638-42

3. Naushad B ,Saoji Y, Premjit Bhakat, Jyothi Thomas - Contact lens compliance among a group of young, university-based lens users in South India –Australasian Medical Journal Volume 5 Issue 3 Page No. 168-74
4. Noushad B, Jyothi Thomas, Shristi V Amin - Reliability of a modified log MAR distant visual acuity chart for routine clinical use - Oman Journal of ophthalmology Volume 5 Issue 2 –Page No. 87-90
5. Thomas J , Jacob GP, Abraham L, Noushad B. - The effect of smoking on the ocular surface and the precorneal tear film , Australasian Medical JournalVolume 5, issue - 4 page no. 221-26

Year 2013 (03)

1. Nilesh Thitte, Babu Noushad., Gauri Kunjeera - Contact lens prescribing pattern in India - 2011 Contact lens and Anterior Eye –Volume 36, Issue 4- page no. 182-5
2. Nijil Sanker , Babu Noushad Trend of soft contact lens prescribing in an Optometry centre in In India: A six year analysis - Contact lens & Anterior eye Volume 36 Issue 4, page No. 196-98
3. Nijil Sanker, Sayyeda Dhiranai, Premjit Bhakat, Comparison of visual acuity results in preschool children with Lea Symbols and Bailey-Lovie E chart - Middle East African Journal of Ophthalmology Volume 20 , issue 2, page no. 345-48

Year 2014 (01)

1. Sreelatha OK, Ramesh S Ve, Judy Jose, Mredula Devassy, Krithica Srinivasan , Virtually controlled computerised visual acuity screening in a multilingual Indian population - Rural and remote health ,Volume 14, issue-2908 page No. 1-8

Dept of Respiratory Therapy

2012 (14)

1. **Anitha Shenoy** - Respiratory therapy in India – Pg 01, Volume 1: Issue 1, Jan 2012
2. **Anitha Shenoy** - Current issues in mechanical ventilation – Pg 15, Volume 1: Issue 1, Jan 2012
3. **Eribaweimon Shilla, Leslie Lewis** – Basic neonatal and paediatric ventilation – Pg 21, Volume 1: Issue 1, Jan 2012
4. **Abhishek Vaidya** – Transport of critically ill patient – Pg 28, Volume 1: Issue 1, Jan 2012
5. **Saamy Johnson, Anitha Shenoy** – Noninvasive ventilation in acute respiratory failure: A study of clinical outcome and correlates for success – Pg 32, Volume 1: Issue 1, Jan 2012
6. **Meeti Sivadas, Anita Shenoy** - Noninvasive ventilation in patients with acute cardioaogenic pulmonary oedema: A prospective study to quantify adequate PEEP – Pg 37, Volume 1: Issue 1, Jan 2012
7. **Eribaweimon Shilla, Leslie Lewis** – Noninvasive respiratory support in preterm neonate with hyaline membrane disease: Bubble CPAP vs. Conventional CPAP – A randomized controlled trial – Pg 42, Volume 1: Issue 1, Jan 2012
8. **Ramesh Unnikrishnan, Anitha Shenoy** – Clinical outcomes of patients admitted with Organophosphorous poisoning in a tertiary hospital in Udupi district – Pg 59, Volume 1: Issue 1, Jan 2012

9. **Prathibha Todur, Saumy Johnson, Anitha Shenoy** – Airway pressure release ventilation for management of life-threatening adult respiratory distress syndrome secondary to fat embolism syndrome – Pg 66, Volume 1: Issue 1, Jan 2012
10. **Eribaweimon Shilla , Pushpa Kini** - Paediatric mechanical ventilation – Pg 124, Volume 1: Issue 2, July 2012
11. **Saumy Johnson, Elna Eldo, Ashley Varghese** – Comparison of FDO₂ at different flow rates in an adult manual resuscitator with and without reservoir bag : A manikin study – Pg 140, Volume 1: Issue 2, July 2012
12. Shyamsunder Kamath, **Anitha Shenoy** – Comparison of D blade with the conventional blade of C-MAC for endotracheal intubation in patients with simulated limitation of cervical movements. – Pg 144, Volume 1: Issue 2, July 2012
13. **Anil Kalarickal, Saumy Johnson, Anitha Shenoy** – Comparison of acute Physiology and Chronic Health Evaluation(APACHE) IV and simplified Acute Physiology score(SAPS) II in a Tertiary care hospital ICU in India – Pg 156, Volume 1: Issue 2, July 2012
14. **Saumy Johnson, Eldo Vijo** – role of noninvasive ventilation for acute respiratory failure due to snakebite – Pg 167, Volume 1: Issue 2, July 2012

2013 (08)

1. **Tisha Ann Skariah, Leslie Lewis, Arun Sasi** – Noninvasive ventilation in preterm neonates – Nasal continuous positive airway pressure versus Nasal intermittent positive pressure ventilation – Pg 206, Volume 2: Issue 1, Jan 2013
2. **Gordan R Kharmalki, Anitha Shenoy, Saumy Johnson** – Utility of rapid shallow breathing index in progressive weaning of adult patients from mechanical ventilation using pressure support ventilation – Pg 213, Volume 2: Issue 1, Jan 2013
3. **Prathibha Todur, Saumy Johnson, Anitha Shenoy** – Utility of arterial to end-tidal carbon dioxide difference [P(a – ET)CO₂] as a weaning index – Pg 227, Volume 2: Issue 1, Jan 2013
4. Heera Lal Mehto, Vishal Shanbag, Anitha Shenoy – efficacy of recruitment manoeuvre with or without antirecruitment strategy in ARDS patients: A prospective study, IJRC: - Volume 2: Issue 2, July 2013
5. Sanjay Sasikumar, Vishal Shanbag, Anitha Shenoy – comparison of pressure support ventilation and proportional assist ventilation plus for weaning from mechanical ventilation in critically ill patients, IJRC: - Volume 2: Issue 2, July 2013
6. Praveen Jacob John J, Saumy Johnson, Anitha Shenoy – comparison of 5 weaning indices in predicting successful weaning from mechanical ventilation, IJRC: - Volume 2: Issue 2, July 2013
7. Shyamsunder Kamath, Anitha Shenoy – anaesthetic management of a huge mediastinal tumor with tracheobronchial compression, IJRC: - Volume 2: Issue 2, July 2013
8. Akhila CBG, Ramesh Unnikrishnan – gloriosa superb poisoning – A case report, IJRC: - Volume 2: Issue 2, July 2013

Department of Clinical Psychology

Year 2013 (02)

1. Sahana, M and Bhat, SM and Haridas, K (2013) Unconsummated marriage and its etiological factors: A case series. Middle East Journal of Psychiatry & Alzheimers, 4 (2). pp. 18-22.
2. Aithal, Venkataraja U and Mohan, Kishan Madikeri and Alex, J (2013) The relationship of perceived severity of tinnitus with depression, anxiety, hearing status,

age and gender in individuals with tinnitus. *International Tinnitus Journal*, 18 (1). pp. 29-34.

Year 2014 (01)

1. Sahana, M (2014) *Reminiscence therapy: An Overview*. *Middle East Journal of Age and Ageing*, 6 (5). pp. 18-22.

22G. Books

Dept. of Speech & Hearing

Year 2012 (03 Numbers)

1. Ganapathy M K, Hari Prakash P, Rajashekhar B. (2012). Brain stem encoding of Fundamental frequency in Cochlear Implant users. LAP LAMBERT Academic Publishing GmbH & Co. KG, Germany. ISBN 978-3-659-17854-2. (July)
2. Kishan M M, Krishna Y, Abin (2012). "Temporal Signal Processing Of Hearing Impaired Through - Hearing Aids" LAP LAMBERT Academic Publishing GmbH & Co. KG, Germany. (ISBN 978-3-659-19783-3). (July)
3. Ayas Mohammad, Kanaka G, Rajashekhar B. (2012). Hearing aid outcomes using generic & disease specific questionnaires: Hearing aid outcome measures. LAP LAMBERT Academic Publishing GmbH & Co. KG, Germany. (ISBN ISBN-13: 978-3659186523). (August)

22H. Chapter in Book

Dept of Speech and Hearing

Year 2014 (01 Number)

1. Dr. Krishna Y - A chapter on "Re/Habilitation of Adults with Cochlear Implants" in "The Cochlear Implants – An overview" ISHA Monographs edited by Dr. Madhuri Gore, Vol 13, No 2 ISHA. ISSN-0974-214X

22I. Conference

22Ii. Conference: National

Department of Physiotherapy

Year 2012 (05 Numbers)

1. Mr. Manikandan. N presented a paper on "Custom-made over ground body weight support system: standardization and feasibility in patients with stroke" in 49th Annual conference of IAP held on January 2011, Pune
2. Mrs. Preetha R presented a paper on "Comparison of Ankle Proprioception Between Pregnant and Non Pregnant Women" in 49th Annual conference of IAP held on January 2011, Pune
3. Dr. John Solomon. M presented a paper on "Effect of virtual reality training on upperlimb functions in patients with cerebellar disorders" in 49th Annual conference of IAP held on January 2011, Pune
4. Ms. Nivedita Prabhu presented a poster on " 17th Annual Congress of the Indian Society of Critical Care Medicine and International Critical Care Congress, February 16 - 21, 2011, Vigyan Bhavan, New Delhi.

5. Mr. Ravi Shankar Reddy presented a paper on “Postural control in cervical spondylosis”, Indian Orthopedic Congress “Conference on spinal injury and rehabilitation at Chandigarh, India

Year 2013 (02)

1. Dr. Bhamini K Rao Has been invited as a session chairperson during International Conference on Developmental Pediatrics and Childhood Disability in 21st Century - a new beginning with Innovative Approaches scheduled on 20th December 2013 at , Kasturba Medical College, Attavar, Mangalore.
2. Dr. John Solomon has participated in the National conference on “Traumatic Brain Injury” held on 30th November 2013 which has been accredited for 10 credit points by the Tamil nadu Dr. M G R Medical University, Chennai

Year 2014 (02)

1. Dr. G Arun Maiya has participated as a plenary speaker in the Manipal Research Colloquim – 2014 held at Manipal University, Manipal on April 11th & 12th 2014.
2. Dr. Manikandan has attended and participated in “PHYSIO ACCORD 2014” The national physiotherapy conference organized by Karnataka Physiotherapists at Manpho Convention Center, Bangalore Karnataka

Dept. of Medical Laboratory Technology

Year 2012 (01 Numbers)

1. Poster presentation on “Internal quality control for Erythrocyte sedimentation rate (ESR) using patient sample” by Asha Patil at CME for medical laboratory technologist conducted by TATA Memorial Hospital, Mumbai, Maharashtra on 23 rd December 2012

Year 2013 (01 Numbers)

1. K Ramya Shetty, B Muralidhara , Dr. Swati Sharma, Dr. Ranjini Kudva, Asha Patil. poster at TATA Memorial Hospital, Mumbai on 21st to 22nd December 2013 on “Cryostat-Frozen Sections: A Double Edged Sword Brief Review Of Literature And Audit Of Concordance Rate For A Period Of One And A Half Years In A Tertiary Care Hospital”-

Year 2014 (01 Numbers)

1. Attended and presented poster on ‘Knuckle pigmentation warrants screening for vitamin B12 deficiency’ at South regional conference of the Association of Clinical Biochemists of India 2014 held at KMC Mangalore on 22nd and 23rd May 2014

Dept. of Clinical Psychology

Year 2012 (08 Numbers)

1. Dr.Dinesh N : Present a paper on Imagery Training for dermatologists in non - pharmacological (psychological) interventions in dermatology, held at Kasturba Medical college, Manipal university, Karnataka, from 17th- 18th November 2012.
2. Ms.Sahana Madhyastha Delivered a lecture on organizational Stress Management for supervisory level employees of Manipal Technologies Ltd., Manipal on 7th February, 2012. Delivered a lecture on stress management and balancing work and personal life for mid management employees of Manipal Technologies Ltd., Manipal in May, 2012.
3. Delivered a lecture on Cognitive Behaviour Therapy in Depression in a workshop

organized by Dr. A.V. Baliga Hospital on 10th October 2012 (World Mental Health Day)

4. Dr.Johnson Alex Invited speaker on Learning Disability Management at the National Conference of Psychotherapy and counseling organized by SPSA calicut Kerala from January 23-25 2012
5. Invited chief guest and delivered a keynote address on “ Challenges and Significance of Psychology in the new era” at Psychoday celebration 2012 organized by KE Collage Mannanam Kottayam Keral and PAAM (Psychology Alumni Association Mannanam Invited speaker on “Assessment and Management of Learning Disabilities” organized by Kerala Kaumadi daily in Kannur Kerala 19th May 2012
6. Invited guest speaker on Identification and Management of Learning Disability at Madhava Kripa School, Manipal University Manipal
7. Invited speaker on Psychosocial aspects of Pulmonary Rehabilitation at SOAHS, Dept of Respiratory Therapy –Pulmonary Rehabilitation update -2012 on 29th September 2012
8. Dr.Shweta Rai Conducted a session on “Applications of Biofeedback” in workshop on Training programme for dermatologists in non - pharmacological (psychological) interventions in dermatology, held at Kasturba Medical college, Manipal university, Karnataka, from 17th- 18th November 2012.

Year 2014 (02 Numbers)

1. Dr. Shweta Rai - Paper titled “Early Maladaptive Schema in Somatoform Disorder” in 40th National Annual Conference of Indian Association of Clinical Psychologists NACIACP - 2014
2. Ms. Sahana Madhyastha - Paper titled “Stress and its Determinants in Medical Students” in 40th National Annual Conference of Indian Association of Clinical Psychologists NACIACP – 2014

Department of Health Information Management

Year 2012 (02 Numbers)

1. Ms. Reshmi B, participated in national conference organized by 56th Annual National Conference of Indian Public Health Association, Kerala, from 10 – 12 February, 2012 & presented a paper “Acceptability of two community based health insurance schemes in Udupi district of Karnataka ”
2. Ms. Reshmi B, participated in national conference Evidence based public health in low & middle income countries, Manipal from 7 -8 nov, 2012, & presented a poster “Systematic review on factors affecting take up of community based health insurance in south Asian countries ”

Year 2014 (02)

- 1) Rajesh Kumar Sinha “Changing Scenario of health information management in delivering quality healthcare” MEDRECON 2014
- 2) Dola Saha, “changing human resource requirements for health information management in India- challenges ahead” MEDRECON 2014

Dept. of Speech & Hearing

Year 2012 (24 Numbers)

1. Akhila.S, Jeena John, Hari Prakash,, Dr.B.Rajashekhar Charactersitics of DP fine structure & threshold fine structure in normal hearing individuals. ISHACON, January 19-21st, Hyderabad

2. Sadanand Gore, Prakruthi Shetty, Remya.M, Dr. Krishna, Knowledge ,attitude & practices about paediatric hearing loss among E.n.t.s, Paediatrician, General Physicians & Trainees, ISHACON, January 19-21st, Hyderabad
3. Remya.M, Dr. Venkatraja Aithal, Dr. B. Rajashekhar. Outcome of awareness training on feeding strategies in parents of cerebral palsy children ISHACON, January 19-21st, Hyderabad
4. Kiran. Gopeekrishnan Validation & preliminary standardization of stroke & Aphasia quality of life (SAQOL:39) scale in Kannada ISHACON, January 19-21st, Hyderabad
5. Hari.C, Rinnu Joseph, Hari Prakash, Dr. B. Rajashekhar. Latency intensity function for speech evoked auditory brainstem responses in normal hearing Individuals ISHACON, January 19-21st, Hyderabad
6. Maya Verma, Usha Devadas, Dr. B. Rajashekha. Vocal loading in dubbing artist, ISHACON, January 19-21st, Hyderabad
7. Pratiti Giri, Jeny Sara Thomas, Sunila John, Dr. B. Rajashekhar Long term outcome of lactic acidosis on speech and Language development ISHACON, January 19-21st, Hyderabad
8. Krithika Lakshmy, Dr. Venkatraja Aithal, Dr. B. Rajashekhar Radiation in laryngectomy: A possible hindrance to successful surgical voice restoration in geriatric population. ISHACON, January 19-21st, Hyderabad
9. Prasanna V, Sunila John, Dr. B. Rajashekhar, Effect of mand training on negative behaviors and verbal behaviour development: a case study. ISHACON, January 19-21st, Hyderabad
10. Manisha Hegde, Archana G, Sunila John, Dr. Veena K D Dr. B. Rajashekhar Profile of phonological process in kanada speaking children with Downs Syndrome. ISHACON, January 19-21st, Hyderabad
11. Dr. Venkatraja Aithal, Vaidyanathan R., Dr. B. Rajashekhar “Development of interrogatives in Tulu speaking children” ISHACON, January 19-21st, Hyderabad
12. Veena KD, Rajashekhar Pointing gesture as a transition to spoken word development – an exploratory study UGC National seminar on Language and Cognitive processes, 23-24 January, 2012
13. Sunila John, Rajashekhar Influence of socioeconomic status on verbal recall in children UGC National seminar on Language and Cognitive processes, 23-24 January, 2012
14. Sachin, L.C., Venkatraja Aithal U, B Rajashekhar., Sunila John., Swathi Shetty., Shahin Nishad “Quality of life in tracheoesophageal speakers – A Retrospective study” Laryngology update-2012, Annual conference of Laryngology and Voice Association held at KDAH, Mumbai during 4th- 5th Feb 2012.
15. Jinu Anna George, Archana G, Dr. B. Rajashekhar ABR as a effective tool in diagnosis of upper brain stem lesion – a case report Manipal AUDICON 2012, 16-17th Nov, 2012, SOAHS, Manipal
16. Rukmangathan, Archana G, Mr. Hari Prakash P, Dr. B. Rajashekhar Effect of progressive filtering of speech stimulus of speech ABR and its correlation with behavioral perception Manipal AUDICON 2012, 16-17th Nov, 2012, SOAHS, Manipal
17. Safaa Asif, Archana G, Dr. B Rajashekhar Jugular Schwannoma – A case report Manipal AUDICON 2012, 16-17th Nov, 2012, SOAHS, Manipal
18. Nikita Lewis, Archana. Autism or hearing loss: Determining the cause of delay in expressive language skills in congenital rubella syndrome Manipal AUDICON 2012, 16-17th Nov, 2012, SOAHS, Manipal
19. Aju Abraham, Hari Prakash P, Dr. B Rajashekhar Latency- intensity function for speech evoked late latency responses in normal hearing individuals Manipal AUDICON 2012, 16-17th Nov, 2012, SOAHS, Manipal

20. Analisa P, Ayas Mohd. SECAP evidence on the processing of speech and non-speech stimuli through hearing aids Manipal AUDICON 2012, 16-17th Nov, 2012, SOAHS, Manipal
21. Antony, Ayas Mohd. Auditory neuropathy in Friedreich Ataxia Manipal AUDICON 2012, 16-17th Nov, 2012, SOAHS, Manipal
22. Neha Sodi, Ayas Mohd, Dr. Kanaka G Subcortical processing of speech in noise using speech evoked ABR in normal hearing adults Manipal AUDICON 2012, 16-17th Nov, 2012, SOAHS, Manipal,
23. Ishita Mitra, Ayas Mohd. Subcortical representation of speech sounds in premature infants Manipal AUDICON 2012, 16-17th Nov, 2012, SOAHS, Manipal
24. Andrea O, Ayas Mohd. Does late identification of hearing loss lead to irreversible cortical reorganization Manipal AUDICON 2012, 16-17th Nov, 2012, SOAHS, Manipal,

Year 2013 (10 Numbers)

1. Snithin Sasheendran, Dr. Usha Devadas, Mr. Manoj M. Optimum pitch training in puberphonics using musical notes- treatment outcomes. 1st – 3rd February, 45th ISHACON 2013, Chennai.
2. Vasudha Sharma, Dr. Usha Devadas. Post-operative rehabilitation in hemimandibulectomy-case report. 1st – 3rd February, 45th ISHACON 2013, Chennai.
3. Praveena, J., Krishna, Y. Identifying speaker from disguised speech using aural perception & mel-frequency cepstral co-efficient. 1st – 3rd February, 45th ISHACON 2013, Chennai.
4. Megha Mohan, Lavya A R, Sunila John, Hari Prakash P, B. Rajashekhar. Language switching in Tulu-Kannada sequential bilingual adults using event related potentials. 1st – 3rd February, 45th ISHACON 2013, Chennai.
5. Reshma George, Mereen Rose Babu, Sunila John, Kanaka G, B. Rajashekhar. Effect of elicitation task on rate of speech in typically developing Malayalam speaking children between 4-6 years. 1st – 3rd February, 45th ISHACON 2013, Chennai.
6. Amritha Mohan, Anusree A K, Sunila John, B Rajashekhar. Knowledge and attitude of autism among health workers. “Blowing beyond Horizon”, 14-16th March NIEPMD, Chennai
7. Krishna Kumari, Gayathri G, Shivani Tiwari and Kiran S. Language and Literacy profile in Kannada speaking children with SLI. 1st – 3rd February, 45th ISHACON 2013, Chennai.
8. Himaja P, Alisha Dhamani, Archana G, B Rajashekhar. Effect of multi-talker babble over speech noise and its implications – a comparative study. 1st – 3rd February, 45th ISHACON 2013, Chennai.
9. Sharavathi R, Hariprakash P, B Rajashekhar. Effect of complexity of visual distracters and variable attention on auditory P300. 1st – 3rd February, 45th ISHACON 2013, Chennai.
10. Rukmangathan T M, Praveena J, Hari Prakash P. Effect of amplification on language outcomes in children with auditory dysynchrony. 1st – 3rd February, 45th ISHACON 2013, Chennai.

Year 2014 (12 Numbers)

1. Divya T, Lipsa S, Kiran, Aithal U V, Rajashekar B. Radiation effect on the TE Puncture Impeding Clinical Decision Making. 7-9 Feb, Kochi, 46th ISHACON
2. Gunjawate. D, Aithal U.V, Rajshekhar, B. High pitch phonation as a method of clinical evaluation of voice in trained singers – A preliminary study. 7-9 Feb, Kochi, 46th ISHACON

3. Ravi R, Gunjawate. D, Mohd A, Rajshekhar, B. Occupational Stress among Audiologists practicing in India. 7-9 Feb, Kochi, 46th ISHACON
4. Prajna K, Aithal _U V, Rajashekar B. Sudden Enlargement of TE Puncture in a Geriatric TE Speaker – A challenging situation in the Indian Scenario. 7-9 Feb, Kochi, 46th ISHACON
5. Janet J, Tina J, Kiran, Aithal _U V, Rajashekar B. Symptomatic Management of Prosthetic-Voice Complications in TEP Speakers with Recurrent Neopharyngeal Stricture: A Case Study.
6. Gunjawate. D, Aithal U.V, Rajshekhar, B. Acoustic analysis of Taar Saptak in Indian Classical Trained Singers. Frontiers of Research on Speech and Music (International Symposium) (FRSM-2014); 13-14, March 2014 at Mysore
7. Archana G, Krishna Y, Rajashekar B. Computerized auditory training module for individual with HI. Emerging trends towards innovation in health care and science in INDIA on 7th march 2014
8. Dr. Venkataraja Aithal U & Dr. Gopee Krishnan. Stress Buster. Emerging trends towards innovation in health care and science in INDIA on 7th march 2014
9. Greeshma T, Archana G. Olfactory neuroblastoma: a case report. Manipal University students research forum 2014 (April)
10. Jinu G, Archana G. Hyperacusis a case report. Manipal University students research forum 2014 (April)
11. Himaja, Kishan. Short term effects of Amplification on Working Memory in the Elderly. Manipal University students research forum 2014 (April)
12. Bhargavi P G, Archana G. Adult Aural Rehabilitation – Is it required? Focused Group Discussion. Indian Speech and Hearing Association – Tamil Nadu at Yercaud, 20-21 Sept, 2014

Dept of Optometry

Year 2012 (04)

1. Dr. Ramesh S Ve, Developmental and validation of Ocular Digital Adapter (OcuDA) Low cost anterior ocular imaging tool – Innovation Day MUTBI Manipal University –Oral presentation
2. Mr. Chandan S Spectacle Dispensing Software in Innovation Day MUTBI Manipal University Oral Presentation on December 2012
3. Mr. Chandan S – Effects on Filters on vision – in 37th All India Optometric Conference oral presentation –
4. Mr. Avik Ray – Recent advances –in contact lens essential for a beginner on March 2012

Year 2013 (05)

1. Dr. Ramesh S Ve – Manipal Remote refraction Program –study the efficacy of custom developed remotely operated vision and refractive error screening method in a hospital and community based population –in Pondicherry
2. Dr. Ramesh S Ve- Performance and perceptions of objective structured practical examination for clinical optometry examination in chennai
3. Dr. Ramesh S Ve –Students and Faculty driven Social entrepreneurship Model for school Eye care services: The manipal VARES chapter –in 12th Dr.EV memorial scientific session Elite School of Optometry – National on March 2013 in chennai
4. Dr. Ramesh S Ve –Ocular Digital Adapter –A Cost effective anterior eye imaging device – Innovators Competition on May 2013 in New Delhi
5. Mr. Avik Ry – Optomed Recent innovations in vision 2020 in Bhopal

Year 2014 (02)

1. Ms. Krithica S – Effect of Optical defocus on vanishing and conventional optotypes – 13TH Dr. EV memorial Scientific session Elite school of Optometry I Chennai
2. Ms. Judy Jose: Awareness Knowledge and barriers to low vision services – 13th Dr. EV Memorial Scientific session Elite school of Optometry in Chennai

Department of Occupational Therapy

Year 2012 (04 Numbers)

1. Ms. Vinita Acharya has contributed to the scientific program by presenting a scientific paper on “Problem Identification Grid – Assessment Tool for Acute Mental Health Settings” at 49th National Conference of AIOTA held at Goa from 16th Jan, 2012 to 18th Jan 2012.
2. Ms. Sumedha Kamath has contributed to the scientific program by presenting a scientific paper on “Static Progressive Mitten Hand Splint” at 49th National Conference of AIOTA held at Goa from 16th Jan, 2012 to 18th Jan 2012.
3. Mr. Sanjiv Kumar has contributed to the scientific program by presenting a scientific paper on “Modified Thumb Opponence Splint” at 49th National Conference of AIOTA held at Goa from 16th Jan, 2012 to 18th Jan 2012.
4. Mr. Koushik Sau has presented scientific paper in the annual meet of Alumni Association of National Institute for the Orthopaedically Handicapped (NIOH) held on 22nd Jan, 2012 at NIOH, Kolkata. Topics of the presentation: “A Portfolio – A Powerful Tool for Professional Development”.

Year 2013 (04 Numbers)

1. Mr. Koushik Sau presented paper title “ Activity selection – An Occupational Therapy Perspective” on XXXI Annual National Conference of Indian Society of Professional Social Work held organized by Department of Psychiatry , Kasturba Medical college , manipal university, Manipal , Karnataka From 3rd to 5th January 2013.
2. Mr. Koushik Sau Presented paper title “ Activities for stroke rehabilitation” on Annual meet of Alumni Association of National Institute for the Orthopedically handicapped held on 27th January , 2013 AT NIOH, Kolkata.
3. Mrs. Vinita Acharya presented a scientific paper on “psychosocial occupational Therapy practice in India: where is the evidence? A systemic Review” on Golden Jubilee annual national conference of All India Occupational Therapists Association (AIOTA) held on 26th .27th &28th February, 2013 Trivandrum , Kerala .
4. Mr. V. Guruprasad personated a scientific poster in the TB awareness poster competition on the theme “Stop TB in my lifetime” organized by Manipal college of nursing Manipal & Kasturba Hospital Manipal on 23rd march 2013.

Year 2014 (04 Numbers)

1. Dr. Shovan Saha presented a paper title “Getting to Know Low Temperature Thermoplastic as a Splinting Medium” at 3rd Annual National Conference of Hand therapy held at hotel tip top plaza, Thane, Maharashtra, India from 13th to 14th September, 2014.
2. Dr. Shovan Saha presented a paper title “Understanding Puzzle Called Contracture” at 3rd Annual National Conference of Hand therapy held at hotel tip top plaza, Thane, Maharashtra, India from 13th to 14th September, 2014.
3. Dr. Shovan Saha presented a paper title “Rehabilitation of complex hand injuries” at 38th Annual conference of Indian society for surgery of the hand, held at Dr. TMA Pai International Convocation Centre, Mangalore 15th November 2014.
4. Mr. Guruprasad V presented a poster titled “Caregiver Board” in innovation day Manipal University on 20th December, 2014 at Manipal.

Department of Nuclear Medicine

Year 2012 (01)

1. Dr. Shivanand Bhushan (oral Paper presentation) 21st - 22nd January 2012 National symposium on Genomics 2012, “ Safety management of hazardous radioactive Chemical materials to protect human health and environment: Insight into regulatory framework of current UGC Guidelines.”

Year 2014

1. Mrs. Vasumathi : 11th to 14th Dec 2014, Participated and Poster Presented “ Retrospective study of differentiated thyroid cancer patients at a tertiary hospital in coastal Karnataka” in the 46th Annual National conference of Society of Nuclear Medicine in India 2011, organized by Saha Institute of Nuclear Physics, Kolkata

22iii. Conference: International

Department of Physiotherapy

Year 2012 (04 Numbers)

1. Dr Kavitha Raja attended and presented scientific paper at international conference Asia Pacific conference in Geriatric care in October 2012.
2. Senthil Kumaran D attended and presented scientific paper at international conference Asia Pacific conference in Geriatric care in October 2012.
3. Parul attended and presented scientific paper at international conference Asia Pacific conference in Geriatric care in October 2012.
4. Mrs. Nivedita S Prabhu attended the Cardiac rehabilitation training program organized by the European Association of Cardiac Rehabilitation and Prevention (EACPR - European Society of Cardiology) held at Bern, Switzerland September 2012

Year 2013

1. Mrs Preetha has given a Poster presentation “ Postural sway changes across various trimesters during pregnancy” in RCOG ,World Congress,Hyderabad, March 28-30,2014
2. Mr. Abraham Samuel Babu has Presented a talk on “Exercise testing in pulmonary hypertension” for a webinar organised by the **Pulmonary Hypertension Association, USA** on December , 2013
3. Mr. Abraham Samuel Babu has Presented talk on “ at the **Global Congress on Physical Activity at the Scientific Sessions of the American Heart Association**, Dallas, Texas, November 16th-20th, 2013
4. Mr. Abraham Samuel Babu has Presented a talk on “Exercise induced pulmonary hypertension – What is it and what do we do about it?” for a webinar organised by the **Pulmonary Hypertension Association, USA** on August 15th, 2013
5. Dr. G Arun Maiya has participated in the Pain Refresher Course held on 2nd May 2013 at Max Atria at Singapore Expo, Singapore
6. Mr. Ganesh as successfully completed IHTC training from December 1st to 31st, 2013 held at National blood centre, Kuala Lumpur, Malaysia.
7. Mr. John Solomon presented a poster entitled comparison between visual, auditory and visuoauditory cueing on timing of movement at the IXth International Conference on progress in motor control under the auspices of the International Society of Motor control July 13-16, 2013, Motreal, Canada.

Year 2014

1. Dr. G Arun Maiya has participated as a resource person in the “International conference on Musculoskeletal & Manual Physical Therapy” organised by Faculty of Physiotherapy in association with Institute of Therapeutic Sciences, Michigan, USA held at Sri Ramachandra University from 3rd to 5th July 2014.
2. Dr. G Arun Maiya has participated as a presenter in the international conference on environmental and occupational health (ICEOH) on 8th & 9th April 2014 at Putrajaya Marriott Hotel, Malaysia.
3. Dr. Vaishali K has delivered a guest lecture on “Role of Physiotherapists in Laryngectomy Rehabilitation” as a part of Pre-conference Seminar, workshop held at Manipal from 30-31 December 2014.
4. Dr. Vaishali K has participated in MIDPULMOCON 2014, the midterm conference organized by Dept. of Pulmonary Medicine, KMC, Manipal on 12th Oct 2014.
5. Dr. Bhamini K Rao has delivered a lecture on “Physiotherapist’s Perspectives” in 47 ISHACON, a National Level conference organised by Indian Speech & Hearing Association held at Manipal from 30th to 31st December 2014
6. Dr. Bhamini K Rao has participated as delegate in the ISSHCON 2014 from 14th to 16th November 2014 held at Dr. TMA Pai International Convention Centre, Mangalore and has also chaired a session for the same on 15th h November 2014
7. Dr. John Solomon has attended the 8th World Congress for Neuro rehabilitation hosted I Istanbul, Turkiye, at International Convention & exhibition
8. Mr. Senthil Kumaran D has participated in Asia Pasific Stroke conference held on Sep 12-14, 2014, in Taipei, Taiwan
9. Mr. Girish N has participated in Asia Pasific Stroke conference held on Sep 12-14, 2014, in Taipei, Taiwan

Department of Occupational Therapy

Year 2012 (03 Numbers)

1. Mr. Shovan Saha has presented a scientific paper in the Physical Therapy, Occupational Therapy, Prosthetics and Orthotics, Speech Language Pathology Conference (POPS) held on 16 to 17 October 2012, Riyadh, Arabia. Topic of the presentation: “perspectives on contracture”.
2. Dr. Sebestina Anita Dsouza has presented the paper “The Effectiveness of Balance Training under Task Conditions in Older Adults at Risk for Falling. UBC Robson Square, Vancouver, Canada.
3. Dr. Sebestina Anita D’souza presented a scientific paper on “ on site exercise programs for computer related musculoskeletal problems in bank employees: a Quasi experimental study in international conference on environment & occupational health organized by department of public Health, Manipal University & ROHC- NIOH, at Manipal, Karnataka from 20 – 22 December 2012.

Year 2013 (03 Numbers)

- 1) Mr. Shovan Saha presented a poster title “ Outcome of Corrective Metal Hand Splints” at the 9th Triennial Congress of the international Federation of Societies for Hand Therapy Held March 4th -8th , 2013 at the India Expo Centre, Greater Noida, New Delhi , India
- 2) Mr. Shovan Saha presented a scientific paper title “ Developing a Device to Improve Forearm Rotation” at the 9th Triennial Congress of the international

Federation of Societies for Hand Therapy Held March 4th -8th , 2013 at the India Expo Centre, Greater Noida, New Delhi , India

- 3) Mr. C Shashidhar Rao presented a paper on “Content Validity and Reliability of Tasks to Elicit Adaptive Responses to Swing” in International Conference on Developmental Pediatrics and childhood Disability in 21st Century.

Department of Health Information Management

Year 2012 (03 Numbers)

1. Ms. Dola Saha participated in international conference HBMeU Annual Congress 2012, Dubai, from 31st January to 2nd February 2012 & presented a paper “Perception of medical students about electronic discharge summaries”
2. Ms. Reshmi B, participated in international conference HBMeU Annual Congress 2012, Dubai, from 31st January to 2nd February 2012 & presented a paper “HIS implementation in Tertiary care hospital ”
3. Ms. Geena Mary S, participated in international conference HBMeU Annual Congress 2012, Dubai, from 31st January to 2nd February 2012 & presented a paper “Mhealth; potential subsegment of e-health for better health information delivery: A pilot study among pregnant Indian Women”

Year 2013

1. Dr. Roopalekha J, presented paper “Determinants of depression among informal caregivers of persons with dementia” at International research conference organized by International association of academicians and researchers at Bangkok, in March, 2013
2. Dr. Rajesh Kumar Sinha presented paper “ Evaluation of user acceptance of an EHR” at International research conference organized by International association of academicians and researchers at Bangkok, in March, 2013
3. Ms. Dola Saha presented paper “ Awareness and practice of students about using mobile phone in healthcare delivery” at International research conference organized by International association of academicians and researchers at Bangkok, in March, 2013

Year 2014

1. Dr. Roopalekha J, presented paper Awareness perception and acceptability of EMR among nurses of a tertiary care hospital in India Global Health care 2014 organized by Global Science and technology forum at Singapore in June 2014

Department of Medical Laboratory Technology

Year 2012 (01 Number)

1. Ms. Saleena Ummer V, the platform presentation paper entitled “Urinary α -Glutathione-s-transferase variations in cisplatin treated cancer patients with and without kidney injury” at “International Conference on BIOSCIENCE, BIOCHEMISTRY and BIOINFORMATICS, held in Chennai on March, 2012 (received best paper award)

Year 2013 (04 Numbers)

1. Saleena Ummer, Evaluation of Cystatin C in urine and serum for the early detection of acute kidney injury due to cisplatin chemotherapy – an observational cohort study, International NCD research Meet, February 2013 at Manipal
2. Attended and presented poster on ‘screening selected urinary organic acids In patients with suspected inborn errors of metabolism’ at 2nd international

Conference on Inborn Errors of Metabolism (IEMCON) from 4th - 7th April, 2013 at "Auditorium, Dr. R.M.L. Hospital & PGIMER , New Delhi, INDIA

3. Attended and presented poster on 'Urinary thin layer chromatography in children with suspected inherited energy metabolism disorders' in 6th International conference on Genetic and Molecular Diagnosis in Modern Medicine(GMDMM 2013) organized by Department of Genetics, Vasavi Medical and Research Centre, Hyderabad from 8th to 10th February 2013.
4. Rinu John M , the proportion of acute kidney injury in patients underwent cardiac surgery – an evaluation using egfr and akin criteria, International NCD research Meet, February 2013 at Manipal

Year 2014 (01 Number)

1. Saleena Ummer, Urinary Neutrophil Gelatinase Associated Lipocalin (uNGAL) detects early Kidney Injury due to Cisplatin Chemotherapy – An Observational Cohort Study, International NCD research Meet, January 2014 at Manipal

Department of Speech and Hearing

Year 2012 (03 Numbers)

1. Sunila John, B Rajashekhar. Error Production During Word Retrieval In Typically Developing Malayalam Speaking Children. 19-22nd July, 13th Annual Conference, PECERA, at NTU, Singapore
2. Dr. Venkataraja Aithal, Dr. Vaidhyathanan, Dr.B Rajashekhar. Acquisition of different case markers in Tulu speaking normal children. 19-22nd July, 13th Annual Conference, PECERA, at NTU, Singapore
3. Snithin Sasheendran & Krishna. Y. "Dichotic Sentence Identification test findings in different anatomical lesions". 11th Asia Pacific Congress on Deafness 2012, 26 - 28 July 2012, Singapore

Year 2013 (02 Numbers)

1. Gopee Krishnan, Shivani Tiwari, & Kiran, S. Two routes to read in Kannada? Evidence from bi-literate (Kannada-English) persons with brain damage. 51st Annual Meet of the Academy of Aphasia at Lucerne, Switzerland from 20-22 October, 2013
2. Tiwari, Gopee Krishnan, & Kiran, S. Manifestation of surface agraphia in an alphasyllabary: Evidence from Kannada-English bi-literates with acquired brain damage. 51st Annual Meet of the Academy of Aphasia at Lucerne, Switzerland from 20-22 October, 2013

Department of Clinical Psychology

Year 2012 (01 Numbers)

1. Japneet Ahluwalia. Presented a paper & poster in 30th International Congress of Psychology (ICP 2012) held at Cape Town, South Africa from 22nd -27th July 2012. "Stigma And Discrimination Faced By Asymptomatic 'Schizophrenics' "

Department of Respiratory Therapy

Year 2012 (02 Numbers)

1. Saumy Johnson. Noninvasive ventilation. Srilankan Medical Association. Colombo. October. 2012
2. Saumy Johnson, Clinical outcome in patients with NIV, Hongkong, China, November 2012

Department of Optometry

Year 2012

1. Ramesh S Ve- Efficacy of remotely controlled computerized visual acuity chart- IX general assembly International Agency for Prevention of Blindness –in Hyderabad
2. Krithica.S , Development and Validation of Amblyopia Awareness questionnaire - IX general assembly International Agency for Prevention of Blindness in Hyderabad
3. Premjit Bhakat- Overnight swelling with Silicone hydrogel contact lens- IX general assembly International Agency for Prevention of Blindness in Hyderabad
4. Jyothi Thomas- Accuracy and safety of Goldman Applanation Tonometry over Daily disposable soft CL- IX general assembly International Agency for Prevention of Blindness- Hyderabad, India

Year 2013

1. Ramesh S Ve - Association of Lifestyle, Geographical, Systemic and Ocular Riskfactors with Prevalence of Cataract in a Rural and an Urban South Indian Population: The Chennai Glaucoma Study- International Conference on Environment and Occupational Health Manipal
2. Ramesh S Ve - Point Wise Linear Regression Assessment Of Perimetric Progression With Standard Automated Perimetry And Frequency Doubling Perimetry In Glaucoma: A Population Based Study -5th World Glaucoma Congress 2013 –Vancouver Canada
3. Nijil Sanker- Comparison of ocular parameters between Dravidian and Mongoloid persons in a University population in South India - Asia-ARVO in New Delhi

Year 2014

1. Dr. Ramesh S Ve -Association of Research in Vision and Ophthalmology (ARVO) 2014 ISIE Imaging conference, Assessment of Retinal Nerve Fiber layer with color and red free images using Smartscope Fundus Camera –May 2014 –Florida USA
2. Ramesh S Ve -ARVO 2014, Variability of Intraocular Pressure with Increasing collar pressure due to tight tie among obese and normal adults, May 2014 –Florida USA

21. Details of patents and income generated

1. Invention Award of USD 200 Received from Intellectual Venture Asia for the Submitted Invention ID: In-812125 Titled Dynamic Chromatoscintigraphy Methods Through Manipal University and M/s Intellectual Venture, Bangalore for Global Patenting in April 2011.
2. Ramesh S Ve, Vijay Varada, Krithica S and Nijil Sanker.- Wearable Ocular Health Monitoring Dress Part and thereof. - Manipal University Technology and Business Incubator. - intellectual properties, Chennai: 3291/CHE/2014 IN 2014

22. Areas of consultancy and income generated

- In additions to Clinical Services Provided at Kasturba Hospital, Manipal, SOAHSis actively providing services at Dr TMA Pai Hospital Udupi where the 30% of the total income generated is used for the Academic Advancement of faculty members.
- Department of Health Information Management received an amount of Rs. 5 Lakhs as a consultation fee from University of Botha for the Launch of B.Sc. HIA program.

23. Faculty selected nationally/ internationally to visit other laboratories in India and abroad (2013-2014)

Sl. No.	Name of faculty member	Visited laboratories in India and abroad.
1.	Ms. Angel	COMDEALL, Bangalore (2014)
2.	Mr. Ramesh S Ve	July 2013: School of Optometry and Vision Science, University of Waterloo, Canada a. Dr. William Bobier's Lab b. Dr. John Flanagan's Lab c. Centre for Contact Lens Research (CCLR)
3.	Ms. Jyothi Thomas	August 2013: a. Contact lens and basic science research lab at Dept. of Optometry, University of New South Wales b. Preclinical lab at Dept. of Optometry, Melbourne University c. Preclinical lab at Australian College of Optometry d. Preclinical lab at Optometry dept., Deakins University

24. Faculty serving in

- a) National committees b) International committees c) Editorial Boards d) any other (please specify)

Sl. No	Name of faculty member	Institutions/Committee/Councils
1	Dr. Rajesh Kumar Sinha	1. Reviewer for Journal of Systems Science and Systems Engineering, An Official Journal of Systems Engineering Society of China. 2. Reviewer for Bulletin of the World Health Organization on eHealth Initiative, Geneva. 3. Reviewer for "The Internet Journal of Allied Health Sciences and Practice", 4. Reviewer for Telemedicine and eHealth.
2	Dr. Rooplekha Jathanna	Reviewer for EMC Health Science Research Journal, British Journal.
3	Mr. Ramesh S Ve	1. Educational Institute Representative (2011-2013)- Executive Board Member- Indian Optometric Association 2. Optometric Glaucoma Society, Supranational Glaucoma Society, World Glaucoma Association. 3. Institutional Research Committee member, School of Allied Health Sciences 4. Honorary Secretary (2012-2015) - Executive Board Member-Association of Schools and Colleges of Optometry- India.
4	Mr. Abraham Samuel Babu	1. Pulmonary Hypertension Association publication committee (USA) 2. Task force on Exercise in PAH, Pulmonary

		<p>Vascular Research Institute (UK)</p> <ol style="list-style-type: none"> 3. Editorial board – Indian Journal of Physiotherapy and Occupational Therapy 4. Peer reviewer – Clinical Rheumatology, Lung India, Disability and Rehabilitation, Circulation: Heart Failure, Mayo Clinic Proceedings, Biomarkers in Medicine
5	Dr. G Arun Maiya	<ol style="list-style-type: none"> 1. Editor of IAP journal “physiotherapy”. 2. Editorial member of (JOPT) journal of occupational therapy & physiotherapy India. 3. Member of the international society of physiotherapy journal editors (ISPJE).
6	Ms. Saumy Johnson	Indian journal of Respiratory Care, an official journal of Indian Association of Respiratory Care
7	Mr. Ramesh Unnikrishnan	Indian journal of Respiratory Care, an official journal of Indian Association of Respiratory Care
8	Ms. Tisha Ann Skariah	Indian journal of Respiratory Care, an official journal of Indian Association of Respiratory Care Treasurer
9	Dr. B. Rajashekhar	<ol style="list-style-type: none"> 1. Member of RCI National Expert Committee on Hearing Impairment, RCI 2. Member of the Advisory Council of NIMH, Secunderabad 3. Member of the Advisory Council of AYJNIHH, Mumbai 4. Member of EC of AIISH, Mysore 5. RCI syllabus revision committee member 6. Academic Council, SRM Journal of Indian Speech and Hearing Association Editorial board 7. Founder president of ISHA-Manipal chapter
10	Dr. Venkataraja Aithal U	<ol style="list-style-type: none"> 1. EC Member, Indian Speech and Hearing Association 2. Reviewer – Folia Phoniatica and Logopedica (Karger Publications) 3. Reviewer – Biomedical Signal Processing & Control (Elsevier) <ol style="list-style-type: none"> 1. Hon. Secretary of ISHA-Manipal chapter 2. EC Member of Asia Pacific Society of Speech Language and Hearing APSSLH
11	Dr. Krishna Y	<ol style="list-style-type: none"> 1. Hon. Gen. Secretary, Indian Speech and Hearing Association 2. Mentor, STEP Program, American Speech and Hearing Association 3. Subject expert, The National Initiative for Allied Health Sciences 4. Member of EC of AIISH, Mysore 5. Vice president of ISHA-Manipal Chapter
12	Dr. Gopee Krishnan	<ol style="list-style-type: none"> 1. President, Kerala Chapter, Indian Speech and

		Hearing Association 2. Member of Editorial Board of International Journal of Speech-Language Pathology and Audiology 3. Editor, Journal of Indian Speech and Hearing Association
13	Mr. Shovan Saha	1. EC Member of Academic Council of Occupational Therapy (ACOT) for 2012-2014 2. Vice Precedent in Society for Hand Therapist in India. 3. Editorial board member of Indian Journal of Physiotherapy and Occupational Therapy (International Journal). 4. Editorial board member of “Journal of Geriatric Care and Research (International Journal). 5. Mmember of Ad-hoc Board of studies for paramedical courses at Goa University 6. Secretary of All Indian Occupational Therapist Association for the year 2010-2012
14	Dr. Sebestina Anita D'souza	Editorial board member of “The Indian Journal of Occupational Therapy
15	Mr. Chavan Shishidhar Rao	Editorial board member of “The Indian Journal of Occupational Therapy
16	Mr. sanjiv Kumar	Reviewer of Journal of Society for wound care and research.
17	Mr. Koushik Sau	Co-opted as EC member of All Indian Occupational Therapist Association for the year 2010-2012
18	Dr. Shivanand Bhushan	Eastern chapter of Society of Medical Radiation Technology India (EC-SMRTI) Nuclear Medicine Physicists Association of India (NMPAI)
18	Dr. Saleena Ummer	Member of Board of Studies, Clinical Vocational courses, Texila Career College, Texila American University
19.	Ms. Jyothi Thomas	BOS Member – Goa University for 2013-15 Member of the Curriculum committee Task force- Ministry of Health & Family welfare New Delhi
20.	Dr. Bhamini Krishna Rao	Member Of National Initiative For Allied Health Sciences – Task Force Unit Member (Ministry of Health & Family Welfare)

25. Faculty Recharging Strategies

- Faculties are encouraged to attend Conferences, Workshop and Continuing Professional Education Programmes of their respective speciality. University provides financial support of Rs. 50,000 annually to attend these professional activities.
- Institution is conducting various Professional Development Programme, especially in the area of research.
- Faculty members are encouraged to publish scientific publications in various journals. Thereby faculty members are encouraged to accumulate publications points for Dr. TMA Pai research incentives.

26. Student projects

- **Percentage of students who have done in-house projects including inter-departmental projects**
100 per cent (100%)
- **Percentage of students doing projects in collaboration with other universities / industry/ institute**
0 Percent (0%)

27. Awards/ recognitions received at the national and international level by

Faculty members -

1. Ramesh S Ve

- Received the Gold Medal for Best innovation at the Innovators Competition for DST-Lockheed Martin India Innovation Growth Programme 2013. April 29- May 2nd 2013, Federation of Indian Chambers of Commerce and Industry, New Delhi.
- Received the Indo-US Public Health Research Fellowship 2013. 6 month Public Health Research fellowship a supported by Indo-US Science and technology forum and Public Health Federation of India. Fellowship starts November 2013 at Dana Center for Preventive Ophthalmology; Wilmer Eye Institute, Johns Hopkins University, Baltimore.

2. Jyothi Thomas - Received “Australian Leadership Awards Fellowship” funded by Brien Holden Vision Institute Foundation, University of New South Wales, Sydney (August 2013).

3. Dr. G Arun Maiya

- UKIERI (UK-India Educational Research Initiative) travel grant by British Council in 2012. First Indian PT to get the grant.
- Certified Clinical exercise specialist workshop and certification program of American College of Sports Medicine (ACSM) in Singapore 2011
- SCS (Spinal Cord Society) gold medal award in the field of rehabilitation at international spinal cord society conference held at New Delhi in 2008 and spinal cord society fellowship at UK

4. Mr. Manikandan

- Third Prize for the innovative product titled ‘Reaction timer for assessing lower limb (leg) reaction time’ in the First Innovation Day event organized by Manipal University on December 2012.
- Chattanooga Biotech award for the Second best senior scientific paper award for the project titled “Orthotic effect of leaf spring AFO on temporal parameters of gait in patients with hemiparesis’ in 48th Annual conference of IAP held on January 2010, Mangalore

5. Mr. Kalyan

- Won best innovative idea for presenting the idea on Innovation day for the prototype presentation on Speech enabled chest vibrometer
- Best idea award for the prototype on integrated respiratory apparatus
- Participated in competitions held at national level for innovative ideas
- Participated in Lockheed Martin-India Innovation growth program and stood one among top 50 innovative ideas submitted in 2010

6. **Dr. B Rajashekhar**

- CARF & Prof. Bellur Rajashekhar Chair in Head & Neck Cancer Research and Voice Restoration at Manipal University,
- Laryngology and Voice Association (SLP) award, 2013
- Dr. Manoharan Oration award, TANISHA, Yercaud;
- Acoustic Society of India Oration award;

7. **Dr. UV Aithal** - Alumni Award 2011, Alumni Association of U Kamala Bai High School, Kadiyali, Udupi)

8. **Dr. Shivani Tiwari** - Received Travel grant/award from Science and Engineering Research Board (SERB), Department of Science and Technology, Government of India, to attend and present my research at the 51st Annual Meet of Academy of Aphasia held at Lucerne Switzerland during 19 - 23 October 2013.

9. **Mr. Shovan Saha**

- Received “Professional Excellence Award” from All India Occupational therapist Association (AIOTA) at the 50th Annual National Conference of AIOTA (OTICON 2013) as recognition of his outstanding contribution to occupational therapy and AIOTA.
- Mr. Shovan Saha is selected as Hand therapy Educator by International Societies for hand Therapy. November 2012
- **Certificate Course In Hand Splinting** recognized as post graduate hand therapy education program by International Federation of Societies for Hand Therapy

10. **Dr. Sebestina Anita D'souza** - was awarded as a Winner of Best Scientific Paper for Kamala V. Nimbkar Trophy on the subject of “**Computer Related Injuries: Awareness & Health Behaviors in Computer Users**” in the 48th Annual National Conference of AIOTA Organized by Tamil Nadu Branch of AIOTA at Anna Auditorium, Chepauk, Chennai, on 9th, 10th & 11th of January 2011.

11. **Mrs. Vinita Acharya** - Awarded the best entry in the contest “It happened in my classroom” organized in connection with teachers day celebration, 2013

12. **Saleena Ummer** - Won best paper award for the platform presentation in the International Conference on Bioscience, Biochemistry and Bioinformatics, 2012 at Chennai in 2012

13. **Dr. Shivanand Bhushan** - Prestigious award of MICNM (Member of Indian College of Nuclear Medicine) – An academic wing of Society of Nuclear Medicine for year 2012 . Award felicitation held during ICNM convocation on 13th Dec 2013 at Mumbai .

14. **Dr Fiddy Davis** - Distinguished Service Award – Research by the Indian Association of Physiotherapists at the national conference 2015

Students

- A. Analisa P, Ayas Mohd., - Best paper (Oral presentation) SECAP evidence on the processing of speech and non-speech stimuli through hearing aids, Manipal AUDICON 2012, 16-17th Nov, 2012, SOAHS, Manipal
- B. Safaa Asif, Archana G, Dr. B Rajashekhar – Best paper (Oral presentation), Jugular Schwanoma – A case report, Manipal AUDICON 2012, 16-17th Nov,

2012, SOAHS, Manipal

C. Sanjivan Gautam Conferred with Nepal Vidhya Bhushan "Ka", "Kha" and "Ga" by the president of Nepal

28. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

#	Resource person	Topic	Date, year	Source of funding
1.	Dr. Shiv Shankar Dr. Prathibha Karanth	Update on audiological practices Orientation to COM-DEALL	27.02.2012	-
2.	In House – Dr. B. Rajashekhar, Dr. Venkataraja Aithal U, Dr. Usha Devadas, Dr. Balakrishnan External- Dr. Blom, Dr. Gurmit B	LARYCARE-2 International workshop on voice rehabilitation after Laryngectomy	9-10 th Oct, 2012,	Shreyaas, Coimbatore (National)
3.	Mr. Prasanna Patil, BERNAFON- Hearing aids Ms. Anupriya, Starkey Hearing aids Mr. Achiah, ALPS- Hearing aids	National seminar on 'Recent Advances in Auditory Evoked Potentials and Hearing Aid Technology'	16-17 th Nov, 2012,	Hearing Aid Industries (International)
4.	Dr. Anantha Padmanabha	Orientation program on VAGHMI and SSL	05 Dec 2012,	-
5.	Dr. Rita Vats	Behavior Modification in Autism	28 March 2013,	-
6.	In House – Dr. Gopee Krishnan, Mr. Kiran S, Dr. Aparna Pai External - Dr. Thomas Bak, Dr. Suvarna Alladi, Mr. Sunil Kumar	Aphentia 2013 – A Seminar on Comprehensive Assessment of Aphasia and Dementia	12 April 2013,	Dept of Speech and Hearing
7.	Resource Persons: Dr. Ajay Bhandarkar, Dr. B. Rajashekar, Dr. U V Aithal, Dr. Usha, Ms. Sheela	World Voice Day	26 April 2014 at Shirdi Sai Baba Hall	Dept of Speech and Hearing
8.	Dr. Leslie Lewis Ms. Bhargavi Ms. Angel S	Current Trends in Pediatric Hearing Assessment – I (Seminar convened by Ms. Archana)	30 Dec, 2014, Interact Halls, Manipal	Dept of Speech and Hearing & Manipal Chapter of ISHA
9.	Mr. Kishan MM Dr. Sivaprasad Reddy Ms. Anupriya	Advances in Hearing Aid Selection and Programming	30 Dec, 2014, Interact Halls, Manipal	Dept of Speech and Hearing & Manipal Chapter

	Dr. Kanaka G	(Seminar convened by Mr. Kishan M M)		of ISHA
10	Mr. Hariprakaash Ms. Archana Mr. Dinesh	Current Trends in Pediatric Hearing Assessment – II (Seminar convened by Mr. Hari Prakash)	30 Dec, 2014, Interact Halls, Manipal	Dept of Speech and Hearing & Manipal Chapter of ISHA
11	Dr. Usha Dalvi Dr. Bhamini Dr. Shovan Saha	AAC in CP (Seminar convened by Dr. Veena K D and Dr. Sunila John)	30 Dec, 2014, Interact Halls, Manipal	Dept of Speech and Hearing & Manipal Chapter of ISHA
12	Dr. Pratibha Karanth Dr. Apoorva Pauranik Dr. Amith Sitharam Dr. Manikandan Dr. Gopeekrishnan	Aphasia (Seminar convened by Dr. Gopee Krishnan)	30 Dec, 2014, Interact Halls, Manipal	Dept of Speech and Hearing & Manipal Chapter of ISHA
13	Dr. Christopher Sudhakar	Infection Control in ASLP Practice (Seminar convened by Dr. Krishna Y)	31 Dec, 2014, Interact Halls, Manipal	Dept of Speech and Hearing & Manipal Chapter of ISHA
14	Dr. Gopeekrishnan Kiran S Dr. Shashidhar	Assessment of Acquired Reading and Writing Impairments (Seminar convened by Mr. Kiran S)	31 Dec, 2014, Interact Halls, Manipal	Dept of Speech and Hearing & Manipal Chapter of ISHA
15	Dr. Balakrishnan Dr. Vaishali Dr. B. Premalatha Dr. B. Rajashekhar Dr. Rehan Kazi Dr. Eric Blom	Laryngectomy: Team Approach (Seminar convened by Dr. Venkataraja Aithal U and Sheela S)	31 Dec, 2014, Interact Halls, Manipal	Dept of Speech and Hearing & Manipal Chapter of ISHA
16	Ms. Sheela Dr. Venkataraja Aithal U Dr. B. Rajashekhar	Laryngectomy: An Overview (Workshop convened by Dr. Venkataraja Aithal U and Sheela S)	31 Dec, 2014, Interact Halls, Manipal	Dept of Speech and Hearing & Manipal Chapter of ISHA
17	Dr. Suresh T Dr. John S Dr. Sashidharan	Assessment and Management of Balance Disorders – A Team Approach (Seminar convened by Dr. Krishna Y)	31 Dec, 2014, Interact Halls, Manipal	Dept of Speech and Hearing & Manipal Chapter of ISHA
18	Dr. Usha Devadas Dr. R. Balakrishnan Dr. Prakash Boominathan Dr. Manjiree Ghokale Mr. Dinesh	Teachers as Professional Voice Users: Issues, Assessment and Management of Voice Problems in Teachers (Seminar convened by Dr. Usha Devadas)	31 Dec, 2014, Interact Halls, Manipal	Dept of Speech and Hearing & Manipal Chapter of ISHA
19	Mr. Shashidhar Rao	“Occupational Therapy: a Global Perspective	24 th January 2012.	---
20	Dr. Bhaskrannand Kumar Dr. Anil Bhat Mr. Shovan Saha Mr. Sanjiv Kumar	“The Art & Science of Hand Splinting”	29 th and 30 th October 2012	Heritage health care

	Ms. Sumedha Kamath			
21	Team member RCM Health care	Resume Writing for Allied Health Professional for American companies	18 th February 2013	RCM Health care Services, USA
22	Team member RCM Health care	Seminar on NBCOT – Licensing Process for US for Occupational Therapy students and job opportunities in us for occupational therapy graduates	1 st October 2013	RCM Health care Services, USA
23	Dr. Elizabeth A Cada Dr. Divya Sood Dr. Mary Butler	Collaborative Coaching Model for children with sensory processing dysfunction & Emerging of practice in vision rehabilitation	23 th to 24 th January 2014	—
24	Dr. Sebestina Anita D'souza Dr. C Shashidhar Rao Mrs. Vinita Acharya	Capacity Building for the Occupational Therapy Researcher	24 th to 26 th November 2014	—
25	Dr. Sebestina Anita D'souza Mr. Koushik Sau Mr. Guruprasad V	Occupational Therapy in stroke rehabilitation: An Evidence based approach	27 th to 29 th November 2014	—
26	Organised by Dr. G Arun Maiya	International colloquim on Exercise Science	Sept 2013	Dr. TMA Pai Endowment Chair
	Organised by Dr. G Arun Maiya	National Grant writing workshop	29 th & 30 th November 2014	Dr. TMA Pai Endowment Chair
	Dept of Physiotherapy: <ul style="list-style-type: none"> • Dr John Solomon • Dr Manikandan • Mr. Senthil Kumaran D • Dr Bhamini Krishna Rao • Mr. Akash • Department Occupational Therapy: • Dr Sebastina 	Evaluation and management of Spasticity	23 rd November 2014	Dept of Physiotherapy & Mc. Gill University Canada
	Dept of Physiotherapy: <ul style="list-style-type: none"> • Dr. Bhamini K Rao • Mr. Ganesh B 	CME on Rehabilitation of Hemophilia	12 th December 2014	Nova nordisk Hemophilia foundation

<ul style="list-style-type: none"> • Mr. Ranganath G • Mr. Rajesh Navada <p>Other department faculty</p> <ul style="list-style-type: none"> • Dr. Annamma Kurien , Associate Dean, MMMC • Dr. Dinesh Nayak, Padiatrics • Dr. Girish Katta, Genetics • Mr. Guruprasad V • Mr. Sanjeev Kumar 			
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List the faculty who have undergone staff development programmes during the last five years (Refresher courses, orientation programmes and staff training conducted by the university and other institutions)

a) Faculty

Physiotherapy

1. Divya Mohan Attended the Workshop on Pedagogic and Personal Effectiveness Conducted at Kasturba Medical College, Manipal from First to sixth June 2010.
2. Dr. Vaishali K has completed certificate course in Bioethics jointly organized by KMC, MU, Manipal and CDSA, held between October – December 2013.
3. Dr. Vaishali K has participated in workshop on “Counselling skills for teachers” on 15 & 16th April 2013 organised by Student Affairs, MU
4. Dr. Bhamini K Rao has attended a Pearson Clinical Assessment Workshop held on 24th and 25th August 2013 and is trained on the administration, scoring and interpretation of Bayley Scales of Infant and Toddler Development Third Edition
5. Dr. Bhamini K Rao has successfully completed NDT/Bobath Certificate Course in the Management and Treatment of Children with Cerebral Palsy and Other Neuromotor Disorders from 16th Sept to October 2013 held in Goa.

Occupational Therapy:

Year 2010

1. Mr Guru Prasad attended the workshop on ‘Pedagogic and Personal Effectiveness’ conducted held from 15-19 June 2010 conducted by KMC, Manipal.

Year 2011 (27 Numbers)

1. Mrs. Sebestina Anita D’Souza for participating in COTE on “Providing Occupational Therapy Services in the Schools: What’s different’ held on 9th January 2011 at the 48th Annual National Conference of AIOTA Organized by Tamil Nadu Branch of AIOTA at Chennai.

2. Mr. Koushik Sau for participating in COTE on “providing Occupational Therapy Services in the Schools: What’s different’ held on 9th January 2011 at the 48th Annual National Conference of AIOTA Organized by Tamil Nadu Branch of AIOTA at Chennai.
3. Mr. Shovan Saha for participating in COTE on “providing Occupational Therapy Services in the Schools: What’s different’ held on 9th January 2011 at the 48th Annual National Conference of AIOTA Organized by Tamil Nadu Branch of AIOTA at Chennai.
4. Mrs. Sebestina Anita D’Souza for participating as a delegate in the 48th Annual National Conference of AIOTA Organized by Tamil Nadu Branch of AIOTA at Chennai, held on 9th, 10th & 11th January, 2011
5. Mr. Koushik Sau for participating as a delegate in the 48th Annual National Conference of AIOTA Organized by Tamil Nadu Branch of AIOTA at Chennai, held on 9th, 10th & 11th January, 2011
6. Mr. Shovan Saha for participating as a delegate in the 48th Annual National Conference of AIOTA Organized by Tamil Nadu Branch of AIOTA at Chennai, held on 9th, 10th & 11th January, 2011
7. Mr. Koushik Sau participated in “Personality Development Workshop” on Sunday 20th march, 2011. Organized by Rotaract Club, Manipal University, and Manipal.
8. Mr. Bijay Kumar Nayak for participating as a delegate in the “Pulmonary Rehabilitation Update Workshop” on 2nd May 2011. Organized by Department of Respiratory Therapy, Manipal College of Allied Health Sciences, Manipal.
9. Mr. Shovan Saha participated at a workshop on “Situational Review Report Writing” of National Initiative for Allied Health Services (NIAHS) on 4th to 6th July, 2011 at MCOAHS Manipal, Valley View Fortune Inn, and Manipal.
10. Mr. Koushik Sau participated at a workshop on “Situational Review Report Writing” of National Initiative for Allied Health Services (NIAHS) on 4th to 6th July, 2011 at MCOAHS Manipal, Valley View Fortune Inn, Manipal.
11. Mr. Koushik Sau for participating in COTE on “Work hardening programme for lower limb amputation for qualified Occupational Therapists ’ held on 27th July to 28th July 2011 at the Swami Vivekanand National Institute of Rehabilitation Training And Research, Cuttack.
12. Mrs. Vinita Acharya participated in “Handwriting Training” on 27th July to 28th July, 2011. Conducted by ADAPT, Mumbai with the support of MAITS, UK.
13. Mrs. Sebestina Anita D’souza participated at a workshop on “Situational Review Report Writing” of National Initiative for Allied Health Services (NIAHS) on 4th to 6th July, 2011 at MCOAHS Manipal, Valley View Fortune Inn, and Manipal.
14. Mr. Shashidhar Rao participated at a workshop on “Situational Review Report Writing” of National Initiative for Allied Health Services (NIAHS) on 4th to 6th July, 2011 at MCOAHS Manipal, Valley View Fortune Inn, and Manipal.
15. Mr. Shashidhar Rao participated at a workshop on “Credit Based Evaluation system held on 27th May, 2011 at MCOAHS Manipal.
16. Mr. Shovan Saha participated at a workshop on “Credit Based Evaluation system held on 27th May, 2011 at MCOAHS Manipal.
17. Mrs. Sebestina Anita D’ Souza participated at a workshop on “Credit Based Evaluation system held on 27th May, 2011 at MCOAHS Manipal.
18. Mr. Bijay Kumar Nayak participated in the Continuing Occupational Therapy Education Program on Occupational Therapy In Hand Rehabilitation on 5th to 7th September, 2011 at National Institute for the Orthopaedically Handicapped, Kolkata.
19. Mrs. Banumathe KR. Participated at a workshop on “Pedagogic & Personal Effectiveness on 26th to 30th September, 2011 at Manipal Centre for Personal & Professional Development 2nd floor, Health Sciences Library, Manipal,.

20. Mr. Shashidhar Rao participated in the Faculty Development Programme in teaching Entrepreneurship on 19th to 24th September, 2011 Organized by Manipal Institute of Management Manipal University, Sponsored by All India Council for Technical education
21. Mr. Shashidhar Rao participated at a one day workshop on “Problem Based Learning” on 1st October, 2011 at Manipal Centre for Professional & Personal Development, Manipal University, and Manipal.
22. Mrs. Vinita Acharya participated at a one day workshop on “Problem Based Learning” on 1st October, 2011 at Manipal Centre for Professional & Personal Development, Manipal University, and Manipal.
23. Ms. Deena Dimple D’ Souza participated at a workshop on “Pedagogic & Personal Effectiveness on 10th to 14th October , 2011 at Manipal Centre for Personal & Professional Development 2nd floor, Health Sciences Library, Manipal,.
24. Mr. Kaushik Sau participated the COTE program on GeriCare-2011, 8th & 9th November, 2011 to mark the event of World Occupational Therapy Day conducted by Dept. of Occupational Therapy, Manipal College of Allied Health Sciences, and Manipal.
25. Ms. Banumathe K.R participated Personality development Program “Transmind “Treasure yourself on 12 september, 2011 at Manipal.
26. Mr. Sanjiv Kumar has successfully completed the Certified Course in “Bio Statistics, Epidemiology and Research Methodology “conducted by the Department of Statistics, Manipal University Manipal from January to June 2011
27. Mr. Koushik Sau has successfully completed the Certified Course in “Bio Statistics, Epidemiology and Research Methodology “conducted by the Department of Statistics, Manipal University Manipal from January to June 2011

Year 2012 (37 Numbers)

1. Mrs. Sebestina Anita D’souza has participated in the workshop on Qualitative Research Methods for Physicians Jan, 30th to Feb, 3rd, 2012 at Indian Institute of Public Health Delhi.
2. Mr. Shovan Saha has attended (2 hours) pre-conference COTE on “Role of Occupational Therapy in Medico-Legal Practice in UK” Conducted by Dr. Gazala Makda held on 16th Jan 2012 at the 49th AIOTA National Conference held at Madgaon, Goa.
3. Ms. Sumedha Kamath has attended (2 hours) pre-conference COTE on “Role of Occupational Therapy in Medico-Legal Practice in UK” Conducted by Dr. Gazala Makda held on 16th Jan 2012 at the 49th AIOTA National Conference held at Madgaon, Goa.
4. Mr. Sanjiv Kumar has attended the short-term training programme on “Addressing Barriers in the Environment and Universal Design” from 19th Jan, 2012 to 21st Jan 2012. Conducted by Lokvishwas Pratisthan Teacher’s Training Centre, Ponda-Goa.
5. Mr. Sanjiv Kumar has attended (2 hours) pre-conference COTE on “Role of Occupational Therapy in Medico-Legal Practice in UK” Conducted by Dr. Gazala Makda held on 16th Jan 2012 at the 49th AIOTA National Conference held at Madgaon, Goa.
6. Mr. Koushik Sau has attended (2 hours) pre-conference COTE on “Role of Occupational Therapy in Medico-Legal Practice in UK” Conducted by Dr. Gazala Makda held on 16th Jan 2012 at the 49th AIOTA National Conference held at Madgaon, Goa.
7. Mr. Shovan Saha has attended the COTE Program on ‘Occupational Therapy: A Global Perspective’ organized by Dept. of Occupational Therapy, MCOAHS, Manipal University, held on 24th January 2012.

8. Mr. Chavan Shashidhar Rao has attended the COTE Program on ‘Occupational Therapy: A Global Perspective’ organized by Dept. of Occupational Therapy, MCOAHS, Manipal University, held on 24th January 2012.
9. Mrs. Sebastina D’souza has attended the COTE Program on ‘Occupational Therapy: A Global Perspective’ organized by Dept. of Occupational Therapy, MCOAHS, Manipal University, held on 24th January 2012.
10. Mr. Sanjiv Kumar has attended the COTE Program on ‘Occupational Therapy: A Global Perspective’ organized by Dept. of Occupational Therapy, MCOAHS, Manipal University, held on 24th January 2012.
11. Mr. Bijay Kumar Nayak has attended the COTE Program on ‘Occupational Therapy: A Global Perspective’ organized by Dept. of Occupational Therapy, MCOAHS, Manipal University, held on 24th January 2012.
12. Mr. D. Sridhar has attended the COTE Program on ‘Occupational Therapy: A Global Perspective’ organized by Dept. of Occupational Therapy, MCOAHS, Manipal University, held on 24th January 2012.
13. Mrs. Banumathe KR has attended the COTE Program on ‘Occupational Therapy: A Global Perspective’ organized by Dept. of Occupational Therapy, MCOAHS, Manipal University, held on 24th January 2012.
14. Mrs. Vinita Acharya has attended the guest lecture on “Research Grant Writing” delivered by Dr. Unnikrishnan as a part of faculty development program on 27th February 2012. Organized by Manipal College of Allied Health Sciences.
15. Mr. Chavan Shashidhar Rao has attended the guest lecture on “Research Grant Writing” delivered by Dr. Unnikrishnan as a part of faculty development program on 27th February 2012. Organized by Manipal College of Allied Health Sciences.
16. Mr. Shovan Saha has attended the guest lecture on “Research Grant Writing” delivered by Dr. Unnikrishnan as a part of faculty development program on 27th February 2012. Organized by Manipal College of Allied Health Sciences.
17. Mrs. Banumathe K.R. has attended the guest lecture on “Research Grant Writing” delivered by Dr. Unnikrishnan as a part of faculty development program on 27th February 2012. Organized by Manipal College of Allied Health Sciences.
18. Mr. Koushik Sau has attended the guest lecture on “Research Grant Writing” delivered by Dr. Unnikrishnan as a part of faculty development program on 27th February 2012. Organized by Manipal College of Allied Health Sciences.
19. Mr. Sanjiv Kumar has attended the guest lecture on “Research Grant Writing” delivered by Dr. Unnikrishnan as a part of faculty development program on 27th February 2012. Organized by Manipal College of Allied Health Sciences.
20. Dr. Sebastina D’souza has attended the guest lecture on “Research Grant Writing” delivered by Dr. Unnikrishnan as a part of faculty development program on 27th February 2012. Organized by Manipal College of Allied Health Sciences.
21. Mr. D. Sridhar participated in “Teacher as Leader Workshop on Academic Leadership” on 22nd March, 2012. Organized by Manipal Centre for Professional and Personal Development (MCPD).
22. Mr. Bijay Kumar Nayak participated in “Teacher as Leader Workshop on Academic Leadership” on 22nd March, 2012. Organized by Manipal Centre for Professional and Personal Development (MCPD).
23. Mr. Koushik Sau has attended 2 days workshop on “Foot Conditions in Leprosy” held at Premananda Memorial Leprosy Hospital, Kolkata on 27th & 28th March, 2012.
24. Mrs. Vinita Acharya has attended (2 hours) pre-conference COTE on “Role of Occupational Therapy in Medico-Legal Practice in UK” Conducted by Dr. Gazala Makda held on 16th Jan 2012 at the 49th AIOTA National Conference held at Madgaon, Goa.

25. Mr. Koushik Sau has attended 5 days workshop on “Pedagogic & Personal Effectiveness” held at Medical Education Department, 2nd floor, Health Sciences Library, University building, Manipal on 10th to 14th July, 2012.
26. Dr. Sebestina D’souza participated in the “SEARCH” the information literacy skills workshop on 28th August 2012 organized by manipal centre for professional and personal development.
27. Mr. Shovan Saha has attended COTE program (10 hours) on “The Art & Science of Hand Splinting” held on 29th & 30th Oct, 2012 organized by Dept. of Occupational Therapy, MCOAHS, and Manipal.
28. Mr. Sanjiv Kumar has attended COTE program (10 hours) on “The Art & Science of Hand Splinting” held on 29th & 30th Oct, 2012 organized by Dept. of Occupational Therapy, MCOAHS, Manipal.
29. Mrs. Vinita Acharya participated in the Workshop on “Teacher as Communication” on 16th Nov, 2012 organized by Manipal Centre for Professional and Personal Development.
30. Mrs. Vinita Acharya has attended the Postgraduate Academic Programme – Psychiatry Update 2012 from 10th Nov, 2102 to 11th Nov, 2012 conducted by the Dept. of Psychiatry, KMC, Manipal
31. Ms. Sumedha Kamath has attended COTE program (10 hours) on “The Art & Science of Hand Splinting” held on 29th & 30th Oct, 2012 organized by Dept. of Occupational Therapy, MCOAHS, and Manipal.
32. Mrs. Vinita Acharya has participated in the workshop on instrumental development workshop, held at Biostatistics Resource and Training Centre (BRTC), Christian Medical College (CMC) Vellore, India from 22nd to 24th November 2012.
33. Mr. Guruprasad V. has participated in the workshop on instrumental development workshop, held at Biostatistics Resource and Training Centre (BRTC), Christian Medical College (CMC) Vellore, India from 22nd to 24th November 2012.
34. Dr. Sebestina Anita Dsouza has participated in two day workshop on copy editing organized by manipal university press, Manipal on November, 23 – 24,
35. Mr. D Sridhar has participated in the workshop on instrumental development workshop, held at Biostatistics Resource and Training Centre (BRTC), Christian Medical College (CMC) Vellore, India from 19th November to 22nd November 2012.
36. Mr. Sanjiv Kumar participated in COTE on “Physical Agent Modalities: As an Adjunct To Occupational Therapy” on December 21- 23, 2012 at Santosh Hospital , Ghaziabad , UP, India Organized by Acedemic Council Of occupational Therapy in collaboration with Santosh group of Institute.
37. Ms. Sumedha Kamath has attended 3 day workshop on “Wheelchair & Prescription for person with Neurological Disorders following world health Organization (WHO) guidelines from 26th to 28th November 2012 at Mobility INDIA, Bangalore.

Year 2013 (23 Numbers)

- 1) Mr. Shovan Saha has participated in the “CME Course on Current Concepts in Hand Therapy” held at right Hospital on 27th January 2013.
- 2) Mrs. Vinita Acharya has participated in the seminar on “Resume writing for Allied Health Professional for American Companies” conducted by department of occupational therapy, MCOAHS , Manipal at Manipal on 18th February, 2013 .
- 3) Mr. Shovan Saha has participated in the seminar on “Resume writing for Allied Health Professional for American Companies” conducted by department of occupational therapy, MCOAHS , Manipal at Manipal on 18th February, 2013

- 4) Mr. Koushik Sau has participated in the seminar on “Resume writing for Allied Health Professional for American Companies” conducted by department of occupational therapy, MCOAHS , Manipal at Manipal on 18th February, 2013.
- 5) Mr. Sanjiv Kumar has participated in the seminar on “Resume writing for Allied Health Professional for American Companies” conducted by department of occupational therapy, MCOAHS , Manipal at Manipal on 18th February, 2013
- 6) Mr. V. Guruprasad has participated in the seminar on “Resume writing for Allied Health Professional for American Companies” conducted by department of occupational therapy, MCOAHS , Manipal at Manipal on 18th February, 2013
- 7) Ms. Sumedha Kamath has participated in the seminar on “Resume writing for Allied Health Professional for American Companies” conducted by department of occupational therapy, MCOAHS , Manipal at Manipal on 18th February, 2013
- 8) Mr. Shovan Saha has participated pre conference Continued Occupational Therapy Education (COTE) on “ Translating research into publication and application in occupational therapy practice” in the 50th annual national conference of AIOTA held at Trivandrum, Kerala from 26th February, 2013
- 9) Mrs. Vinita Acharya has participated pre conference Continued Occupational Therapy Education (COTE) on “ Translating research into publication and application in occupational therapy practice” in the 50th annual national conference of AIOTA held at Trivandrum, Kerala from 26th February, 2013
- 10) Dr. Sebestina Anita D’Souza participated in the Workshop on “counseling skills for teachers” on 11th & 12th March, 2013 organized by department of student Affairs.
- 11) Mr. Guruprasad V. Participated in the workshop on qualitative research method and analysis, held at biostatistics resource and training centre (BRTC), Christian Medical College (CMC), Vellore, India from May 13th 2013 to May 15th 2013.
- 12) Mr. Koushik Sau Participated in the workshop on “How to write and publish a scientific article” Conducted by the department of pharmacology, kasturba Medical College, Manipal on 17th & 18th may 2013.
- 13) Ms. Sumedha Kamath P Participated in the workshop on “How to write and publish a scientific article” Conducted by the department of pharmacology, Kasturba Medical college, Manipal on 17th & 18th may 2013.
- 14) Mr. Sanjiv Kumar participated in the workshop on “Ethical issues in biomedical research” on 29th and 30th may 2013. Jointly organized by Manipal centre for professional and personal development (MCPD), MU and department of hospital Administration, KMC Manipal.
- 15) Mr. Koushik Sau Participated in the Half-Day Workshop on BMJ Case Reports “How To Get Your Cases Published” Conducted by the SEARCH – The Health Science Library & Department of Library & Information Science, Kasturba Medical College, Manipal University in association with BMJ publishing group on 25th June 2013.
- 16) Dr. Sebestina A D’Souza participated in the workshop on “Curriculum Design” organized by Manipal Centre for Professional and Personal Development (MCDP), Manipal University, on 9th July, 2013 .
- 17) Mrs. Sumedha Kamath participated in the workshop “ Pedagogic and Personal Effectiveness” organized by Manipal Centre for Professional And Personal Development (MCDP), Manipal University from 22nd to 26th July , 2013.
- 18) Mr. C. Shashidhar Rao participated in the national workshop on “survey Research & statistical Analysis” organized by the department of statistics, Manipal university, Manipal during 12-14 August, 2013.
- 19) Mrs. Vinita Acharya participated in the national workshop on “survey Research & statistical Analysis” organized by the department of statistics, Manipal university, Manipal during 12-14 August, 2013.

- 20) Mr. Shovan Saha participated ICF workshop on 3rd to 4th December 2013 in cochin (Kerala), India
- 21) Mrs Vinita A Acharya participated in the “Capacity Building Workshop On Qualitative Data Analysis” organized by department of public health Department of Statistics Manipal university, India and university of Groningen , The Netherlands
- 22) Mrs. K.R Banumathe has participated in two day workshop on cognitive Rehabilitation on 14th and 15th December, 2013 organized by department of clinical Psychology, SOAHS, Manipal university
- 23) Mrs. Shalini Quadros has participated in two day workshop on cognitive Rehabilitation on 14th and 15th December, 2013 organized by department of clinical Psychology, SOAHS, Manipal university

Year 2014 (12 Numbers)

1. Mr. Sanjiv Kumar has participated as delegate in workshop titled “Emerging Trends towards Innovation in Health Care and Science in India” organized by School of Allied Health Science, at Manipal university on 7th march 2014.
2. Dr. Shovan Saha has participated as delegate in workshop titled “Emerging Trends towards Innovation in Health Care and Science in India” organized by School of Allied Health Science, at Manipal university on 7th march 2014.
3. Mrs. Shalini Quadros has participated as delegate at the “National Conference on Research and Services in Psychiatry Rehabilitation: Focus on Recovery” organized by the psychiatric rehabilitation services, NIMHANS, Bangalore on 8th and 9th March, 2014.
4. Dr. Shovan Saha has participated in the Continuing Occupational Therapy Education (COTE) and work shop on Fundamentals of splinting on 29th march, 2014 organized by SRM College of occupational Therapy, SRM University.
5. Dr. Sebestina Anita D’souza has participated in the half day “Mini Workshop for Postgraduate Dissertation Guides” held on 27th July 2014 Between 2.00 to 5.00 pm at Kasturba Medical College, Manipal University, Manipal.
6. Mrs. Vinita A. Acharya has participated in the half day “Mini Workshop for Postgraduate Dissertation Guides” held on 27th July 2014 Between 2.00 to 5.00 pm at Kasturba Medical College, Manipal University, Manipal.
7. Dr. Shovan Saha has participated in the half day “Mini Workshop for Postgraduate Dissertation Guides” held on 27th July 2014 Between 2.00 to 5.00 pm at Kasturba Medical College, Manipal University, Manipal.
8. Mrs. Vinita Acharya has attended the one day Workshop on Copy Editing Organized by Manipal University Press (MUP), Manipal on October 27, 2014 at the department of European studies, Manipal University, We appreciate her active participation in the workshop.
9. Dr. Sebestina Anita Dsouza has successfully completing the training programme on “Nurturing an Effective Work Place” for the head of the departments of institutions of Manipal university conducted by TAPMI during October 17th to 18th, 2014 at Manipal.
10. Mrs. Vinita Acharya has participated in the “National Grant Writing workshop for Health Professionals” held on 29th & 30th November 2014, Manipal University, Manipal 576104.
11. Dr. Sebestina Anita D’souza has participated in the “National Grant Writing workshop for Health Professionals” held on 29th & 30th November 2014, Manipal University, Manipal 576104.
12. Mr. Sridhar D. has attended the half day workshop on “How to get published?” organized by the SEARCH the health science library and department of library &

information Science, KMC , Manipal University, Manipal is association with BMJ publishing group held on 10th , December, 2014.

Medical Laboratory Technology

2011

1. Asha Patil participated in training programme on ‘Laboratory Quality Management and Internal Audit’ as per ISO 15189:2007 from 5-8 April at Centre for Electronic Testing Engineering, STQC Directorate, Department of Information Technology, Government of India ETDC, Peenya, Bangalore, Karnataka.
2. Vivek Raghavan attended the workshop on ‘Credit Based Evaluation System’ conducted by Manipal College of Allied Health Sciences on 27 May 2011.
3. Saleena Ummer attended the workshop on ‘Credit Based Evaluation System’ conducted by Manipal College of Allied Health Sciences on 27 May 2011.
4. Saritha Kamath U attended the workshop on ‘Credit Based Evaluation System’ conducted by Manipal College of Allied Health Sciences on 27 May 2011.
5. Kusumakshi attended the workshop on ‘Credit Based Evaluation System’ conducted by Manipal College of Allied Health Sciences on 27 May 2011.
6. Vivek Raghavan attended a workshop on ‘Situational Review Report Writing’ conducted by Ministry of Health and Family Welfare, Government of India and Public Health Foundation of India Initiative, National Initiative for Allied Health Services (NIAHS) on 4-6 July 2011.
7. Kusumakshi attended a workshop on ‘Situational Review Report Writing’ conducted by Ministry of Health and Family Welfare, Government of India and Public Health Foundation of India Initiative, National Initiative for Allied Health Services (NIAHS) on 4-6 July 2011.
8. Vivek Raghavan attended a workshop on ‘Safety issue in Hospital towards quality patient care-II’ organized by Department of Hospital Administration, KMC, Manipal, in association with Academy of Hospital Administration Mangalore on 27 August 2011.
9. Saleena Ummer attended a workshop on ‘Safety issue in Hospital towards quality patient care-II’ organized by Department of Hospital Administration, KMC, Manipal, in association with Academy of Hospital Administration Mangalore on 27 August 2011.
10. Kusumakshi attended a workshop on ‘Safety issue in Hospital towards quality patient care-II’ organized by Department of Hospital Administration, KMC, Manipal, in association with Academy of Hospital Administration Mangalore on 27 August 2011.
11. Saleena Ummer V attended the Pubmed Basics training programme organized by MCPD, Manipal University on 28 July 2011.
12. Saleena Ummer attended workshop on ‘Problem based Learning’ organized by MCPD on third October 2011.
13. SarithaKamath U attended workshop on ‘Problem based Learning’ organized by MCPD on third October 2011.
14. Ms. Asha Patil attended Transfusion Medicine CME-2011 “Towards Safer Transfusions”, conducted by Voluntary Blood Bank , Kasturba Medical College & Hospital, MU ,Manipal on 30TH of January 2011
15. Ms. Kusumakshi attended Certificate course in biostatistics, epidemiology and research methodology, conducted by the department of Statistic, Manipal University from January 2011 to June 2011.
16. Ms. Asha Patil attended “Importance Of QC to seek Accreditations and QC Concepts” organized by Bio-Rad Laboratories (India) Pvt. Ltd & Department of Biochemistry on 22nd January 2011 held at KMC, Melaka Manipal Medical College & Kasturba Medical College International Centre

2012

1. Ms. Asha Patil attended Certificate course in biostatistics, epidemiology and research methodology, conducted by the department of Statistic, Manipal University from August 2011 to January 2012.
2. Ms. Asha Patil attended the training programme on Laboratory Diagnosis for Haemophilia held at Christian Medical College, Vellore, Chennai from 5th March to 10th March 2012

2013

1. Saritha Kamath U attended workshop on “How to write and publish scientific articles” conducted by Dept. of Pharmacology KMC , Manipal on 17th and 18th May 2013
2. Kusumakshi attended workshop on “How to write and publish scientific articles” conducted by Dept. of Pharmacology KMC , Manipal on 17th and 18th May 2013
3. Vivek Raghavan attended workshop on “How to write and publish scientific articles” conducted by Dept. of Pharmacology KMC , Manipal on 17th and 18th May 2013
4. Saritha Kamath U attended and completed successfully Internal Auditor Course on Integrated Management System (ISO 9001: 2008 & ISO 14001: 2004) on 1st – 3rd July 2013
5. Ms. Saritha Kamath attended ICMR Sponsored Workshop/ CME on laboratory diagnostic technique in inborn errors of metabolism organised by the department of biochemistry, KMC Manipal and Melaka Manipal Medical College Manipal held on 30th September and 1st October 2013.
6. Ms. Asha Patil attended ICMR Sponsored Workshop/ CME on laboratory diagnostic technique in inborn errors of metabolism organised by the department of biochemistry, KMC Manipal and Melaka Manipal Medical College Manipal held on 30th September and 1st October 2013.
7. Ms. Asha Patil participated as a trainer in the Basic coagulation training cum workshop programme from 23rd October to 26th October 2013 held at Manipal University, Manipal.

2014

1. Saritha Kamath U attended awareness programme on clinical chemistry trainee council conducted by KMC Manipal University, Manipal held on 1st February 2014
2. Ms. Saritha Kamath participated in Workshop on Systematic Reiews and Meta-analysis, organised by Public Health Evidence South Asia (PHESA) & Dr. TMA. Pai Endowment Chair in Systematic Reviews and Evidence Based Public Health. 22-23 November, 2014
3. Ms. Kusumakshi participated in Workshop on Systematic Reiews and Meta-analysis, organised by Public Health Evidence South Asia (PHESA) & Dr. TMA. Pai Endowment Chair in Systematic Reviews and Evidence Based Public Health. 22-23 November, 2014
4. Ms. Asha Patil participated in Workshop on Systematic Reiews and Meta-analysis, organised by Public Health Evidence South Asia (PHESA) & Dr. TMA. Pai Endowment Chair in Systematic Reviews and Evidence Based Public Health. 22-23 November, 2014

5. Ms Asha Patil attended the Pedagogic and Personal Effectiveness workshop for health science Teachers- March 2014.
6. Saleena Ummer participated in the training programme “Nurturing an effective workplace” for the heads of the departments of the institutions of Manipal University, on Oct 2014

Health Information Management

2011

1. Rajesh Kumar Sinha participated in ‘Situational Review Report Writing: National Initiative of Allied Health Science’ Organized by Public Health Foundation of India in association with Ministry of Health and Family Welfare from 4-6 July 2011 at Manipal, India.
2. Roopalekha Jathanna participated in workshop on ‘Credit Based Evaluation System’ on 27 May 2011 conducted by Manipal University, Manipal.
3. B Reshmi participated in Faculty Development Programme in Teaching Entrepreneurship conducted by Manipal Institute of Management and All India Council of Technical Education, New Delhi on 19-24 September 2011.
4. Dola Saha participated in Faculty Development Programme in Teaching Entrepreneurship conducted by Manipal Institute of Management and All India Council of Technical Education, New Delhi on 19-24 September 2011.
5. Sabu KM participated in workshop on ‘safety issue in Hospital towards quality patient care - II’ organized by Department of Hospital Administration, KMC, Manipal in association with the Academy of Hospital Administration Mangalore – Manipal chapter on 27 August 2011.
6. Sabu KM participated in workshop on ‘Situational Review Report Writing – National Initiative for Allied Health Services (NIAHS)’ organized by Ministry of Health and Family Welfare, Government of India and Public Health Foundation of India at Manipal on 4-6 July 2011.
7. Sabu KM Participated in workshop on ‘safety issue in Hospital towards quality patient care - I’ Organized by Department of Hospital Administration, KMC, Manipal in association with the Academy of Hospital Administration Mangalore – Manipal chapter on 25 June 2011.
8. B Reshmi participated in Workshop on ‘Non Communicable Diseases conducted by Manipal University in collaboration with University of Alabama at Birmingham, USA, July 2011.

2012

1. B.Reshmi, Workshop on “Research Grant Writing “, organised by Manipal College of Allied Health Sciences, Manipal University as a Faculty Development Program on 27.02.2012
2. B.Reshmi Workshop on “Healthcare Financing” organised by the Department of Community Medicine, KMC ,Manipal from 27-29th June 2012

2013

1. Dola Saha and B.Reshmi. Workshop on “Curriculum Design and Development “, organised by Manipal Centre for Professional Development, Manipal on the 9th of July 2013.
2. B.Reshmi and Dola Saha. Workshop on “Curriculum Design and Development “, organised by Manipal Centre for Professional Development, Manipal on the 9th of July 2013.

2014

1. B.Reshmi, “National Grant Writing Workshop” organised by T.M.A.Pai Endowment Chair on Exercise Therapy and Health Promotion, Physiotherapy, School of Allied Health Sciences, Manipal University on 28th and 29th of November 2014.
2. Dr. Roopalekha Jathanna attended, Certifying training program “IMS Training” organized by Manipal University, in 2013
3. Ms. Dola Saha attended, Certifying training program “IMS Training” organized by Manipal University, in 2013
4. Dr. Roopalekha Jathanna attended workshop on faculty development program “Nurturing an effective work place” organized by TAPMI, in 2014

Optometry

2011

1. Mrs Jyothi Thomas and Mr Premjit Bhakat attended the workshop on training Optometry educators ‘Eye Teach’ organized by International Centre for Eye Care Education on 18-19 October 2011 at Hyderabad.
2. Mr Chandan S and Mr Avik Ray attended a workshop on Rose CL K training on October 2011 at Mumbai.
3. Mr Nijil Sanker AU completed the certificate course on ‘Biostatistics, Epidemiology and Research Methodology’ on January-June 2011, Manipal.
4. Mrs Jyothi Thomas, Mr Nijil Sanker attended the workshop on ‘Credit Based Evaluation’ conducted by SOAHS on 27 May 2011.

Speech and Hearing

2010

1. Mr Muhammed Ayas attended the workshop on Pedagogic and Personal effectiveness held on 11-15 January 2010 conducted by KMC, Manipal.
2. Ms. Kanaka – attended a Certificate Course in Statistics, Epidemiology and Research Methodology conducted by Dept of Statistics, Manipal from July – Dec 2010
3. Mr. Ayas – attended a Certificate Course in Statistics, Epidemiology and Research Methodology conducted by Dept of Statistics, Manipal from July – Dec 2010

2011

1. Hariprakash - Attended workshop “ MATLAB applications in Speech & Hearing” conducted by SOAHS, Manipal on 22-26th March, 2011
2. Deepthi K J - Attended workshop “ MATLAB applications in Speech & Hearing” conducted by SOAHS, Manipal on 22-26th March, 2011
3. Dr. U V Aithal - Attended workshop “ MATLAB applications in Speech & Hearing” conducted by SOAHS, Manipal on 22-26th March, 2011
4. Dr. Krishna Y - Attended workshop “ MATLAB applications in Speech & Hearing” conducted by SOAHS, Manipal on 22-26th March, 2011
5. Ms. Sunila John underwent training in Integrated Management System - Internal Auditor Training from 1-4 Aug 2011
6. Ms. Angel attended a workshop on Pedagogy and Personal Effectiveness by Dept of Medical Education, Manipal, July 2011
7. Ms. Deepthi – attended a Certificate Course in Statistics, Epidemiology and Research Methodology conducted by Dept of Statistics, Manipal from July – Dec 2011
8. Mr. Hariprakash – attended a Certificate Course in Statistics, Epidemiology and Research Methodology conducted by Dept of Statistics, Manipal from July – Dec 2011

9. Mr. Kishan – attended a Certificate Course in Statistics, Epidemiology and Research Methodology conducted by Dept of Statistics, Manipal from July – Dec 2011
10. Ms. Archana – attended a Certificate Course in Statistics, Epidemiology and Research Methodology conducted by Dept of Statistics, Manipal from July – Dec 2011

2012

1. Bhargavi attended a faculty development program on “Research Grant Writing” on 27 Feb 2012 at Manipal
2. Mr. Hariprakash – National Workshop on Getting Started with MATLAB and Simulink (GSMS 2012), MIT, Manipal, 12-14 July 2012
3. Archana - National Workshop on Getting Started with MATLAB and Simulink (GSMS 2012), MIT, Manipal, 12-14 July 2012
4. Dr. B Rajashekhar - - LARYCARE-2 International workshop on voice rehabilitation after Laryngectomy, 9-10th Oct, 2012, Dept of Speech & Hearing, SOAHS, Manipal
5. Dr. U V Aithal - - LARYCARE-2 International workshop on voice rehabilitation after Laryngectomy, 9-10th Oct, 2012, Dept of Speech & Hearing, SOAHS, Manipal
6. Dr. Krishna - - LARYCARE-2 International workshop on voice rehabilitation after Laryngectomy, 9-10th Oct, 2012, Dept of Speech & Hearing, SOAHS, Manipal
7. Dr. Kanaka - - LARYCARE-2 International workshop on voice rehabilitation after Laryngectomy, 9-10th Oct, 2012, Dept of Speech & Hearing, SOAHS, Manipal
8. Dr. Veena - - LARYCARE-2 International workshop on voice rehabilitation after Laryngectomy, 9-10th Oct, 2012, Dept of Speech & Hearing, SOAHS, Manipal
9. Dr. Gopeekrishnan - - LARYCARE-2 International workshop on voice rehabilitation after Laryngectomy, 9-10th Oct, 2012, Dept of Speech & Hearing, SOAHS, Manipal
10. Dr. Usha - - LARYCARE-2 International workshop on voice rehabilitation after Laryngectomy, 9-10th Oct, 2012, Dept of Speech & Hearing, SOAHS, Manipal
11. Ms. Shivani - - LARYCARE-2 International workshop on voice rehabilitation after Laryngectomy, 9-10th Oct, 2012, Dept of Speech & Hearing, SOAHS, Manipal
12. Ms. Rama Prabhu - - LARYCARE-2 International workshop on voice rehabilitation after Laryngectomy, 9-10th Oct, 2012, Dept of Speech & Hearing, SOAHS, Manipal
13. Mr. Hariprakash - - LARYCARE-2 International workshop on voice rehabilitation after Laryngectomy, 9-10th Oct, 2012, Dept of Speech & Hearing, SOAHS, Manipal
14. Ms. Sunila - - LARYCARE-2 International workshop on voice rehabilitation after Laryngectomy, 9-10th Oct, 2012, Dept of Speech & Hearing, SOAHS, Manipal
15. Mr. Kishan - - LARYCARE-2 International workshop on voice rehabilitation after Laryngectomy, 9-10th Oct, 2012, Dept of Speech & Hearing, SOAHS, Manipal
16. Mr. Ayas - LARYCARE-2 International workshop on voice rehabilitation after Laryngectomy, 9-10th Oct, 2012, Dept of Speech & Hearing, SOAHS, Manipal
17. Ms. Archana - LARYCARE-2 International workshop on voice rehabilitation after Laryngectomy, 9-10th Oct, 2012, Dept of Speech & Hearing, SOAHS, Manipal
18. Ms. Angel - LARYCARE-2 International workshop on voice rehabilitation after Laryngectomy, 9-10th Oct, 2012, Dept of Speech & Hearing, SOAHS, Manipal
19. Ms. Bhargavi - LARYCARE-2 International workshop on voice rehabilitation after Laryngectomy, 9-10th Oct, 2012, Dept of Speech & Hearing, SOAHS, Manipal
20. Dr. B Rajashekhar - National seminar on ‘Recent Advances in Auditory Evoked Potentials and Hearing Aid Technology’, 16-17th Nov, 2012, Dept of Speech & Hearing, SOAHS, Manipal
21. Dr. U V Aithal - National seminar on ‘Recent Advances in Auditory Evoked Potentials and Hearing Aid Technology’, 16-17th Nov, 2012, Dept of Speech & Hearing, SOAHS, Manipal

22. Dr. Krishna - National seminar on 'Recent Advances in Auditory Evoked Potentials and Hearing Aid Technology', 16-17th Nov, 2012, Dept of Speech & Hearing, SOAHS, Manipal
23. Dr. Kanaka - National seminar on 'Recent Advances in Auditory Evoked Potentials and Hearing Aid Technology', 16-17th Nov, 2012, Dept of Speech & Hearing, SOAHS, Manipal
24. Dr. Veena - National seminar on 'Recent Advances in Auditory Evoked Potentials and Hearing Aid Technology', 16-17th Nov, 2012, Dept of Speech & Hearing, SOAHS, Manipal
25. Dr. Gopeekrishnan - National seminar on 'Recent Advances in Auditory Evoked Potentials and Hearing Aid Technology', 16-17th Nov, 2012, Dept of Speech & Hearing, SOAHS, Manipal
26. Dr. Usha - National seminar on 'Recent Advances in Auditory Evoked Potentials and Hearing Aid Technology', 16-17th Nov, 2012, Dept of Speech & Hearing, SOAHS, Manipal
27. Ms. Shivani - National seminar on 'Recent Advances in Auditory Evoked Potentials and Hearing Aid Technology', 16-17th Nov, 2012, Dept of Speech & Hearing, SOAHS, Manipal
28. Ms. Rama Prabhu - National seminar on 'Recent Advances in Auditory Evoked Potentials and Hearing Aid Technology', 16-17th Nov, 2012, Dept of Speech & Hearing, SOAHS, Manipal
29. Mr. Hariprakash - National seminar on 'Recent Advances in Auditory Evoked Potentials and Hearing Aid Technology', 16-17th Nov, 2012, Dept of Speech & Hearing, SOAHS, Manipal
30. Ms. Sunila - National seminar on 'Recent Advances in Auditory Evoked Potentials and Hearing Aid Technology', 16-17th Nov, 2012, Dept of Speech & Hearing, SOAHS, Manipal
31. Mr. Kisha - National seminar on 'Recent Advances in Auditory Evoked Potentials and Hearing Aid Technology', 16-17th Nov, 2012, Dept of Speech & Hearing, SOAHS, Manipal
32. Mr. Ayas - National seminar on 'Recent Advances in Auditory Evoked Potentials and Hearing Aid Technology', 16-17th Nov, 2012, Dept of Speech & Hearing, SOAHS, Manipal
33. Ms. Archana - National seminar on 'Recent Advances in Auditory Evoked Potentials and Hearing Aid Technology', 16-17th Nov, 2012, Dept of Speech & Hearing, SOAHS, Manipal
34. Ms. Angel - National seminar on 'Recent Advances in Auditory Evoked Potentials and Hearing Aid Technology', 16-17th Nov, 2012, Dept of Speech & Hearing, SOAHS, Manipal
35. Ms. Bhargavi - National seminar on 'Recent Advances in Auditory Evoked Potentials and Hearing Aid Technology', 16-17th Nov, 2012, Dept of Speech & Hearing, SOAHS, Manipal
36. Ms. Bhargavi attended a workshop on Pedagogy and Personal Effectiveness by Dept of Medical Education, Manipal, July 2012
37. Ms. Angel – attended a Certificate Course in Statistics, Epidemiology and Research Methodology conducted by Dept of Statistics, Manipal from Aug 2012 – Jan 2013
38. Ms. Bhargavi – attended a Certificate Course in Statistics, Epidemiology and Research Methodology conducted by Dept of Statistics, Manipal from Aug 2012 – Jan 2013

2013

1. Dr Usha Devadas – CRE on Principles of Physiologic Voice Therapy by Dr. Joseph Stemple on 16th April, 2013 at KMC, Mangalore

2. Dr. U V Aithal – Aphentia 2013 - A Seminar on Comprehensive Assessment of Aphasia and Dementia on 12 April 2013 at Manipal.
3. Dr. Krishna – Aphentia 2013 - A Seminar on Comprehensive Assessment of Aphasia and Dementia on 12 April 2013 at Manipal.
4. Dr. Kanaka – Aphentia 2013 - A Seminar on Comprehensive Assessment of Aphasia and Dementia on 12 April 2013 at Manipal.
5. Dr. Veena – Aphentia 2013 - A Seminar on Comprehensive Assessment of Aphasia and Dementia on 12 April 2013 at Manipal.
6. Dr. Gopeekrishnan – Aphentia 2013 - A Seminar on Comprehensive Assessment of Aphasia and Dementia on 12 April 2013 at Manipal.
7. Dr. Usha – Aphentia 2013 - A Seminar on Comprehensive Assessment of Aphasia and Dementia on 12 April 2013 at Manipal.
8. Ms. Shivani – Aphentia 2013 - A Seminar on Comprehensive Assessment of Aphasia and Dementia on 12 April 2013 at Manipal.
9. Ms. Rama Prabhu – Aphentia 2013 - A Seminar on Comprehensive Assessment of Aphasia and Dementia on 12 April 2013 at Manipal.
10. Mr. Hariprakash – Aphentia 2013 - A Seminar on Comprehensive Assessment of Aphasia and Dementia on 12 April 2013 at Manipal.
11. Ms. Sunila– Aphentia 2013 - A Seminar on Comprehensive Assessment of Aphasia and Dementia on 12 April 2013 at Manipal.
12. Mr. Kishan – Aphentia 2013 - A Seminar on Comprehensive Assessment of Aphasia and Dementia on 12 April 2013 at Manipal.
13. Mr. Ayas – Aphentia 2013 - A Seminar on Comprehensive Assessment of Aphasia and Dementia on 12 April 2013 at Manipal.
14. Ms. Archana – Aphentia 2013 - A Seminar on Comprehensive Assessment of Aphasia and Dementia on 12 April 2013 at Manipal.
15. Ms. Angel – Aphentia 2013 - A Seminar on Comprehensive Assessment of Aphasia and Dementia on 12 April 2013 at Manipal.
16. Ms. Bhargavi – Aphentia 2013 - A Seminar on Comprehensive Assessment of Aphasia and Dementia on 12 April 2013 at Manipal.
17. Angel Selvakumar – Workshop on Publishing in Biomedical Journals, organized by the Dr. TMA Pai Endowment Chair in Exercise and Health Promotion, Physiotherapy, SOAHS, Manipal University, Manipal on 25 Sept, 2013

2014

1. Dr. Gopee Krishnan – attended Cognition:Cell to System, a two day symposium on 21-22 Feb 2014 at Manipal
2. Dr. Venkataraja Aithal U – attended Cognition:Cell to System, a two day symposium on 21-22 Feb 2014 at Manipal
3. Dr. Veena K D – attended Cognition:Cell to System, a two day symposium on 21-22 Feb 2014 at Manipal
4. Dr. Usha Devadas – attended Cognition:Cell to System, a two day symposium on 21-22 Feb 2014 at Manipal
5. Ms. Sunila John – attended Cognition:Cell to System, a two day symposium on 21-22 Feb 2014 at Manipal
6. Dr. Gopee Krishnan participated in the workshop “Emerging Trends towards Innovation in Health care and Science in India”, Manipal on 7th March, 2014
7. Ms. Bhargavi participated in the workshop “Emerging Trends towards Innovation in Health care and Science in India”, Manipal on 7th March, 2014
8. Ms. Sheela participated in the workshop “Emerging Trends towards Innovation in Health care and Science in India”, Manipal on 7th March, 2014
9. Dr. Venkataraja Aithal U – attended a Half Day Mini Workshop for Postgraduate Dissertation Guides on 14 June 2014 at KMC, MU

10. Dr. Venkataraja Aithal U – attended Workshop on "Effective Electronic Communication" held at MCPD on 28th December, 2013.
11. Ms. Sheela attended a workshop on Pedagogy and Personal Effectiveness by Dept of Medical Education, Manipal, 25-28 August, 2014
12. Ms. Bhargavi P G participated in a CNE program on Nutrition & Wellness for Health on 6 Sept 2014, at KMC, Manipal
13. Dr. U V Aithal – attended a training program on Nurturing an Effective Work Place conducted by TAPMI during 17-18 October, 2014 at Manipal
14. Dr. Venkataraja Aithal U - attended a workshop on Systematic Reviews and Meta-Analysis conducted by Public Health Evidence South Asia (PHESA) and Dr. TMA Pai Endowment Chair in Systematic Reviews and Evidence Based Public Health, Manipal University, Manipal on 22, 23 Nov, 2014.
15. Ms. Shivani Tiwari - attended a workshop on Systematic Reviews and Meta-Analysis conducted by Public Health Evidence South Asia (PHESA) and Dr. TMA Pai Endowment Chair in Systematic Reviews and Evidence Based Public Health, Manipal University, Manipal on 22, 23 Nov, 2014.
16. Dr. Usha - attended a workshop on Systematic Reviews and Meta-Analysis conducted by Public Health Evidence South Asia (PHESA) and Dr. TMA Pai Endowment Chair in Systematic Reviews and Evidence Based Public Health, Manipal University, Manipal on 22, 23 Nov, 2014.
17. Dr. Sunila John - attended a workshop on Systematic Reviews and Meta-Analysis conducted by Public Health Evidence South Asia (PHESA) and Dr. TMA Pai Endowment Chair in Systematic Reviews and Evidence Based Public Health, Manipal University, Manipal on 22, 23 Nov, 2014.
18. Ms. Sheela - attended a workshop on Systematic Reviews and Meta-Analysis conducted by Public Health Evidence South Asia (PHESA) and Dr. TMA Pai Endowment Chair in Systematic Reviews and Evidence Based Public Health, Manipal University, Manipal on 22, 23 Nov, 2014.
19. Dr. Venkataraja Aithal U - attended a National Grant Writing Workshop for Health Professionals on 29, 30 Nov, 2014 at Manipal University, Manipal (Organized by Dr. TMA Pai Endowment Chair in Exercise Science and Health Promotion, Physiotherapy).
20. Dr. Gopee Krishnan - attended a National Grant Writing Workshop for Health Professionals on 29, 30 Nov, 2014 at Manipal University, Manipal (Organized by Dr. TMA Pai Endowment Chair in Exercise Science and Health Promotion, Physiotherapy).
21. Dr. Sunila John - attended a National Grant Writing Workshop for Health Professionals on 29, 30 Nov, 2014 at Manipal University, Manipal (Organized by Dr. TMA Pai Endowment Chair in Exercise Science and Health Promotion, Physiotherapy).
22. Ms. Sheela - attended a National Grant Writing Workshop for Health Professionals on 29, 30 Nov, 2014 at Manipal University, Manipal (Organized by Dr. TMA Pai Endowment Chair in Exercise Science and Health Promotion, Physiotherapy).
23. Angel – attended a Faculty Development Program on Soft Skills Training on 19 December 2014 organized by SOAHS
24. Bhargavi – attended a Faculty Development Program on Soft Skills Training on 19 December 2014 organized by SOAHS
25. Sheela – attended a Faculty Development Program on Soft Skills Training on 19 December 2014 organized by SOAHS
26. Ms. Sheela – attended a Certificate Course in Statistics, Epidemiology and Research Methodology conducted by Dept of Statistics, Manipal in 2014
27. Dr. B. Rajashekhar – attended Preconference of 47 ISHACON 2015 held at Manipal on 30-31 December, 2014

28. Dr. U V Aithal – attended Preconference of 47 ISHACON 2015 held at Manipal on 30-31 December, 2014
29. Dr. Y. Krishna – attended Preconference of 47 ISHACON 2015 held at Manipal on 30-31 December, 2014
30. Dr. Kanaka – attended Preconference of 47 ISHACON 2015 held at Manipal on 30-31 December, 2014
31. Dr. Veena – attended Preconference of 47 ISHACON 2015 held at Manipal on 30-31 December, 2014
32. Ms. Rama Prabhu – attended Preconference of 47 ISHACON 2015 held at Manipal on 30-31 December, 2014
33. Dr. Usha Devdas – attended Preconference of 47 ISHACON 2015 held at Manipal on 30-31 December, 2014
34. Mr. Hari Prakash – attended Preconference of 47 ISHACON 2015 held at Manipal on 30-31 December, 2014
35. Ms. Archana – attended Preconference of 47 ISHACON 2015 held at Manipal on 30-31 December, 2014
36. Ms. Shivani Tiwari – attended Preconference of 47 ISHACON 2015 held at Manipal on 30-31 December, 2014
37. Dr. Gopee Krishnan – attended Preconference of 47 ISHACON 2015 held at Manipal on 30-31 December, 2014
38. Mr. Kishan M – attended Preconference of 47 ISHACON 2015 held at Manipal on 30-31 December, 2014
39. Dr. Sunila John – attended Preconference of 47 ISHACON 2015 held at Manipal on 30-31 December, 2014
40. Ms. Angel – attended Preconference of 47 ISHACON 2015 held at Manipal on 30-31 December, 2014
41. Ms. Bhargavi – attended Preconference of 47 ISHACON 2015 held at Manipal on 30-31 December, 2014
42. Ms. Sheela – attended Preconference of 47 ISHACON 2015 held at Manipal on 30-31 December, 2014
43. Ms. Rekha – attended Preconference of 47 ISHACON 2015 held at Manipal on 30-31 December, 2014

Nuclear Medicine

2011

1. Participated in training programme on ‘Pubmed Basics’ organized by RFFC, MCPD, and Manipal on 28 July 2011.
2. Participated at a workshop on ‘Situational Review Report Writing’ under the National Initiative for Allied Health Services (NIAHS) in partnership with Public Health Foundation of India (PHFI) at SOAHS, Manipal on 4-6 July 2011.
3. Participated in workshop on Credit Based Evaluation System held on 27 May 2011 by Manipal College of Allied Health Sciences (SOAHS), Manipal.
4. Completed training course on ‘Radioimmunoassay Techniques and their Clinical applications’ conducted by Radiopharmaceuticals Division, BARC, Mumbai during 15-26 March 2011.
5. Participated in workshop on ‘Pedagogic and Personal Effectiveness’ conducted by Department of Medical Education KMC, Manipal during 15-19 February 2011.
6. Attended one day training series in Epidemiology and Biostatistics and one day workshop on Research Methodology and Biostatistics organized by department of Community Medicine, KMC, Manipal on 5-6 October 2010.

7. Organized and Participated in work shop on 'Medical Cyclotron and PET-CT' organized by Indian College of Nuclear Medicine and Manipal University , Manipal on 24-25 April 2010.
8. Participated in 'Pedagogic and Personal Effectiveness Workshop' conducted by Department of Medical Education KMC, Manipal on 23-27 November 2009.
9. Participated in preconference workshop on 'Ultrasound, CT and MRI' on seventh January 2009 and 62nd Indian Radiological and Imaging Association (IRIA) Annual Conference hosted by Bihar Chapter of IRIA on 7-11 January 2009 at S K Memorial Hall, Patna.
10. Participated in Clinical Excellence Programme on Clinical Trials on 7 September 2008 at SCADA Business centre, Patna.
11. Participated in one day CME on Breast Imaging on second March 2008 jointly organized by IRIA Bihar Chapter and Department of Radiology and RCC IGIMS, Patna.
12. Participated in one day Appraisal Programme for Radiological Safety Officers serving in Ind auditorium Mumbai on 17 April 2006.
13. 7-10 March 2008: Participated in the National Workshop on Radio isotopes in biology in Mangalore University, Mangalore, and Karnataka.
14. 29-30 Sep 2009: Participated in the workshop on 'Research Methodology and Biostatistics' conducted by Department of Community Medicine KMC, Manipal, and Karnataka.
15. 24-25 April 2010: Participated in Workshop on 'Medical Cyclotron and PET-CT' organized by Indian College of Nuclear Medicine and Manipal University, Manipal.
16. 15 -19 June 2010: Participated in 'Pedagogic and Personal Effectiveness Workshop' conducted by Department of Medical Education, KMC, Manipal.
17. 16-18 September 2010: Participated in 'A Short Course in Error Analysis and its Applications' held at Department of Statistics, KMC, Manipal University, Manipal.
18. 25-27 March 2011: Participated in 'National Workshop on Predictive Mathematical models in Science and Engineering' organized by the Department of Mathematics, Manipal Institute of Technology, Manipal.
19. 27 May 2011: Participated in workshop on 'Credit Based Evaluation System' organized by Manipal college of Allied Health sciences, Manipal University, Manipal.
20. First October 2011: Participated in workshop on 'Problem Based Learning' organized by the Medical Centre for Professional and Personal development (MCPD), KMC, and Manipal.
21. March 2006: Participated in 'Teaching learning workshop' held by Department of
22. 7-10 March 2008: Participated in the National Workshop on Radio isotopes in Biology in Mangalore University, Mangalore, and Karnataka.
23. Sep 2009: Participated in the workshop on 'Protocol Writing and Research Methodology' conducted by Department of Community Medicine, KMC, Manipal, Karnataka.
24. 24-25 April 2010: Organized and participated in workshop on 'Medical Cyclotron and PET-CT' organized by Indian College of Nuclear Medicine and Manipal University, Manipal.
25. 16-18 September 2010: Participated in 'A Short Course in Error Analysis and its Applications' held at Department of Statistics, Manipal University, Manipal.
26. March 2011: Attended one day workshop on '¹⁷⁷Lu as a therapeutic radionuclide and ¹⁷⁷Lu-DOTATATE for neuroendocrine treatment' held at Bhabha Atomic Research Centre, Mumbai.
27. March 2011: Participated in 'Pedagogic and Personal Effectiveness Workshop' conducted by Department of Medical Education, KMC, Manipal.

28. July 2011: Participated in a workshop on 'Situational Review Report Writing' under the National Initiative for Allied Health Services (NIAHS) in partnership with Public Health Foundation of India (PHFI) at SOAHS, Manipal.
29. Attended three day workshop on radiation safety by Thyrocare limited held on 28-30 October 2011 at thyrocare limited in Navi-mumbai.
30. Attended the workshop by ICNM held on 28 August 2009 at PGIMER, Chandigarh.
31. Attended the Conference on 'Update on PET/CT- Applications in Current Medical Diagnosis' held on 29-30 August 2009 at PGIMER, Chandigarh.
32. Attended the XXX Annual Conference of IABMS (Indian Association of Bio-Medical Scientists) held on 18-20 November 2009 at DIHAR (DRDO), Chandigarh.
33. Attended the preconference workshop on 'Recent developments in Nuclear Medicine' held on 18 November 2009 at DIHAR (DRDO), Chandigarh.
34. Attended the 42nd Annual Conference of Society Nuclear Medicine (India) held on 11-14 November 2010 at PGIMER Chandigarh, India.
35. Attended the two day workshop on Radiation Safety in Nuclear Medicine organized at Institute of Nuclear Medicine DRDO, New Delhi.
36. Attended the International symposium on advanced diagnostics in medical physics and PET/CT medical cyclotron, organized jointly by the American Associations of Medical Physicist and All India Institute of Medical Sciences in New Delhi.
37. Participated in the 13th Annual Conference of Southern Chapter, Society of Nuclear Medicine, India.

Renal replacement therapy and Dialysis technology department:

1. Participated in the peritoneal dialysis work shop on 31st March 2013.
2. Attended CME on "Renal replacement therapy in acute kidney injury" on 15th March 2014.
3. Attended National expert Taskforce Meet 2014. Conducted by Ministry of health and family welfare Government of India & NIAHS on 4th & 5th September 2014.
4. Attended Manipal Cordiology Update 2014 conference on 1st November 2014.
5. Attended workshop on "How to published?" by Health Sciences Library and department of Library and Information Science, KMC, Mu, Manipal on 10th December 2014

Medical Imaging Technology

2013

1. Rahul P Kotian attended Pedagogic and Personal Effectiveness for Teachers
2. Winniecia Dkhar attended Pedagogic and Personal Effectiveness for Teachers

Exercise and Sports Sciences

1. Mr Prabu attended the workshop on 'Pedagogic and Personal Effectiveness' conducted by Manipal Centre for Professional development held from 24-28th July 2012
2. Mr Prabu Completed certification course on Biostatistics, epidemiology an research methodology conducted by the department of Biostatistics, Manipal University held from February to June 2015
3. Mr Prabu attended the international symposium on Physical activity and health promotion during life course conducted by University of Jyvaskyla from Jan 21st – 23rd 2013
4. Mr Prabu attended the international symposium on Physical fitness and training adaptations: Scientific basis in practical applications in sport, conducted by University of Jyvaskyla from Nov 21st – 23rd 2012
5. Mr Prabu attended the international congress on enhancement of physical activity and motor skills conducted by University of Jyvaskyla from Nov 1st – 3rd 2012

6. Mr Prabu attended the national workshop on getting started with MATLAB and SIMULINK conducted by department of mathematics, Manipal University from 12-14th July 2012
7. Dr Fiddy and Mr Prabu attended the International workshop on Epidemiology and biostatistics organized by Ohio state University and Department of Public health from 16th – 20th December 2011
8. Dr Fiddy attended the workshop on counselling skills for teachers conducted by Department of Student Affairs, Manipal University from 19-20th February 2014

b) Non-teaching staff:

Year 2010

Mr B Ramakrishna Nayak and Ms Prameela V K attended the training programme on quality initiatives conducted by Manipal University on 18-19 June 2010.

Year 2011 (01 Numbers)

Ms. Yogitha participated Personality development Program “Transmind “Treasure yourself on 12th September, 2011 at Manipal.

31. Code of ethics for research followed by the departments

All doctoral protocols and thesis works are presented to the Institutional Research Cell (IRC) and with suggested modification/correction the candidate would appear for ethical clearance of Manipal University. Post graduate research works are presented to IRC and those requiring ethical clearance are further referred to the Ethics Committee approval. The IRC is also aimed at facilitating more publications and patent filing through appropriate training program. To distribute information regarding available grants/fellowships. Schedule meetings for all conference presentation requiring institutional funding for attending and to approve based on appropriate guidelines. To conduct workshop and CME to increase the research potential of the institution.

32. Student profile course-wise (2013-2014) admission

CourseName of the course	Applications Received	Admitted	
		Female	Male
B P T	1,100	30	06
BPT Bridge Programme		12	04
B A S L P		18	03
B O T		11	04
BOT Lateral		02	-
Bachelor of Clinical Optometry		13	07
BSc C V T		14	06
BSc M I T		07	04
BSc N M T		03	06
BSc M L T		06	04
BSc MRT		02	06
BSc R T		20	10
BSc Perfusion Technology		04	06
BSc RRT and DT		07	07
BSc HIA		06	01
Lateral BSc MLT		01	01

MOT		07	02
MSc MLT		05	04
Moptom		03	03
MSc MRP		04	01
MSc HHIA		01	01
Masters in Respiratory Therapy		01	0
MASLP		17	03
MSc MIT		06	06
MSc NMT		0	03
MSc NMT Lateral		-	01
MPT and		15	04
MPT Sports and Biomechanics		-	-
MSc Echocardiography (M.Sc.CVT)		02	01
MSc RRT and DT		0	0
MPhil Clinical Psychology		11	0

33. Diversity of students

Gender-wise list of UG Students

Gender	Number of students
Male	182
Female	437
Total	619

Gender-wise list of PG Students

Gender	Number of students
Female	140
Male	44
Total	184

Gender-wise list of Super specialty (MPhil Clinical Psychology) students

Gender	Number of students
Female	17
Male	2
Total	19

State-wise list of UG students

Sl. No.	Name of the state	Number of students
01	Karnataka	157
02	Uttar Pradesh	08
03	Maharashtra	57
04	Tamil Nadu	15
05	Kerala	207

06	Himachal Pradesh	02
07	Uttarkhand	0
08	Jharkand	04
09	Bihar	09
10	Sikkim	05
11	Delhi	04
12	Andhra Pradesh	09
13	Gujarat	07
14	Meghalaya	09
15	Rajasthan	06
16	Haryana	0
17	Punjab	03
18	Chatisgarh	01
19	West Bengal	05
20	Madhya Pradesh	04
21	Assam	02
22	Goa	11
23	Jammu and Kashmir	02
24	Orissa	03
25	Mizoram	03
26	Uttaranchal	0
27	Dadra & Nagar Haveli	01
	Grand total	534

State-wise list of PG students

Sl.No.	NAME OF THE STATE	NUMBER OF STUDENTS
01	Kerala	51
02	Bihar	01
03	Andhra Pradesh	05
04	Karnataka	41
05	Delhi	02
06	Tamil Nadu	12
07	Gujarat	06
08	Orissa	04
09	Uttar Pradesh	04

10	West Bengal	02
11	Jammu and Kashmir	01
12	Uttarkhand	01
13	Maharashtra	26
14	Chattisgarh	02
15	Assam	03
16	Jharkhand	0
17	Madhya Pradesh	02
18	Goa	03
19	Mizoram	01
20	Himachal Pradesh	02
21	Manipur	01
22	Sikkim	03
23	Meghalaya	04
	Total	177

Nationality-wise list of UG students

Sl.No.	Nationality	Number of students
01	India	534
02	Kuwait	01
03	Oman	13
05	Kenya	07
04	Nepal	02
05	Saudi Arabia	0
06	Nigeria	04
07	Thailand	--
08	Tanzania	08
09	Canada	03
10	UAE	-
11	Iran	07
12	South Africa	01
13	Mauritius	03
14	Yemen	0
15	Malaysia	18
16	Bahrain	-
17	Seychelles	01
	NRI	

18	Kerala	05
19	Goa	01
20	Gujarat	06
21	Maharashtra	02
	Chatisgarh	01
	Andra Pradesh	01
	Karnataka	01
22	Total	619

Nationality-wise list of PG students

Sl.No.	Nationality	Number of students
01	Indian	177
02	Afghanistan	01
03	Malaysia	02
04	UAE	--
05	Nepal	02
	NRI	
	Andhra Pradesh	01
	Goa	01
	Total	184

State-wise list of super specialty students

Sl. No.	Name of the State	Number of Students
01	Kerala	7
02	Maharashtra	2
03	Madhya Pradesh	1
04	Uttar Pradesh	1
05	Andhra Pradesh	1
06	Karnataka	4
07	Delhi	2
09	Total	18

Nationality-wise list of Super specialty students

Sl.No.	Nationality	Number of students
	NRI	
01	Kerala	01

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

NET: 6 Students
 JRF: 2 Students
 Defence Service: 1

35. Student progression

Student progression	Percentage (%) against enrolled
UG to PG	29
PG to MPhil	-
PG to PhD	-
PhD to Post-Doctoral	-
Employed <ul style="list-style-type: none"> • Campus selection • Other than campus recruitment 	100
Entrepreneurs	Nil

36. Diversity of staff

Percentage (%) of faculty who are graduates	
of the same University	69
from other universities within the State	12
from universities belonging to other States	19
from universities outside the country	0

37. Number of faculty members who were awarded PhD, DSc and DLitt during the assessment period

- **PhD – 30 (2003 – 2013)**
- **2014: 06**

38. Present details of infrastructural facilities with regard to

- a) Library - Department library facility and access to central library
- b) Internet facilities for staff and students - yes both LAN and wifi connectivity
- c) Total number of class rooms - 15
- d) Class rooms with ICT facility - 08
- e) Students' laboratories – All Departments
- f) Research laboratories -02

39. List of Doctoral, Post-Doctoral students and Research Associates

a) from the host University

List of Doctoral students and Research Associates

Regd.	Title	Investigator	Guide	Awarded /
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				ongoing (Manipal University)
2004	Acoustic analysis of Telugu vowels	Mr Krishna Y	Dr B Rajashekar	Awarded
2005	Tulu syntax screening test	Venkatarama Aithal U	Dr Vaidyanathan, Dr B Rajashekar	Awarded
2005	Quality of life in adult and elderly with cochlear implant	Ms G Kanaka	Dr B Rajashekar	Awarded
2005	Development of Communicative Gestures and Speech in children during 8-18 months	Ms Veena KD	Dr B Rajashekar	Awarded
2006	Prevalence and nature of voice problems in call center operators	Ms Usha Devadas	Dr B Rajashekar	Awarded
2012	Design and Development of Customized Decision Support System in Oncology	Mr. Rajesh Kumar Sinha	Dr. M S Vidyasagar Dr. M Manohara Pai	Awarded
2007	An appraisal of lexical retrieval skills in subjects with right hemisphere damage	Mr Gopee Krishnan	Dr Prathibha Karanth Dr B Rajashekar	Awarded
2008	Acceptability of community based health insurance schemes in Karnataka	Dr B Reshmi	Dr. N Sreekumaran Nair	Awarded
2009	Developmental changes in verbal fluency output of Malayalam speaking children	Ms Sunila John	Dr B Rajashekar	Awarded
2009	Effect of Low Level Helium Neon (He-Ne) Laser Therapy in the prevention and treatment of radiation/chemoradiotherapy induced oral mucositis in head and neck cancer patients- A Randomised Controlled Trail	Mr. Ajay Prasad Gautam	Dr. G Arun Maiya	Completed
2010	Effects of aerobic exercise training on Diabetic peripheral neuropathy – A Randomised controlled trial”	Mr. Snehil Dixit	Dr. G Arun Maiya	Completed
2010	An investigation into the morphosyntactic deficits in kannada- English bilingual children with specific language impairment	Ms Shivani Tiwari	Dr Prathibha Karanth Dr B Rajashekar	Awarded
2011	Effect of Sensorineural Hearing Loss on Speech	Mr Hari Prakash	Dr B Rajashekar	Ongoing

	Evoked Cortical Auditory Potentials			
2011	Comparison of electrophysiological measures of brainstem timing changes in young, middle aged and older adults	Mr Ayas Mohammed	Dr B Rajashekar	Ongoing
2011	Effectiveness of a Health Information Management Module for strengthening the Health Information Practices among Primary Level Health Care Personnel	Ms Dola Saha	Dr B Unnikrishnan	Ongoing
2013	Comparison of temporal processing speech perception and quality of life through multi channel and channel free hearing aid in hearing impaired	Mr. Kishan	Dr. B Rajashekar	Ongoing
2013	Efficacy of novel structured aural rehabilitation modeule in Kannada for adults with hearing impairment	Ms. Archana	Dr. Y Krishna, Dr. B. Rajashekar	Ongoing
2013	Development of a protocol for screening visual impairment in children aged 3 to 6 years	Ms. Jyothi Thomas	Dr. Parikshith Gogate Dr. B Rajashekhar	Ongoing
2014	Aerodynamic and perceptual measures in non indwelling and indwelling tracheo-esophageal prosthetic voice	Ms. Sheela	Dr. U V Aithal, Dr. B. Rajashekar	Ongoing

Research Associates: AS ON 2012

#	Title	Principal Investigator(s)	Co-investigators	Research staff	Funding agency
1.	The Central Alexias and Agraphias in Semi-syllabic orthography	Dr Gopee Krishnan	Ms Shivani Tiwari Dr B Rajashekar Dr Shyamala KC	Mr Kiran S Ms Manita T Ms Prakrithi	Department of Science and Technology, Government of India
2.	Reading-related eye movements in semi-syllabic and alphabetic orthographies	Dr Gopee Krishnan	Ms Shivani Tiwari Dr B Rajashekar Dr Shyamala KC	Ms Priya	Department of Science and Technology, Government of India
3.	Unravelling the overlapping features of Autism spectrum	Ms Shivani Tiwari and Dr Prathibha	Dr Gopee Krishnan Dr B	To be appointed	Indian Council of Medical

	Disorders and Specific Language Impairment	Karanth	Rajashekar		Research, Government of India
4.	Development and standarisation of phonological process analysis test in Tulu	Dr. Veena KD	Dr. Sunila John Dr. Venkataraja Aithal U Dr. B. Rajashekhar	Prajna	Indian Council of Social Science Research
	Metabolic equivalence of common physical activities in rural Udupi Taluk	Dr. Arun G Maiya	Dr. Sundar Kumar	Mrs. Radhika Jadav	ICMR
	Prevalence and physiotherapy intervention for pelvic floor dysfunction in women of Udupi Taluk	Dr. Bhamini K Rao	Mrs. Shubha R Nayak Dr. Pratap Kumar Dr. Veena Kamath Dr. Asha Kamath	Mrs. Sahana Suraj	ICMR
	Design and development of a pain relieving instrument,	Dr. Arun G Maiya		Mr. Stephen Samel Babu	Department of Science & technology, Govt of India

b) From other universities

Nil

40. Number of postgraduate students getting financial assistance from the University.

11

41. Was any assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

Yes. To offer the Postgraduate programmes, the Graduate Alumni feedback was taken and based on the feedback new programme has been initiated.

42. Does the department obtain feedback from –

Yes. Once in six months.

a. Faculty members on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

Yes. The department obtains feedback from the faculty members and the visiting faculty members and other experts invited for seminars, workshops and guest lectures. Based on the feedback changes are made in curriculum and teaching-learning-evaluation.

b. Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Feedback is taken from students semester-wise and year-wise and by considering

their suggestions necessary modification are done in curriculum and teaching learning evaluation. Respective heads of the department discuss the student's feedback with concerned faculty and necessary changes are made if required.

c. Alumni and employers on the programmes offered and how does the department utilizes the feedback?

Feedback is taken from Alumni, employers and the members of Boards of Studies. They express their views on the programme offered. The suggestions given by them are taken into consideration when modifying the programme as per industry need.

43. List the distinguished alumni of the department (maximum 10)

1. Nimma Purna Chander Reddy- (MSc MIT), Clinical S.M.E (Subject Matter Expert), Siemens Research Suite, Apollo health street, Hyderabad.
2. Mr. Nagendra Upadhyaya, Team Leader, Accenture, Bangalore
3. Ms. Avishikta Sarkar, Business Analyst - Healthcare Application Management at DELL
4. Sanjivan Gautam :Researcher, National Cancer Institute (NCI) National Institutes of Health (NIH) US Department of Health and Human Services Bethesda, USA
5. Kiran Cahllagundla : Indian Badminton team, IPL, ICL
6. S.N Badrinath: Indian Hockey Team
7. Richa Agnihotri, Coviden PVT LTD

Dept of Speech and Hearing

1. Archana Rao, Speech Language Pathologist, Lawrenceville, NJ, USA
2. Venkataraja Aithal U., Professor and Head, Dept of Speech and Hearing, SOAHS
3. Anusha Ayyar, Octave, Speech and Hearing Center, Bangalore
4. Akhilesh P.M. - Principal, Father Muller College of Speech and Hearing.
5. Anupriya - Head Audiological Services at Starkey Labs India Pvt Ltd
6. Elizabeth Rachel Oommen, Assistant Professor Speech-Language Pathology and Audiology Calvin College, Michigan
7. Dr. Imran Dhamani - - Senior Audiologist at Australian Hearing, Rockhampton Area, Australia
8. Dr. Saloni Krishnan, Post Doctoral Research Associate, Birkbeck, University of London
9. Rashida Hassuji, HearWell Audiology Clinic, Tanzania
10. Ms. Namita Gehani, Clinical Audiologist at Associates in Hearing Healthcare, NJ, USA

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

Sl. No	Department	Name of the Program	Experts Details
1	Health Information Management	Continuing Health Information Education Program	<ul style="list-style-type: none"> • Dr. G D Mogli, CEO & MD, Dr., Mogli Healthcare Consultancy, Hyderabad. • Dr. S N Sarbadhikari, Project Director at Centre for Health Informatics for National Health Portal • Dr. Dhaval • Ms. Seeme Kurian,

			<p>Administration Manager at Fathima Healthcare Group, UAE.</p> <ul style="list-style-type: none"> • Dr. Krishna Kothai, Research Director, Azeem Premji University, Bangalore • Dr. Nagraj, Professor & Head, Department of Community Medicine, Kamineni Medical College, Hyderabad. • Dr. Seena Biju, Asst. Prof. TAPMI, ManipalSix Sigma in Healthcare • Mr. Anil Paul Jacob, Sr Manager – Marketing “ issues and challenges in hospital marketing-lessons from KH, Manipal • Mr. Jibu Thomas, Operations Manager, KH, Manipal “ Hospital Operations, - challenges experienced – based lessons • ICD 10-2014, on 25th October, 2014
2	MLT	Explore , the annual CME on Clinical laboratory Science – an update	Experts from Becton Dickinson India Pvt Ltd., Coulter Diagnostics pvt Ltd
3	Optometry	Special lecture	Prasad Sawant Yeshwant Saoji Dr.PremNandhini Dr. Shrikant Bharadwaj Dr.L S Varadarajan
4	Physiotherapy	❖ Workshop on Exercise Testing and Prescription 2012	
		❖ Colloquium - 2013	
		❖ Manual Therapy	Deepak Kumar, KiranCahllagundla
		❖ NDT	Raj Kumar, Sri Ram Bhat
		❖ Sports	KannanPughazhandi
5	Respiratory therapy	<ul style="list-style-type: none"> • 17th Annual Congress of the Indian Society of Critical Care Medicine & International Critical Care Congress (Criticare 2011)” at Delhi 	
		18th Annual Congress of the Indian Society of Critical Care Medicine & International Critical Care Congress (Criticare 2012)” at Pune	

		19th Annual Congress of the Indian Society of Critical Care Medicine & International Critical Care Congress (Criticare 2013)” at Kolkata	
6	Speech and Hearing	Aphentia 2013 – A Seminar on Comprehensive Assessment of Aphasia and Dementia, 2013	Dr. Aparna Pai, Associate Prof, Dept of Neurology, KMC Dr. Thomas Bak, Professor, University of Edinburgh Dr. Suvarna Alladi, Asso. Prof, NIMS, Hyderabad Mr. Sunil Kumar, Research Fellow, AIISH, Myore
		Behavior Modification in Autism, 2013	Dr. Rita Vats, Director, Wellbeing Research & Rehabilitation Centre, Delhi
		Orientation program on VAGHMI and SSL, 2012	Dr. Anantha Padmanabha, Bangalore
		LARYCARE-2 International workshop on voice rehabilitation after Laryngectomy, 2012	Dr. Eric Blom, Center for Ear, Nose & Throat & Allergy, Indianapolis Dr. Gurmit B – Tata Memorial Center, Mumbai
		Update on audiological practices, 2012	Dr. Shiv Shankar, Prof, Dept of Speech Pathology and Audiology, NIMHANS, Bangalore
		Online lecture on Technological Advances in the Management of Dysphagia, 2011	Dr. Shirir Yarkony DMD, Elixir Research, Medical Director
		Short term workshop on MATLAB application for speech & hearing, 2011	Dr Sandeep Pathak, Military Hospital, Washington DC, USA
		Challenges of Audiology and speech language services in India - An Interactive Session, 2011	Dr. Rathna, Former Director, AIISH, Mysore & AYJNIHH, Mumbai
		APD – Recent developments, 2010	Vishweshwara Bhat, USA
		HearLab, 2010	Shridhar Krishna Murthy
		Communication disorders in Cleft lip & Palate: Assessment & Management, 2010	B. Subramaniam & Chithra R, SRMC, Chennai
		Research designs and Evidence based practice in speech language pathology, 2010	Dr MN Hegde, Prof of Speech-Language Pathology, Dept of Communicative Disorders, California State University, Fresno
		Signal processing & speech perception, 2010	Dr Sandeep Pathak, Military Hospital, Washington DC, USA
		Cochlea beyond 2010, 2010	Mr. Apoorv, Cochlear, India
		Evidence Based Practice	Dr MN Hegde, Prof of Speech-

		And Trends in Management of Communication Disorders, 2009	Language Pathology, Dept of Communicative Disorders, California State University, Fresno
		Balance Disorders – New Techniques of Diagnosis, 2009	Ms. Michelle Petrak
		Dysphagia & Its Management, 2009	Elizabeth Rachel Oommen, Ohio University
		Dysphagia – Evaluation & Intervention, 2008	Veena Mohan, CCC-SLP, USA
7	Occupational Therapy	<ul style="list-style-type: none"> • Seminar on Resume Writing for Allied Health Professional for American companies” 	Expert from RCM healthcare Services, USA delivered Lecturer
		Interaction with Post graduate and Inters of Department of occupational therapy	Dr. Brenton Kortman, Flinders University, Australia
8	Clinical Psychology	Guest Lecture -2008	Dr.Sam Manickam, Professor of Clinical Psychology, Department of Psychiatry, JSS Medical College, Mysore delivered a talk on “An Introduction to Gestalt Therapy” and interacted with the faculty members and trainees, on December 22, 08.
		Guest Lecture -2009	Dr. Keshav, Asst. Professor, NIMHANS, Bangalore gave a series of guest lecture on Nueropsychology, from 27th June to 29th June, 2009.
		Guest Lecture -2010	<ul style="list-style-type: none"> • Guest Lecture by Prof Dr. Rahmattullah Khan Bin, Professor of Psychology, University of Pendidikan Sulthan Idris, Malasia. • Guest Lecture on ‘Issues and Problems of Private Practice’ by Dr. E D Joseph, Clinical Psychologist, Kerala
		Guest Lecture 2011	Dr. Jamuna Rajeswaran, (Associate Professor, Department of Clinical Psychology, NIMHANS) delivered a Guest Lecture on “Neuropsychological assessment and issues related to Disability Assessment” on 2nd December, 2011”.
		Workshop & Guest	Neurofeedback Workshop on

		Lecture -2012	December 2012 Dr.Promodu , Guest Lecture on Sex therapy
		Lecture -2013	Lecture by Dr.Maju Mathew Koola, faculty Sheppard Pratt health systems, Baltimore USA on Academic Carrier: publish or perish on 15th July 2013 at 12.00 clock
	Renal Replacement Therapy and Dialysis Technology	Lecture--2013	Lecture by Dr.Thiagarajan Thandavan SRM Medical college and hospital, SRM University Chennai

45. List the teaching methods adopted by the faculty members for different programmes.

- Like using Audiovisual Unit, various teaching learning methods: assignments, quiz, presentations, clinical examinations are utilized as applicable.
- Attending Pedagogy workshop: Faculty of SOAHS attend the pedagogy training workshop conducted by Manipal Center for Personal and Professional Development for upgrading their teaching skills.

46. How does the Department ensure that programme objectives are constantly met and learning outcomes are monitored?

- Periodic audit as per IMS audit
- Regular BoS meet once in six months

47. Highlight the participation of students and faculty members in extension activities.

Sl. No	Department	Name of the Program	Details
1	All Dept.of SOAHS	Voluntary student organisations	Few students from various departments of SOAHS participate in VSO programs.
2	Clinical Psychology	Yearly Medical Camp	Medical Camp in Brahmavar -1 Faculty & 2 students
			Medical camps in Emmadi, Gaidimani,Muthoor, Maadari, Thalloor,Muduru
			Asha Nilaya Medical Camp
		Medical Camp organized by Sarva Shikshana Abhiyana, Department of Public Instruction, Udupi District in association with Kasturba Hospital Manipal from 10th June to 14th June 2013 – 5 Faculty members & 7 M.Phil trainees attended	
		Weekly Students Counselling	Weekly Program – Student Counseling
		School mental	in Govt Higher secondary School, Bailur &

		health program	Govt middle school Jarkala
3	Medical Lab Technology	Blood donation camps	VSO Activities Interns, BSc MLT and DMLT students attend Blood Donation camps organized by Blood Bank, Kasturba Hospital manipal at various places in and around Manipal and Udupi.
4	Optometry	School Screening Program: VARES Study	A cross-sectional study across eleven schools from both urban and rural parts of Udupi taluk was conducted to report the magnitude of visual impairment among the school children. Totally 1784 school children between the age group of 5-15 years participated in the study.
		Monthly organized Eye camps organized by O.E.U Institute of Ophthalmology, Kasturba Hospital, Manipal at various places around Udupi-Manipal	Community Eye screening camps
		Medical camp with Social welfare committee, KMC at Mahalasa Exports for cashew factory workers	Eye screening camp-vision, refraction and community eye screening
5	Optometry	Royal embassy site; Manipal	Eye screening camp
		Free Medical Check up	CSI Boys Boarding Home, Mission Coumpound Udupi
		Social welfare committee of Manipal University	Bijapuri Slum Area
6	Physiotherapy	School health programme	15 schools have been visited in and around Udupi by CBR team.
		Monthly/ Yearly Physiotherapy Screening Camp	Stroke Camp, Diabetes Camp, School Camp and Field Visit
		Awareness and screening camp for women.	women's health awareness and screening camp, school health education camp for teachers
5	Respiratory therapy	Sleep study camp 2012	Manipal
		PFT camps	Udyavara

			Malpe
6	Speech and Hearing	Yearly Sarva Shiksha Abhiyan Camp	Nearby Taluks
		Yearly Hearing screening program	NGO's and Schools
		Yearly Camp for Red Cross Society and District Health Office	Udupi
7	Exercise and Sports Sciences	Federation cup athletics (1-4 th May 2015)	Faculty students served as volunteers for the the National Anti Doping Agency

48. Give details of 'beyond syllabus scholarly activities' of the Department.

Nil

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

- The Rehabilitation Council of India has awarded 'excellent' grading to the Department of Speech and Hearing and the SOAHS for its training programme and contribution to the welfare of the hearing impaired.
- Nuclear Medicine - Atomic Energy Regulatory Body
- Occupational Therapy - All India Occupational Therapists Association
- Physiotherapy - Indian Association of Physiotherapists (IAP), Life Member of WCPT
- Respiratory Therapy - Indian Association of Respiratory care.
- ISO 14001-2004+ Cor. 1:2009 Certified
- ISO 9001:2008 Certified
- Ranked number three amongst All Allied Health Colleges in India - Source The Week
- Department of Optometry - Member of Association for Schools and Colleges of Optometry, Associate member of World Council of Optometry.
- MSc exercise and sports sciences is affiliated to the European College of Sports Sciences

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

- Department were strengthened with highly competent and dedicated faculty members thereby promoting the training and research facility at the Department. Patentable product development and continued emphasis on publishing all good quality research work from faculty members and students is promoted.

51. Future plans of the Department.

- Start collaborative research with other institution of MU and foreign University.
- Start short term/certificate programmes by all departments of SOAHS.
- Start interdisciplinary programmes with support of other constituent colleges of Manipal University.
- Initiate new collaborations, especially to establish Allied Health Sciences programme in partnership with foreign universities.
- Attract/invite more international firms/organizations to the college for facilitating student's international project and placements.

- Establish consultancy services by SOAHS in the Allied Health domain.

52. Detail any five strengths, weaknesses, opportunities and challenges (SWOC) of the department.

Strengths

- The first full pledged institution in the country for Allied Health Education.
- Highly dedicated and qualified faculty members (> 30 per cent completed PhD and 60 per cent registered their PhD).
- The Institution is attached with modern equipment, infrastructure and multispecialty hospital.
- Various community outreach programmes for quality training of both UG and PG.

Threats

- Competition from other Allied Health Institutions.
- Lack of clinical facility provided solely by Allied Health Specialty.
- Difficulty in obtaining extramural research grant from national and international body for Allied Health research work.

Opportunities

- Strengthening the international Collaboration and Collaboration with both Government and other organizations.
- Capacity building - Modernizing the existing facilities for effective training and research at both Undergraduate and Postgraduate level.
- To strengthen the institution as one of the best training colleges in the country.

Challenges:

- To sustain the quality of training.
- As attrition rate of faculty is very high to retain the competent faculty members.

School of Life Sciences (SOLS) Manipal

1. Name of the Department: Division of Biotechnology

2. Year of establishment: 2003

3. Is the Department part of a school/faculty of the university?

Yes, part of the School of Life Sciences (SOLS), KMC Manipal

4. Names of programmes / courses offered (UG, PG, MPhil, PhD, Integrated Masters, Integrated PhD, etc.)

- BSc Biotechnology
- MSc Medical Biotechnology
- MSc Molecular Biology and Human Genetics
- MSc Bioinformatics
- PG Diploma in Cellular and Molecular Diagnostics
- Certificate Course in Bioinformatics
- PhD

5. Interdisciplinary courses and departments involved

Name of Course	Departments involved
BSc Biotechnology	KMC, MIT, MCOPS, Biostatistics, Computer and Information Sciences
MSc Medical Biotechnology	MCOPS, Biostatistics
MSc Molecular Biology and Human Genetics	KMC, Biostatistics
MSc Bioinformatics	Biostatistics, Computer and Information Sciences
Certificate Course in Bioinformatics	Computer and Information Sciences
PhD	KMC, MCOPS, Biostatistics

MSc Nursing	Faculty members, SOLS
MSc Medical Laboratory Technology(MLT)	
MSc Biochemistry	
MD (Pathology)	
BSc Nursing	
MBBS	
BDS	

6. Courses in collaboration with other universities, industries, foreign institutions, etc.

MSc Medical Biotechnology, MSc Molecular Biology and Human Genetics and MSc Bioinformatics students have an option to undergo training and research work under Erasmus Mundus program of the European Union at Joseph Fourier University (France), University of Barcelona (Spain) and University of Turin (Italy).

MSc Bioinformatics course has an option of training and research work at the Maastricht University, the Netherlands.

MSc Medical Biotechnology and MSc Molecular Biology and Human Genetics students have an option to do training at Queensland University of Technology (Brisbane) and Flinders University (Adelaide), Australia

MSc Medical Biotechnology and MSc Molecular Biology and Human Genetics students have an option to study at Lancaster University, UK

BSc Biotechnology course has an option of training at Flinders University, Adelaide, Australia

BSc Biotechnology course has an option of training at University Medical College, Utrecht, the Netherlands

BSc Biotechnology course has an option of training at Lancaster University, Lancaster, UK

7. Details of programmes / courses discontinued, if any, with reasons - None

8. Annual/ Semester/Choice Based Credit System

BSc Biotechnology, MSc Bioinformatics, MSc Medical Biotechnology, MSc Molecular Biology and Human Genetics, PG Diploma in Cellular and Molecular Diagnostics – Semester System

9. Participation of the department in the courses offered by other departments

1. Genetics classes for BSc Nursing, BDS, MBBS at constituent institutions of Manipal University
2. Radiation Biology classes for BSc Medical Radiation Technology, MSc Medical Radiation Physics at constituent institutions of Manipal University
3. Molecular Biology classes for MSc MLT programme and MSc Biochemistry programme at constituent institutions of Manipal University
4. Molecular Biology practical training to MD (Pathology) students of constituent institutions of Manipal University.

10. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Assistant Professors)

Designation	Sanctioned	Filled
Professor	4	4
Associate Professors	5	5
Assistant Professors	9	9
Lecturer	3	3

11. Faculty profile with name, qualification, designation and specialisation (DSc/DLitt/ PhD/MPhil, etc.)

#	Name	Qualification	Designation	Specialization	Number of Years of Experience	No. of PhD students guided for the last four years
1	K Satyamoorthy	PhD	Professor, Director and Head	Biochemistry, Cancer Biology	14	6
2	PM Gopinath	PhD	Professor, Senior Scientist	Human Genetics	13	1
3	Gopalakrishna Bhat	PhD	Professor	Biochemistry	28	0
4	Padmalatha S Rai	PhD	Professor	Plant Biology, Pharmaco-genomics	13	3
5	KP Guruprasad	PhD	Assoc. Prof.	Cell Biology, Ageing Research	11	2
6	Saadi Abdul Vahab	PhD	Assoc. Prof.	Molecular Biology, Cancer Research	09	2
7	Moka Rajasekhar	PhD	Assoc. Prof.	Human Cytogenetics	10	2
8	A Muthusamy	PhD	Assoc. Prof.	Plant Biology, Plant Tissue Culture	09	3
9	Herman Sunilkumar	PhD	Assoc. Prof.	Biochemistry, Lead Toxicology	09	1
10	Murali TS	PhD	Asst. Prof.	Mycology, Microbiology	07	3
11	Vasudevan TG	PhD	Asst. Prof.	Microbiology, Industrial Biotechnology	07	0
12	Roopa Nayak	PhD	Asst. Prof.	Chemistry	07	0
13	Vidhu Sankar Babu	PhD	Asst. Prof.	Plant Tissue Culture	07	2
14	KS Babitha	PhD	Asst. Prof.	Chemistry	06	0
15	Shama Prasada K	PhD	Asst. Prof.	Cancer Epigenetics	06	0
16	Manjunath B Joshi	PhD	Asst. Prof.	Cell Signalling	04	3
17	Bobby Paul	PhD	Asst. Prof.	Bioinformatics	04	0
18	Sanjiban Chakrabarty	PhD	Asst. Prof.	Biotechnology	01	0
19	Bharath Prasad AS	MSc	Lecturer	Microbiology, Animal Tissue Culture	07	0
20	Manoj Bhat	MSc	Lecturer	Bioinformatics	06	0
21	Sandeep Mallya	MSc	Lecturer	Bioinformatics	01	0

12. List of senior Visiting Fellows, faculty, adjunct faculty, emeritus professors

Name	Location
Dr K Thangaraj	Centre for Cellular and Molecular Biology, Hyderabad
Dr SP Thyagarajan	Sri Ramachandra University, Chennai
Dr K Dharmalingam	Madurai Kamaraj University, Madurai

Dr RNK Bamezai	Jawaharlal Nehru University, New Delhi
Dr Keshav K Singh	Roswell Park Cancer Institute, New York
Dr Ross T Barnard	Queensland University, Australia
Dr Angela Brand	Maastricht University, the Netherlands
Dr Arun Balakrishnan	Piramal Life Sciences, Mumbai
Dr KH Sreedhara Swamy	Ambar Lok Rachana CHS Ltd., Mumbai
Dr Daniel B Oerther	Missouri University of Science and Technology, Rolla
Dr Randeep Singh	Philips, Bangalore
Dr. Raviraja N. Seetharam	Stempeutics Research Pvt. Ltd, Manipal

13. Percentage of classes taken by temporary faculty – programme-wise information

None

14. Programme-wise Student Teacher Ratio

BSc Biotechnology	– 4:1
MSc Medical Biotechnology	– 1:1
MSc Molecular Biology and Human Genetics	– 1:1
MSc Bioinformatics	– 1:1.5

15. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Details	Sanctioned	Filled
Technical Staff	25	25
Administrative Staff	9	9

16. Research thrust areas recognized by funding agencies

Pharmacogenomics, Translational Research, Biodosimetry

17. Number of faculty with on-going projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies and grants received project-wise.

No. of faculty with on-going projects – 4

#	PI	Year	Name of the project	Name of the funding agency (all National)	Total grant received (sanctioned) (in rupees)
1	Dr. K Satyamoorthy	2012	Deregulation of miRNAs in cervical Cancer: control by DNA Methylation and copy Number Variations	DBT	54,73,600 (77,35,000)

2	Dr. K Satyamoorthy	2012	Epigenetic status of pro/anti apoptotic activity of age-related genes involved in breast cancer	DBT	25,91,000 (28,50,000)
3	Dr. K Satyamoorthy	2012	Design and expression of humanized antibodies against soluble Interleukin-6R, soluble gp130 in Bacterial and Animal Cell lines	DBT	69,55,000 (147,40,000)
4	Dr. K Satyamoorthy	2012	Population Based Human Genetic Variations and Impact on Radiation Effect	DST (Indo-Japan)	2,70,000 (3,50,000)
5	Dr. K Satyamoorthy	2012	Development of probes based on a human BAC library for the diagnosis of disease for use in situ hybridization in microarray	DBT	9,48,000 (29,00,000)
6	Dr. K Satyamoorthy	2013	DST-FIST Program	DST	50,77,877 (56,00,000)
7	Dr. KP Guruprasad	2013	Multidisciplinary approach to understand ageing process in relation to DNA repair	VGST	20,00,000 (60,00,000)
8	Dr. K Satyamoorthy	2014	Functional and Structural Characterization of Snake Venom Proteins from Bothrops atrox with Angiogenic Potential	DBT	7,61,200 (33,21,000)
9	Dr Vidhu Sankar Babu	2012	Identification, molecular characterization of <i>Dendrobium</i> species of Western Ghats, their conservation for 'Moscatilin' screening and bioproduction through in vitro strategies	SERB	18,50,000 (21,80,000)
10	Dr. Padmalatha Rai	2014	Epigenetic factors influencing bipolar disorders and therapeutic response to mood stabilizing drugs	ICMR	(39,78,600)
11	Dr. K Satyamoorthy	2012	Development of pharmacogenomics SNP database for critical candidate genes involved in drug response to schizophrenia	ICMR	5,36,800 (5,36,000)
12	Dr. S Padmalatha Rai	2012	Development of reverse dot blot array for screening of single nucleotide polymorphisms and allele specific expression analysis in folate metabolism pathway genes	ICMR	2,75,600 (2,76,000)

13	Dr. S Padmalatha Rai	2014	Pharmacogenomic variations of genes involved in type2 diabetes and their therapeutic response to oral hypoglycemic drugs	ICMR	5,11,866 (5,12,000)
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18. Inter-institutional collaborative projects and grants received

a) All India collaboration b) International

#	PI	Name of the project	Name of the institution involved (All-India)
1	Dr K Satyamoorthy	Molecular and histological analysis of neurological disorders associated with mitochondrial mutations	Centre for Cellular and Molecular Biology, Hyderabad
2	Dr K Satyamoorthy	CORE -Pharmacogenomics	Industry partners
3	Dr KP Guruprasad	Role of Medhya Rasayana on ageing and stress-induced autophagy in hippocampus	SDM College of Ayurveda, Udupi
4	Dr K Satyamoorthy	Functional genomics for understanding holistic principles of Ayurveda therapeutics with asthma as a model	University of Pune
5	Dr K Satyamoorthy	Analysis of Molecular Signalling proteins and epigenetic factors responsible for regulation of PEPCK Expression	NEHU, Shillong ILS, Orissa
6	Dr A Muthusamy	Induction of Somaclonal Variations in Phyllanthus amarus Schum. and Thonn. And Phyllanthus urinaria Linn. by in vitro mutagenesis. Screening of mutant plants with enhanced secondary metabolites for biomedical applications	Bharathidasan University, Tamilnadu
7	Dr K Satyamoorthy	Epigenetic status of pro/anti apoptotic activity of age-related genes involved in breast cancer	NEHU, Shillong ILS, Orissa
8	Dr K Satyamoorthy	Design and expression of humanized antibodies against soluble interleukin-6R, soluble gp130 in bacterial and animal cell lines	Industry (Bhat Biotech, Bangalore)

#	PI	Name of the project	Name of the institution involved (international)
1	Dr K Satyamoorthy	The use of indigenous medicinal plants and commercialised herbal products	Medical Research Council, South Africa
2	Dr K Satyamoorthy	Identification of diagnostic and prognostic biomarkers to improve management of diabetic ulcers	Queensland University of Technology, Australia

Grants received – same (as above Q17)

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, etc.; total grants received.

Funding Agency	Total Grants Received (in Rs.)	Total Grants Sanctioned (Rs.)
DBT	1,67,28,800	3,15,46,000
DST	62,63,877	74,98,000
ICMR	13,24,266	13,24,000
SERB	18,50,000	21,80,000
Govt. of Karnataka	20,00,000	60,00,000

(Details as given above for Q17)

20. Research facility / centre with

- **state recognition**–Biotechnology Finishing School
- **national recognition** – TIFAC-CORE, DST, Government of India. Translational Research, DBT, GOI
- **international recognition** – Nil

21. Special research laboratories sponsored by / created by industry or corporate bodies – Nil

22. Research output in last three years

Details		2012	2013	2014
Completed funded research projects		4	7	3
Completed non-funded research projects		0	0	0
Completed PhD research projects		0	1	5
Completed PG research projects		37	32	34
Completed UG research projects		16	26	27
Publications	International	21	17	32
	National	0	2	3
Books		1	0	0
Chapters in books		6	0	0
Conference presentations	International	20	27	14
	National	3	28	14

Completed funded research projects

2012

1. Programme Support on Translational Research in Biomedical Sciences - DBT
2. Development of fibre optic probe based low laser therapy (LLLTT) for tissue generation - DRDO
3. Genomic variation analysis and Gene expression profiling of Human Dosha Prakriti based on principals of Ayurveda - DST

- The use of Indigenous Medicinal Plants and commercialized herbal products in the biological response modulation of cancer associated Chemo and radiotherapy and its associated side effects amongst cancer patients - DST

2013

- Molecular and Histological analysis of neurological disorders associated with mitochondrial DNA Mutations - DBT
- Identification of diagnostic and prognostic biomarkers to improve the management of diabetic ulcers – DBT (Indo-Aus)
- Genetic evaluation of patients with mental retardation in Udupi & D.K. district of Karnataka State - ICMR
- Role of Medhya Rasayana on Ageing and stress induced Autophagy in Hippocampus - DST
- Functional genomics for understanding holistic principles of Ayurveda therapeutics with asthma as a model - DST
- Biotechnology Finishing School-Govt of karnataka
- VGST-Govt of Karnataka (Infrastructure)

2014

- Analysis of Molecular signalling proteins and epigenetic factors responsible for regulation of PEPCK Expression - DBT
- Analysis of metabolites of endophytic fungi from C3, C4 and CAM plants for therapeutic applications - DST
- Induction of Somaclonal Variations in *Phyllanthus amarus* Schum. & Thonn. and *Phyllanthus urinaria* Linn. By in vitro mutagenesis. Screening of mutant plants with enhanced secondary metabolites for biomedical applications - ICMR

Completed Ph.D. research projects

#	Name (year)	Title of Dissertation
1	Dr. Sanjiban Chakrabarty (2013)	Construction and Characterization of Human BAC Library
2	Dr. Ashok Kumar (2014)	Epigenetic Modulation due to Radiation Effect
3	Dr. Raghavendra Upadhya (2014)	Screening and Characterization of Novel Compounds from Marine Organisms for Biomedical Applications
4	Dr. P.B. Ravikiran (2014)	Wound Healing Potential of <i>Nigella Sativa</i> in Mice Exposed to Different Doses of Gamma Radiation
5	Dr. Reena Reshma D'Souza (2014)	Indian human bacterial artificial chromosome: library construction and its characterization with the genome of Epstein-Barr virus transformed Lymphoblastoid cells
6	Dr. Pranita Pai (2014)	Pharmacogenomics of Critical Candidate Genes involved in Drug Response to Schizophrenia

Completed PG research projects

2012

#	Name	Title of Dissertation
1	Advait Subramanian	An investigation on host-pathogen sensing during infection with <i>Salmonella</i>
2	Nishan BS	Assessment of mitochondrial damage induced by alpha and beta endosulfan – an <i>in-vitro</i> study
3	Prathyush Deepth Roy	Profiling of CpG island Methylation using High Resolution Melting and Bisulfite sequencing in Kapha Pitta and Vata Prakriti

		individuals
4	Elroy Joe Pereira	Autofluorescence Characterization of Cancer and Normal Cell Lines
5	Akshaykumar A Nayak	Anti-infective activity of endophytes from Cucurbitaceae
6	Arshia Angural	Study of genetic variations in host factors and their interaction for Malaria susceptibility and resistance to parasite
7	Vandana Singh	Expression of cytokines in diabetic and non-diabetic wounds: implications in wound healing
8	Ankita Walvekar	Generating molecular reagents to study Indian Hedgehog mediated patterning in embryoid bodies derived from mouse embryonic stem cells
9	Rashmi R	Anticancer Compounds from Marine Actinomycetes: Detailed studies on the anti-cancer properties of Plicacetin
10	Pavithra R Shetty	Effect of Amalaki Rasayana on Telomere Length
11	Milton Roy	Screening and molecular characterization of ubiquitous endophytes
12	Nivya Tholar	Triplet primed PCR method in molecular diagnostic testing for Fragile X syndrome
13	Vishnu Chandran	Influence of Tetrathiomolybdate on the Radiosensitizing Effect of Cisplatin under oxic and hypoxic conditions
14	Dhanur P Iyer	Clinical Prognostic Studies of TOP2A Gene Expression in Anthracycline treated Breast Cancer Patients: A Retrospective Indian Cohort Study
15	Asna Tungekar	Development of a simpler and cost-effective method for Fluorescence in situ hybridization using Quantum Dots
16	Manpreet Patheja	Molecular Effects of Mood Stabilizing Drugs on Human Cultured Cells
17	Shruti Kumar	Relative Assessment of Photosynthetic Efficiency in Tropical Orchids Using Portable Photosynthesis Measuring System
18	Moonmun Kanoi	Molecular Evaluation of Single Nucleotide Polymorphism in Congenital Cataract
19	Akshaya Hegde	Role of N WASP binding proteins in EGF induced Vinculin patch assembly
20	Swathy PS	Investigating Natural Product Approaches to Target Pathways Implicated in Diabetes Using Cell Based Screening
21	Sandra M Daniel	Analysis of transgenic brinjal (<i>Solanum melongena</i> L. var. Mattu gulla) overexpressing Chitinase gene for fungal disease resistance
22	Geethasudheer R	Evaluation of Anti-diabetic Potential of Selected Medicinal Plants with Anti-inflammatory Activity
23	Vidya BG	Mutation Screening of ATM and p53 genes and Expression Analysis of DBC2 in Breast Cancer Patients
24	Amrita Shrivastava	Nuclear Architecture Studies in Models of Cellular Differentiation and Development
25	Apurva Lad	Neutrophil Activation Under Diabetic Conditions
26	Hitendra Negi	Genetic Polymorphisms and its Role in Radiotherapy Induced Acute Skin Reactions
27	Clelia D'Souza	Clinical Prognostic Studies to Validate Candidate ER-Alpha Pathway Genes using Gene Expression Profiling – An insight into the Receptor Crosstalk Biology
28	Shweta R Dadhich	Identification of Novel Anti-Cancer compounds from Natural Products and elucidating their multiple target activity potential using cell based High Throughput Screening
29	Abhinav Chaturvedi	Synthesis of Derivatives of Bipyridine and Characterization of its Anticancer Activity
30	Apeksha Mathur	Database Development and Web Designing for Autoimmune Disease and siRNA Tool Development

31	Nahush B. N	Pathway Centered Gene Expression Compendium
32	Smirti Mishra	Tool Development for "Mining Association Relationship in Diabetes mellitus (type1 and type2) Peptide Sequences" and Promoter Finder
33	Manjari Uppal	Construction of database for structural variations and genes associated with telomeric and sub-telomeric regions in Homo sapiens
34	Nitin Mandloi	Copy number variations analysis for colorectal cancer using microarray based aCGH
35	Jayati Narle	In- Silico Analysis Of Pyrazinamide Resistance Of Mycobacterium Species
36	Amit Kumar Gupta	A Genome Assembly Pipeline for NGS(454) Sequenced Data and Genome Analysis of Coconut (<i>Cocos nucifera</i> L.) Phytoplasma
37	Mohammad Imran Shah	Tool Development for "Mining Association Relationship in Breast Cancer Peptide Sequences" and "Promoter Finder"

2013

#	Name	Title of Dissertation
1	Kruthika Iyer	Comparative deconjugation activities of the papain like cysteine protease mutant proteins from genotype 1 and 4 hepatitis E viruses
2	Vishal Menon	Identification of T-box family protein targets responsible for cell fate commitment in the mesoderm
3	Ashish Kumar	Functional analysis of mismatch repair using in vitro heteroduplex assay
4	Smrithi	Quantitative Estimation of Vitamin B7 (Biotin) in Plasma by HPLC and Genetic Variation in Biotinidase (BTD) Gene
5	Abhinav Rathi	FOX1 gene in mesenchymal stem cells & study of its signalling pattern via computational biology & bioinformatics approaches
6	Ritwik Ravi	Strain improvement for over-production of novel secondary metabolites from <i>Streptomyces</i> spp.
7	Sawmya Kotian J	Effect of endophytes on photosynthetic efficiency of plants
8	Melisa Jovita Andrade	Elucidation of Melanocyte Differentiation Program through Induced Pluripotent Stem Cells (iPSCs) in Vitiligo
9	Vishnu Priya	Profiling of inflammatory and endothelial markers in a South Indian diabetes population
10	Surabhi	Copy number variation in CREB3, EPBH1 and KCNN genes in bipolar disorder
11	Nayak Divya Shrinivas	Role of Small Molecule Chaperones in Protein Structure and Function: A Case Study
12	Jyotsna Jayaram Kadri	Cardiotoxicity of anti-angiogenic drugs in the Zebra Fish
13	Lakshmy Ramakrishnan	Novel vaccine candidate offering protection over all four serotypes of dengue virus
14	Mohthash Musambil	Development of molecular diagnostic procedure to detect inherited disorders
15	Uday Sannakki	Laser induced fluorescence study of cervical cancer samples
16	Sumana Vasista	Study of Differential Matrix metalloproteinases Activity in Normal, Cancer Cell Lines and Wound Swabs
17	Aysha Dilna V K	Identification, Validation and Functional Evaluation of Aberrantly Methylated Genes In Human Cervical Cancer
18	Ajanta Paul	Role of Flavanoids in Amelioration of Mitochondrial Dysfunction induced by Mercury Toxicity: An in vitro study using HepG2 and Human Fibroblast Cells
19	Deepti Prasad	The Exploration of Possible Targets of Antimicrobial Peptides
20	Shweta Chakraborty	Sorghum as an anticancer agent and its therapeutic potentials

21	Varsha Vivek	APOE4 association with dementia: comorbidity with diabetes and hypertension
22	Alumelu J	Effect of Shankhpushpi extract on the DNA repair and neuronal differentiation
23	Apoorva Sreekanth Naik	Cloning and expression of Gene X coding for protein 'PX' in <i>E. coli</i>
24	Srija Moulik	Effect of molecule 'x' on the biofilm formation of <i>Salmonella</i>
25	Ramanjaneyulu Usarathi	Effect of Shankhpushpi rasayana on DNA repair and autophagy in ischemic stress induced rats
26	Faraz	Hyperglycemia induced Extracellular matrix (ECM) remodelling in neuronal cells: Role in diabetic neuropathy
27	Nakka Subrahmanyam	Visual Detection of Genetic Polymorphisms in Folate Metabolism Genes and its association with Acute Lymphoblastic Leukaemia
28	Swati Suresh Dudhal	Study the propensity of differentiation of mesenchymal stem cells into dopamine neurons
29	Kushika	Role of pan-inflammatory molecules in chronic inflammatory disorders
30	Kunal Singh	A Novel Strategy to Simplify Molecular Diagnosis and Screening of Myotonic Dystrophy Type I, the Most Commonly Inherited Muscular Dystrophy
31	Arpitha G.G.	<i>De novo</i> Genome Assembly and Annotation of <i>Staphylococcus aureus</i>
32	Vibha Nim	Genome Assembly of <i>Staphylococcus aureus</i> using Reference-Based Method

2014

#	Name	Title of Dissertation
1	R Anush	Implication of TFAM, POLRMT gene mutation & copy number in mitochondrial disorders
2	Avika Roy	Humoral immune responses in macaques immunized with a novel HIV-1 lentivector-based DNA vaccine
3	Richa P Bhatt	Studying the mechanism of FMRP mediated Translation Regulation
4	Fathima Mohammed Ahamed	Effect of Botropase from <i>Bothrops atrox</i> and Crude Extract isolated from <i>Morinda citrifolia</i> L. on Blood Coagulation Process
5	Rohit Bharat	Functional importance of 6-Phospho gluconate dehydrogenase (6PGD) in MCF-7. A therapeutic target against breast cancer
6	Supriti Ghosh	Identification, Characterization and Functional Evaluation of Methylation Regulated Genes in Cervical Cancer
7	Vijetha Nagendra Prakash	Magnetic bead based extraction of human sperms from semen based on their hyaluronic acid binding ability
8	Geetha Shree N	The Role of Novel Stem Cell Markers and Tumor Suppressor Gene on Glioblastoma Multiforme Prognosis
9	Vibha Vyas Haridas	Model development for liver fibrosis
10	Komal Sharma	Resistance and virulence patterns among <i>Pseudomonas aeruginosa</i> isolates from diabetic foot ulcer infections
11	Garima Shahi	Diffusion Tensor Imaging and Voxel Based Morphometry Analysis on Trigeminal Neuralgia
12	Nishchal	Autofluorescence Imaging of Acidic and Basic Native PAGE
13	Namita Gidakatti	Development of a dried RT-PCR master mix for the molecular detection of major retroviruses from clinical samples
14	Himani Tripathi	Regulation of Luteinizing Hormone/Choriogonadotrophin Receptor (LH/CGR) in Rat Corpus Luteum
15	Amanda Grace Vaz	Development of an Immunoserological test against Malaria using Monoclonal antibodies

16	Kongo Atho Grace Audelene	Validation of single nucleotides polymorphism in various genes from exome sequence in chronic myeloid leukemia patients
17	Swati S Rao	Studies to understand the regulation and function of DDX5, an RNA helicase in rat corpus luteum
18	Pratik Arvind Vyas	Investigating a Possible Antiviral activity of Eukaryotic Initiation Factor 3-subunit f against Hepatitis C Virus
19	Mariet Mathew Stephen	Association study of ASMT gene with Autism Spectrum Disorder in a South Indian Population
20	Zainub T Madarwala	Expression and Refolding of Engineered Eukaryotic Rieske Oxygenase Mutants
21	Supriya S Murthy	Functional characterization of quiescent stem cells in fresh water cnidarian Hydra
22	Sandhya N	Role of iNKT Cells in Non-Alcoholic Fatty Liver Disease
23	Valita P Lobo	Role of Single Nucleotide Polymorphism in Breast Cancer Predisposition
24	Prakriti Haldia	DNA Base Excision Repair Modulation in PTCH1-/+ Dermal Fibroblasts Isolated from Healthy Skin of Gorlin Syndrome Patients
25	Chandni Lal	Expression of recombinant sIL-6r in mammalian cells
26	Sharon Chechamma Varghese	Study of differential regulation of various zinc finger proteins in <i>Pichia pastoris</i> using real time PCR under different carbon source conditions and cloning of putative zinc finger transcription factor PAS_0166 from <i>Pichia pastoris</i>
27	Suresh K	Screening of small molecules and standard compounds in immunomodulation assays
28	A Y Mohammed Tariq	Detection of <i>Plasmodium falciparum</i> infection in human blood by using gold nano-particles
29	Prasanna Maratanger	Analysis of DNA Methylation and Duplication of SHANK3 Gene CpG islands in Bipolar Disorder
30	Aditya Jain	1-CMDb: Database for variation in human one carbon metabolism pathway
31	Suparna Roy	Bioinformatic Analysis of <i>AerA</i> Gene Sequences; Cloning and Expression of a Gene from <i>Aeromonas hydrophila</i> MTCC 646 and Development of Perl Program for Biology use
32	Reshma	A study on evolution of protein domain Architecture
33	Sheldon Pereira	Application of SAS and CDISC Standards in Oncology Trials
34	Pooja S	Gene Expression Analysis for Understanding Brain Functions

Completed UG research projects

2012

#	Name	Title of Dissertation
1	Chaitra Rao	Association of delta-amino levulinic acid dehydratase (ALAD) polymorphism on blood lead levels and understanding biology of lead effects using EBV transformed human B cells
2	Harshith	Role of Thymol in Mitigating Mercury Induced Cytotoxicity in Hepato-cellular Carcinoma (HepG2) Cells: A Post Treatment Scenario
3	Jitender Kumar	Studies on <i>in vitro</i> propagation of banana (<i>Musa</i> sp.)
4	Komal Sharma	Screening of subtle Chromosome rearrangements using high-resolution G-banding
5	Edward Mark Fernandes	<i>In Vivo</i> Laser Induced Fluorescence (LIF) as an objective tool to monitor wound healing following Low Level Laser Therapy
6	Priya Joshi	Impact of <i>TCF7L2</i> Gene Variant on Risk of Type II Diabetes

7	Rohit Bharath	Quantification of <i>DAXX</i> and <i>CTSF</i> gene copy numbers using Multiplex Ligation Dependent Genome Amplification in Colorectal Cancer.
8	Shilpa Patil	Analysis of extracellular matrix proteins under hypoxic conditions in hepatocarcinoma (HepG2) cell line
9	Vikram Singh Tomar	Identification and validation of differentially methylated genes in Breast Cancer
10	Mohamed Zahir Alimohamed	Analysis of plasmids from bacteria associated with Chronic Foot Ulcers
11	Sunaina Banerjee	Standardization and assessment of Enzyme Kinetics involved in malate oxidative decarboxylation in Plant Systems
12	Prakriti Haldia	Association Studies of <i>MDR1</i> gene with Schizophrenia and antipsychotic drug response
13	Zainub Madarwala	Diagnosing Huntington's chorea by characterization of CAG repeats in <i>HTT</i> gene
14	Abhishek Singh	In vitro regeneration and quantification of Alizarin and other secondary metabolites in <i>Rubia cordifolia</i>
15	Akshansh Bharadhwaj	Standardisation of culture and direct sensitivity testing of <i>Mycobacterium tuberculosis</i> to Rifampicin in specific liquid culture medium
16	Shashika Lavangi Wijesooriya	Incidence and etiology of sub-clinical mastitis in dairy cattle in Gampaha district, Sri Lanka

2013

Sl. No.	Name	Title of the project
1.	Hina Ayesha Shafi	Implications of TFAM Gene Mutations in Relation to Mitochondrial Function
2.	Pooja Shyamala Sridhar	Analysis of SOD, GST and TGF- β 1 Plasma Levels, Their Single Nucleotide Polymorphisms and its Association with Radiotherapy Induced Adverse Reactions in Cancer Patients
3.	Srujan C	Implications of bacterial toxins/metabolites and biofilms on chronic wound healing – An <i>in vitro</i> study
4.	Ravi Nepali	Role of Shankapushpi on DNA repair capacity in Human Neuroblastoma Cells
5.	Yashika Khandelwal	Standardization of the Molecular Diversity in <i>Dendrobium</i> Plant (hybrid vs <i>D. ovatum</i>)
6.	Satyam Srivastava	Molecular Characterization of pathogens Associated with Diabetic Foot Ulcer
7.	Anindita Mitra	Screening of Single Nucleotide Polymorphisms in IL-6 gene
8.	Geetika Datta	Genetic Predictors of Chemoradiotherapy Induced Acute Skin Toxicities
9.	Apoorva Jnana	Effect of 2 deoxy D glucose on repair of radiation induced damage in normal cells
10.	Pradeep Harish	Genetic basis of different growth rates in size selected zebra fish
11.	Shikha Srivastava	Molecular Detection Of <i>Plasmodium vivax</i> In Human Blood
12.	Amrisha Singh	Identification and Validation of Aberrant DNA Methylation Marks in Cervical Cancer
13.	Shubhi Sinha	Identification and Validation of Polymorphism in Promoter of PEPCK Isoforms
14.	Surabhi Mishra	Genetics of Congenital Heart Diseases
15.	Anusha Acharya	Predictive Potential of Fluorescence Spectroscopy as an Objective Tool to Evaluate Wound Granulation Tissues
16.	Somyasree	Promoter DNA Methylation of Developmental Genes in Prakriti Samples
17.	Fernandes Nikita	Association of Polymorphism in δ -ALAD Gene with Blood

	Darlene	Lead Levels and Its Effect on Genetic Damage
18.	Maya Roy	Synthesis and Characterization of New Bivalent metal Chelators as Anticancer Targets and their mechanism of action
19.	Anjali D Talreja	Association Study of <i>SLC30A8</i> Polymorphism (rs13266634) with Type 2 Diabetes
20.	Pranoy Kumar Sahu	Understanding the Metabolic Processes involved in Neurogenesis using high throughput Metabolomics Approach
21.	Ayushi Rai	To Study the Association of Methylation of <i>ABCB1</i> and <i>ADRB2</i> gene Methylation with Malaria
22.	Aparna Sinha	Occurrence and Identification of Fungal and Bacterial Diseases in Brinjal (<i>Solanum melongena L.</i>) var. Mattu Gulla
23.	Ann Isaac	Investigation of the Effect of Vitamin-E on The Cytotoxicity and Activity of Camptothecin on a Cancer Cell Line
24.	Rituraj James	Analysis of Next-Generation Sequencing Data for Antibiotic Resistant Strain of Staphylococcus Aureus
25.	Prashanth Singh	Analysis of Integration, Origin & in vivo Differentiation in Induced Pluripotent Stem Cells
26.	Vunnam Chaithanya	Copy Number Variation Analysis of Candidate Genes in Bipolar Disorder

2014

Sl. No.	Name	Title of the project
1.	Fatmah Zahra Mehboob Rashid	An Association Analysis of the Effects of CNVs and DNA Methylation Patterns on Distinct Phenotypes
2.	Debbie Mariam Jose	Generation of Promoter Deletion Mutants in Senescence-Associated Breast Cancer Genes
3.	Minal Chaturvedi	Study of Single Nucleotide Polymorphisms of CRHR1 Gene and its Association with Therapeutic Drug Response in Asthma Patients
4.	Akanksha Mathur	Analysis of Gad11 Gene Polymorphisms in BD and Lithium Response in a South Indian Population
5.	Amrita P V	Investigation of Hyperglycemia Induced Changes in Metabolic Processes in Neutrophils
6.	Gail Marjorie Fernandes	Effect of Genistein on energy metabolism enzymes in rat hepatocytes and hepatocarcinoma cell lines
7.	Manchi Vathsalya	The effect of low level laser irradiation on inflammatory response during burn wound repair - A pre-clinical study
8.	Ishani Bhat	Effects of Tamra bhasma on biological functions in <i>in vivo</i> mice system
9.	Hiranya Aditi	Functional Evaluation of ADRB2 Gene Variants in Mammalian Cell Culture System Through Cloning and Expression Studies
10.	Alekhya Mazumdar	Characterization of Host – Pathogen Interactions: The Response To A Bacterial Biofilm
11.	M Aparna Prasad	Role of Endophytic Bacteria in Phytostabilization of Toxic Heavy Metals
12.	Preeta Ananthanarayanan	Engineering of Superparamagnetic Iron Oxide Nanoparticles Conjugated Geldanamycin Against Breast Cancer Cells.
13.	Ishita Basu	Development of Genotyping Assay for detection of single Nucleotide Polymorphism Associated with Type2 Diabetes.
14.	Remanika Edolia	The Impact of Abiotic Stress on the Growth Hormones, Proteins, Pigments and Endophytes of <i>Solanum melongena L.</i> Var. Mattu Gulla
15.	Pallavi Mathur	Haploid Production and Cytological Studies in <i>Dendrobium ovatum</i>
16.	Aarushi Jain	Cloning and Expression study of human TFAM protein

17.	Purba Sarkar	Identification and Validation of DNA Methylation and miRNA Associated Signatures in Cervical Cancer
18.	Maben Janith Mary	Cloning, Expression and Purification of Zinc Finger Protein 471 (ZNF471)
19.	Aayushi Yadav	Development Of Molecular Diagnostic Procedure To Detect Friedreich's Ataxia: A Trinucleotide Repeat Neurodegenerative Disorder
20.	Neethu V	Screening for Anticancer Metabolites from Fungal Endophytes
21.	Shivani Shekar	Evaluation of DNA Repair Capabilities of Oral Squamous Cell Carcinoma (OSCC) Cell lines and Fibroblasts
22.	Sharma Kashish	Genetic Association of BHMT (rs3733890) and ATIC (rs2372536) with Acute Lymphoblastic Leukemia in South Indian Population
23.	Naima Haque	Clinical and Genetic Screening of Down syndrome with Congenital Heart Defects
24.	Nishika	Quantum Dot Fluorescence In situ Hybridization [QD-FISH]: Development, Standardization and Diagnostic Application
25.	Moushumi Goswami	Influence of Selected Gene Variants on the Chemotherapy and Radiotherapy Induced Normal Tissue Toxicity in Breast Cancer Patients
26.	Sheth Dhruv Rajendrakumar	Novel Bivalent Metal Chelators as Target for Hdacs and RR Enzymes and its Anticancer Property
27.	Arya Shambhavi	Expression and Purification of Double C2-Like Domain-Containing Protein Beta (DOC2B)

Students from other Universities/Institutes who have undertaken project at School of Life Sciences using the infrastructure set up.

#	Name	University/ Institute	Title of Dissertation
2012 (January to April)			
1	Neenu Gandotra	Jammu University, Jammu	Genotype and Allele Frequency of ADORA2A Gene Polymorphism NC 000022.10:g.24837301T>C (rs 5751876) in an Indian population
2	Richa Pathania	Jammu University, Jammu	Cytogenetic and CGG repeats screening in patients with premature ovarian failure
3	Radhika Sharma	Jammu University, Jammu	Mutations Screening in N-Acetylgalactosamine-6-sulfatase (GALNS) gene
4	Nisha Khah	Jammu University, Jammu	Identification of Staphylococcus species using Multilocus Sequence Typing
5	Sunita Pandita	Jammu University, Jammu	Association of CYP2C9 Gene Variants with the Risk of Type 2 Diabetes in South Indian Population
6	Nahid Akhter	Jammu University, Jammu	Identification of Gene Specific Methylation in Cervical Cancer

2013 (February to April)			
1	Sukirti Sharma	Jammu University, Jammu	Cloning based bisulfate sequencing in Prakriti Samples
2	Nitika Langeh	Jammu University, Jammu	Study on DNA Methylation Level and Invitro Anticancer Activity of Ashwagandha [Withania Sommifera (L) Dunel]
3	Gargi Sarkar	Jammu University, Jammu	Validation by DNA Methylation in the ILITRA promoter region by bisulfate sequencing of Asthma before and after Ayurveda Intervention samples

4	Rashmi Thapa	Jammu University, Jammu	Clinical Diagnosis of JAK2V617F Mutation by Molecular Techniques
5	Ramandeep Singh	Jammu University, Jammu	Cloning And Identification of mUtation Specific Exons of CFTR, FGFR3 and SMW1 genes
6	Manik Vohra	Jammu University, Jammu	Impact of PRARG (rs 1801282) and SLC47A1 (rs 8065082) gene Polymorphism on the risk of Type 2 Diabetes
7	Scynthia Singh Bhau	Jammu University, Jammu	Bacterial Isolates from diabetic foot ulcers: Biofilm formation and Antibiotic drug resistance profile
8	Sakshi Abrol	Jammu University, Jammu	Modification of the Conventional Lymphocyte culture for faster Diagnostic Testing

2014 (February to April)

1	Shiva Saproo	Jammu University, Jammu	Mitochondrial DNA Copy Number in Estrogen Receptor Positive and Negative Breast Cancer
2	Zakiya Ahsan	Jammu University, Jammu	Identification and Validation of Gene Specific Methylation Profiles in Breast Cancer
3	Pooja Loachan	Jammu University, Jammu	Standardization of H2O2 induced senescence model.
4	Vijay Lakshmi Jamwal	Jammu University, Jammu	Standardization of chromosome banding techniques in two Dendrobium species of Western Ghats
5	Ekta Jamwal	Jammu University, Jammu	Genetic Association of <i>ADIPOQ</i> (rs 16861194) and <i>ABCC8</i> (rs 757110) Gene Polymorphism With Type 2 Diabetes
6	Anu Radha Sharma	Jammu University, Jammu	Characterization of Proteins with Ribonuclease Activity In <i>Bothrops atrox</i> venom

Publications:

* [Number of papers published in peer reviewed journals \(national / international\)](#) - 75

2012

INTERNATIONAL: 21

1. Tharoor H, Kotambail A, Jain S, Sharma PSVN and Satyamoorthy K 2012.
Association study of serotonin transporter triallelic 5-HTTLPR and STin2 VNTR polymorphisms with lithium prophylaxis response in bipolar disorder.
Psychiatric Genetics 2:77-81.
2. Guruprasad KP, Subramanian A, Singh VJ, Sharma RS, Gopinath PM, Sewram V, Varier PM, Satyamoorthy K. 2012
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3. Chakrabarty S, D'Souza RR, Bellampalli R, Rotti H, Saadi AV, Gopinath PM, Acharya RV, Thangaraj K, Satyamoorthy K. 2012.

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4. Girisha KM, Shrikiran A, Bidchol AM, Sakamoto O, Gopinath PM, Satyamoorthy K. 2012

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Ind J Hum Genet, 18: 346-348.

5. Shivakumar BM, Kumar BL, Bhat G, Suvarna D, Rao L, Pai CG, Satyamoorthy K. 2012

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6. Dutta A, Shetty P, Bhat S, Ramachandra Y, Hegde S. 2012.

A mass spectrometric study for comparative analysis and evaluation of metabolite recovery from plasma by various solvent systems.

J Biomol Tech 23:128-135.

7. Shruthi SD, Padmalatha Rai S, Ramachandra YL. 2012.

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8. Goutham HV, Mumbrekar K, Vadhiraja BM, Fernandes DJ, Sharan K, Guruprasad KP, Satyamoorthy K, Satish Rao BS. 2012.

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9. Rai PS, Bellampalli R, Dobriyal RM, Agarwal A, Satyamoorthy K, Anantha Narayana DB.2012

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10. Muthusamy A, Pratibha PK, Prabhu V, Mahato KK, Vidhu SB, Rao MR, Gopinath PM, Satyamoorthy K. 2012.

- Influence of Helium-Neon laser irradiation on seed germination in vitro and physico-biochemical characters in seedlings of brinjal (*Solanum melongena* L.) var. Mattu Gulla. *Photochem Photobiol.* 88:1227-1235.
11. Coutinho MF, Santos Lda S, Girisha KM, Satyamoorthy K, Lacerda L, Prata MJ, Alves S. 2012.
Mucopolipidosis type II α/β with a homozygous missense mutation in the GNPTAB gene. *Am J Med Genet.* 158: 1225-1228.
12. Mascarenhas R, Sham PK, Pai HV, Kamath H, Gran J, Gopinath PM and Satyamoorthy K. 2012.
Analysis of mitochondrial DNA variations in Indian Patients with Congenital Cataract. *Molecular Vision.* 18: 181-193.
13. Prabhu V, Rao BSS, Chandra S, Kumar P, Rao L, Vasudeva G, Satyamoorthy K and Mahato KK. 2012.
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14. Swati P, Thomas B, Vahab SA, Satyamoorthy K, Kushtagi P. 2012.
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15. Ramachandra YL, Ashajyothi C, Padmalatha Rai S. 2012.
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16. Ramachandra YL, Ashajyothi C, Padmalatha Rai S. 2012.
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International Journal of Pharmacy and Pharmaceutical Sciences. 4: 424-427.
17. Neetha J, Girisha KM, Gopinath PM, and Sekhar MR. 2012.
A de novo translocation of Chromosome 1 and 2 in an 18 year old boy with syndromic mental retardation.
Genetic Counseling. 23: 473-476.
18. Sreelakshmi K, Muralidhar V Pai, Jayraman N and Rajasekhar Moka. 2012.
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19. Ellmann L, Joshi MB, Resink TJ, Bosserhoff AK and Kuphal S. 2012.
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20. Kyriakakis E, Maslova K, Philippova M, Pfaff D, Joshi MB, Buechner SA, Erne P and Resink TJ. 2012.
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21. Joshi MB*, Philippova M*, Pfaff D, Kyriakakis E, Maslova K, Erne P and Resink TJ. 2012.
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2. Gupta H, Sakharwade SC, Angural A, Kotambail A, Bhat GK, Hande MH, D'Souza SC, Rao P, Kumari V, Saadi AV, Satyamoorthy K. 2013
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3. Jois S, Chandru S, Chavan A, Ramachandra YL, Padmalatha Rai S. 2013
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Journal of Pharmaceutical, Chemical and Biological Sciences 3(3), 565-570
4. Joshi MB, Lad A, Bharath Prasad AS, Balakrishnan A, Ramachandra L, Satyamoorthy K. 2013

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FEBS Lett. 11:587 (14):2241-6. Impact Factor: 3.5
5. Kabekkodu SP, Bhat S, Mascarenhas R, Mallya M, Bhat M, Pandey D, Kushtagi P, Thangaraj K, Gopinath PM, Satyamoorthy K. 2013
Mitochondrial DNA variation analysis in cervical cancer.
Mitochondrion, S1567-7249. Impact Factor: 4.1
6. Murali TS, Thirunavukkarasu N, Rajulu GMB, Suryanarayanan TS. 2013
Fungal communities of symptomless bark of tropical trees
Mycosphere 4(3):627-637. Impact Factor: 1.0285
7. Muthusamy A, Jayabalan N. 2013
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J. Environ. Biol. 34(1):11-16. Impact Factor: 0.68
8. Rajasekar M, Sreelakshmi K, Gopinath PM, Satyamoorthy K. 2013
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J Hum Rep Sci. 6: 129-132.
9. Rajasekhar M, Gopinath PM, Sreelakshmi K, Satyamoorthy K. 2013
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10. Ramachandra YL, Ashajyothi C, Sreepadaraja HJ, Padmalatha Rai S. 2013
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11. Ramachandra YL, Sreepadaraja HJ, Gurumurthy H, Ashajyothi C, Padmalatha Rai S. 2013
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12. Saadi AV, Gupta H, Angural A, Dhanya SK, Mony S, Oberoi D, D'Souza SC, Sahoo SC, Hande MH, Gopinath PM, Satyamoorthy K. 2013
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- Infection, Genetics and Evolution 20:140–147 Impact factor: 2.768
13. Sawmya K, Vasudevan TG, Murali TS. 2013
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14. Shivakumar BM, Lakshmi Rao, Satyamoorthy K, Ganesh C Pai. 2013
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15. Shruthi SD, Sujan Ganapathy PS, Padmalatha Rai S, Ramachandra YL. 2013
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reticulate* Baill.
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16. Singh P, Amirtharaj F, Singh R, Rakesh T, Raja R, Karan Singh S, Kaling M, Goel
MM, Daminani S, Rao DR, Rao L, Ramachandra L, Kumar S, Kumar S, Satti V,
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Women: A Case-Control and Population-Based Study.
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17. Tharoor H, Kotambail A, Jain S, Sharma PS, Satyamoorthy K. 2013
Study of the association of serotonin transporter triallelic 5-HTTLPR and STin2
VNTR polymorphisms with lithium prophylaxis response in bipolar disorder.
Psychiatric Genetics. 2:77-81. Impact factor 2.365

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1. John N, Rajasekhar M, Girisha KM, Sharma PS, Gopinath PM. 2013
Multiplex ligation-dependent probe amplification study of children with idiopathic
mental retardation in South India.
Indian J Hum Genet. 19:165-70
2. Rajasekhar M, Sreelakshmi K, Gopinath PM, Satyamoorthy K. 2013
Cytogenetic study in recurrent pregnancy loss: an experience from tertiary care centre.
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2014

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1. Mumbreakar KD, Fernandes DJ, Goutham HV, Sharan K, Vadhiraaja BM, Satyamoorthy K, Bola Sadashiva SR. 2014
 Influence of double-strand break repair on radiation therapy-induced acute skin reactions in breast cancer patients.
 Int J Radiat Oncol Biol Phys. 88(3):671-6.
2. Murali TS, Paul B, Parikh H, Singh RP, Kavitha S, Bhat MK, Satyamoothy K. 2014
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 Genome Announc. 2(2):e00204-14.
3. Phani NM, Acharya S, Xavy S, Bhaskaranand N, Bhat MK, Jain A, Rai PS, Satyamoorthy K. 2014
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 Gene, 536:247-253. (IF 2.24)
4. Frismantiene A, Pfaff D, Frachet A, Coen M, Joshi MB, Maslova K, Bochaton-Piallat ML, Erne P, Resink TJ, Philippova M. 2014
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 Cell. Signal. 26:1897-908 (IF 4.09)
5. Balakrishnan A, Satyamoorthy K, Joshi MB. 2014
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6. Rajasekhar M, John N, Borkar Y, Shetty KR. 2014
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7. Borkar Y, Shetty KR, Krishnanand K, Rajasekhar M. 2014
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8. Phani NM, Guddattu V, Bellampalli R, Seenappa V, Adhikari P, Nagri SK, D'Souza SC, Gopinath PM, Satyamoorthy K, Padmalatha Rai S. 2014

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- Leuk. Lymphoma (doi:10.3109/10428194.2014.953154) [Impact Factor:2.605]
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- Pharmacogenomics 15:349-359. (Impact Factor: 3.4)
11. Phani NM, Acharya S, Xavy S, Bhaskaranand N, Bhat MK, Jain A, Padmalatha Rai S, Satyamoorthy K. 2014
- Genetic association of KCNJ10 rs1130183 with seizure susceptibility and computational analysis of deleterious non-synonymous SNPs of KCNJ10 gene.
- Gene 536:247-25 (Impact Factor: 2.24)
12. Kotambail A, Mathur A, Bhat SM, Rai PS, Sharma PS, Satyamoorthy K. 2014
- GADL1 gene polymorphisms and lithium response in bipolar I disorder: lack of association from an Indian population.
- Psychiatr. Genet. DOI 10.1097/YPG.000000000000066 (Impact Factor: 2.365)
13. Phani NM, Padmalatha Rai S, Adhikari P, Nagri S, D'Souza S, Gopinath PM, Satyamoorthy K. 2014
- Impact of KCNJ11, TCF7L2, SLC30A8, IGF2BP2, PPARG, SLC47A1, STK11, HHEX, KCNQ1, CDKAL1, FTO, CYP2C9, ADIPOQ, CAPN10 Gene Polymorphisms on Risk of Type 2 Diabetes and Therapeutic Response to Sulfonylurea and Metformin Therapy.
- Mol. Cytogenet. 7(Suppl 1):P100 (Impact factor 2.66)
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- Development of allele specific hybridization assay and computer aided tool for detection of genetic variations in folate pathway genes.
- Mol. Cytogenet. 7(Suppl 1):P19. [Impact Factor: 2.66]

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16. Kabekkodu SP, Bhat S, Radhakrishnan R, Aithal A, Mascarenhas R, Pandey D, Rai L, Kushtagi P, Gopinath PM, Satyamoorthy K. 2014
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21. Rai PS, Pai GC, Alvares JF, Bellampalli R, Gopinath PM, Satyamoorthy K. 2014
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- Immunophenotyping of Normal Individuals Classified on the Basis of Human Dosha Prakriti.
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23. Chakrabarty S, D'Souza RR, Kabekkodu SP, Gopinath PM, Rossignol R, Satyamoorthy K. 2014
- Upregulation of TFAM and mitochondria copy number in lymphoblastoid cell lines.
- Mitochondrion, 15:52-58
24. Kabekkodu SP, Bhat S, Mascarenhas R, Mallya S, Bhat M, Pandey D, Kushtagi P, Thangaraj K, Gopinath PM, Satyamoorthy K. 2014
- Mitochondrial DNA variation analysis in cervical cancer. Mitochondrion. 16:73-82.
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- Epigenetic regulation of double c2 like domain beta (Doc2b) in cervical cancer.
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26. Manimekalai R, Anil Kumar NC, Roshna OM, Satyamoorthy K. 2014
- Isolation and comparative analysis of PotC Gene of ABC-Transport System from Coconut Root Wilt, Sugarcane Grassy Shoot (16srxi Group) Phytoplasmas.
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27. Radhakrishnan R, Upadhy R, Aithal A, Shama Prasada, Bhat S, Jayaprakash C, Ray S, Prasad KC, Kamath A, Rasmussen LJ, Satyamoorthy K. 2014
- DNA Methylation Changes in Clinical Stages of Oral Cancer Progression and Correlation with DOC2B Promoter Hypermethylation.
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28. Narayanan SN, Kumar RS, Kedage V, Nalini K, Nayak S, Bhat PG. 2014
- Evaluation of oxidant stress and antioxidant defense in discrete brain regions of rats exposed to 900 MHz radiations.
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29. Kaushik NK, Murali TS, Sahal D, Suryanarayanan TS. 2014
- A search for antiplasmodial metabolites among fungal endophytes of terrestrial and marine plants of southern India.

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30. Murali TS, Kavitha S, Spoorthi J, Bhat DV, Prasad ASB, Upton Z, Ramachandra L, Raviraj Acharya, Satyamoorthy K. 2014

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32. Vidhu SB, Pai D, Sheikh T, Muthusamy A, Satyamoorthy K. 2014

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NATIONAL: 3

1. Muthusamy A, KS Vidya, PK Pratibha, MR Rao, SB Vidhu, KP Guruprasad, U Raghavendra, PM Gopinath, K Satyamoorthy. 2014

Establishment of an in vitro plantlet regeneration protocols for unique varieties of brinjal (*Solanum melongena* L.) var. Mattu Gulla and Perampalli Gulla.

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3. Muthusamy A, Vidya KS, Pratibha PK, Radhakrishna Rao M, Vidhu SB, Guruprasad KP, Raghavendra U, Gopinath PM, Satyamoorthy K. 2014

Establishment of an *in vitro* plantlet regeneration protocol for unique varieties of brinjal (*Solanum melongena* L.) var. Mattu Gulla and Perampalli Gulla.

Indian Journal of Experimental Biology 52:80-88. Impact Factor:1.19

* Monographs - Nil

* Chapters in Books – 6

1. Kamath SD, Mahato KK. 2012. Pulsed laser induced simultaneous fluorescence and photoacoustic spectroscopic studies of flavin adenine dinucleotide (FAD) in water.

- Electronic design and signal processing, Narosa Publishing House Pvt. Ltd., New Delhi, ISBN 978- 81-8487-160-9.
2. Roopa Nayak, Organic Chemistry, “Manipal Laboratory manual for Biotechnologists” Manipal University Press, pp. 41-69, 2012
 3. Roopa Nayak, Physical Chemistry, “Manipal Laboratory manual for Biotechnologists” Manipal University Press, pp.70-95, 2012
 4. Roopa Nayak, Inorganic Chemistry, “Manipal Laboratory manual for Biotechnologists” Manipal University Press, pp.96-121, 2012
 5. Vidhu Sankar babu, Plant Tissue Culture, “Manipal Laboratory manual for Biotechnologists” Manipal university Press, pp.239-262, 2012
 6. TG Vasudevan, K Satyamoorthy, Molecular Biology, “Manipal Laboratory Manual for Biotechnologists”, Manipal University Press, pp.122-209, 2012

* **Edited Books – 1**

1. Herman D’souza, Shyama Prasad Sajankila, K Satyamoorthy, 2012, Manipal Laboratory Manual for Biotechnologists, ISBN: 978-93-82460-02-2, Manipal University Press.

* **Books with ISBN with details of publishers – 1**

1. Herman D’souza, Shyama Prasad Sajankila, K Satyamoorthy, 2012, Manipal Laboratory Manual for Biotechnologists, ISBN: 978-93-82460-02-2, Manipal University Press.

Conference Presentations

2012 – International (20)

Papers/Talks

1. Samatha Bhat, Shama Prasada K, Padmalatha S Rai, Gopinath PM, Satyamoorthy K
“Double C2-Like Domains, Beta (DOC2B) is Down Regulated through Promoter Hypermethylation and Acts as a Tumor Suppressor in Cervical Carcinoma”
10th Asia Pacific Conference on Human Genetics, Kuala Lumpur, Malaysia, Dec 5-8 2012
2. Shama Prasada K, Samatha Bhat, Gopinath PM, Satyamoorthy K
“Analysis of DNA Methylome Profile and its Clinical Utility in Management of Cervical Cancer”
10th Asia Pacific Conference on Human Genetics” Kuala Lumpur, Malaysia, Dec 5-8, 2012
3. Bharath Prasad, Vandana Singh, Srujan C, Kavitha P, Spoorthi J, Deepika VB, Acharya RV, Ramachandra L, Joshi MB, Vasudevan TG, Murali TS, Satyamoorthy K
“Expression of Cytokines in Diabetic and Non-Diabetic Wounds: Implications in

- Wound Healing”
 3rd World Congress on Diabetes & Metabolism, Hyderabad, Sep 24-26, 2012
4. Shyama Prasad Sajankila, K Ambika, B Nageshwar Rao, Rashtri Gosh, BS Satish Rao
 “A study on the toxicity of Copper Nanoparticles (CuNP) in mouse system”
 NanoSciTech 2012, Punjab University, Chandigarh, Feb 16-18, 2012
 5. Satish Rao BS
 “Prediction of radiotherapy induced normal tissue acute toxicity: Molecular significance of DNA double strand breaks and its repair”
 The International Conference on Radiation Biology (ICRB – 2012) ACTREC, Tata Memorial Centre, Navi Mumbai, Nov 22-24, 2012
 6. Kamalesh DM, HV Goutham, BM Vadhiraaja, DJ Fernandes, K Sharan, KP Guruprasad, K Satyamoorthy, BS Satish Rao
 “Cellular Radiosensitivity and its Association with Clinical Radiosensitivity In Breast Cancer Subjects”
 International Conference on Radiation Biology (ICRB – 2012) ACTREC, Tata Memorial Centre, Navi Mumbai, Nov 22-24, 2012
 7. Satish Rao BS, B Kiran Aithal, MR Sunil Kumar, N Udupa
 “Anticancer, radiosensitizing potential of plumbagin and juglone as free and microsphere, liposome based targeted drug delivery platforms”
 BNERC and IJAA Joint International Symposium on Advanced Science and Technology, Toyo University, Japan, Dec 8, 2012

Posters

8. Saadi AV, Geetha K, Girisha KM, Gopinath PM, K Satyamoorthy
 “Diagnosis of Dystrophinopathies at Manipal by Multiplex Polymerase Chain Reaction for Deletions in Dystrophin Gene”
 INDO-US Conference on Disorders of Developing Brain, Manipal University, Manipal, Oct 27-28 2012
9. SK Tiwari, S Bhat, KK Mahato
 “MEMS Design Tool in Teaching Orientation Dependent Double Sided Silicon Etching”
 22nd International Conference on Chemistry Education & 11th European Conference on Research in Chemical Education, Rome, Italy Jul 15-20 2012
10. A Petuskaite D, Pfaff A Frachet, MB Joshi, M Philippova, K Maslova, E Kyriakakis, P Erne, T Resink
 “Upregulation of T-cad in smooth muscle cells: consequences for vascular function”
 AGLA & Vascular Biology Meeting, Bern, Switzerland, Dec 2012
11. Kavitha P, Murali TS, Satyamoorthy K
 “Genotyping of Staphylococcus aureus isolates from diabetic foot ulcer”.
 3rd World Congress on Diabetes & Metabolism, Hyderabad, Sep 24-26 2012
12. Kamalesh DM, Goutham HV, Vadhiraaja BM, Guruprasad KP, Satyamoorthy K, Satish

- Rao BS
 “Evaluating the predictive potential of DSB repair kinetics in radiotherapy induced acute skin reactions”
 International Conference on Cancer Prevention, Diagnosis & Treatment (ICCPDT-2012), Rajasthan University, Jaipur, Jan 21-22, 2012
13. Goutham HV, Kamalesh DM, Vadhiraja BM, Guruprasad KP, Satyamoorthy K, Satish Rao BS
 “Association between polymorphisms in genes of NHEJ pathway and acute reactions of radiotherapy in head and neck cancer patients”
 International Conference on Cancer Prevention, Diagnosis & Treatment (ICCPDT-2012), Rajasthan University, Jaipur, Jan 21-22, 2012
14. Archana PR, Nageshwar Rao B, Satish Rao BS
 “Role of Thymol in curtailing radiation injury: an in vitro study”
 International Conference on Cancer Prevention, Diagnosis & Treatment (ICCPDT-2012), Rajasthan University, Jaipur, Jan 21-22, 2012
15. Satish Rao BS
 “Anticancer, radiosensitizing effect of Plumbagin and Juglone as free and microsphere, liposome based targeted drug delivery platforms”
 International Conference on Cancer Prevention, Diagnosis & Treatment (ICCPDT-2012), Rajasthan University, Jaipur, Jan 21-22, 2012
16. Satish Rao BS
 “Protective effect of zingerone, a dietary compound against radiation induced damage”
 International Conference on Emerging frontiers and challenges in radiation Biology”
 Govt. Dungar College, Bikaner, Jan 24-25, 2012
17. Shubhankar Das, BS Satish Rao
 “Radiation antagonistic effects of hydroalcoholic extract of *Saracaindica* - An in vitro study using Chinese hamster Lung fibroblast (V79) cell”
 International Symposium on Emerging trends in Free Radicals, Antioxidants and Nutraceuticals on Health, Disease and Radiation Biology, Kolkata, Jan12-14, 2012
18. Satish Rao BS
 “Cytoprotective Effect of Mangiferin Against Methylmercury Induced Cellular Damage in IMR-32, Human Neuroblastoma Cells by the Inhibition of Oxidative Stress”
 International Symposium on Emerging Trends in Free Radicals, Antioxidants and Nutraceuticals on Health, Disease and Radiation Biology, Kolkata, Jan 12-14, 2012
19. Sekhar MR
 “Screening for submicroscopic, subtelomeric chromosomal aberrations in 150 children with developmental delay and intellectual disabilities using MLPA”
 38th Annual Conference ISHG, BHU, Varanasi, Dec 9-11, 2012
20. Phani MN, Padmalatha Rai S, Prabha Adhikari, Shivashankara, Gopinath PM and Satyamoorthy K

“Association of genetic variants in *KCNJ11*, *TCF7L2*, *SLC30A8* and *IGF2BP2* genes for type 2 diabetes and response to Sulfonylurea and Metformin in South Indians”
3rd World Congress on Diabetes and Metabolism, Hyderabad, Sep 24-26, 2012

2012 – National (3)

Papers/Talks

1. Muthusamy A, Pratibha PK, Prabhu V, Mahato KK, Vidhu SB, Radhakrishna Rao M, Gopinath PM, Satyamoorthy K.
“Stimulatory effect of laser irradiation on in vitro morphogenesis of brinjal (*Solanum melongena* L.) var. Mattu Gulla – a unique variety of Udupi, Karnataka” National Conference on Integrative Plant Biology and Agribiotechnology, Bangalore, Feb 29, 2012
2. Vidhu Sankar Babu, Shruti Kumar, Sunaina Banerjee, TS Murali, TG Vasudevan, Annamalai Muthusamy, Padmalatha Rai S, K Satyamoorthy
“Relative Assessment of Photosynthetic Efficiency in Sugarcane – the C4 crop to Rice (C3) and Aloe (CAM) using LICOR XT 6400”.
National seminar on Biodiversity and Sustainability, Kuvempu University, Shimoga, Mar 5-6, 2012

Poster

3. Murali TS, Kavitha P, Spoorthi J, Bharath Prasad K, Srujan C, Deepika VB, Satyamoorthy K.
“Host factors and antibiotic resistance in bacterial communities from Diabetic Foot Ulcers”
2nd Annual Conference of Clinical Infectious Disease Society, Chennai, Aug 25-26, 2012

2013 – International (27)

Papers/Talks

1. Satyamoorthy K
“TFAM: a regulator of mitochondria maintenance and function”
3rd Annual conference of the Society of Mitochondrial Research and Medicine entitled “Mitochondria in Health and Disease” NIMHANS, Bangalore during December 19-20, 2013 and also chaired a session.
2. Satyamoorthy K
“Epigenetic changes due to DNA methylation in human tumors”
82nd Annual Meeting of Society of Biological Chemists (India) and International Symposium on Genomes: Mechanism and Function organized by School of Life Sciences, University of Hyderabad, Hyderabad during December 2-5, 2013.

3. Satyamoorthy K
“Gene delivery vehicles”
Faculty Development Programme on "Pharmaceutical Regulations in Developing Countries", “Nano-based Drug Delivery Systems: A New Era in Pharmaceutical Research”, “Entrepreneurship Development” & “Industry Institute Interaction Programme” organized by Department of Pharmacy Management, Manipal College of Pharmaceutical Sciences, Manipal University, Manipal on October 15, 2013.
4. Satyamoorthy K
“Mitochondrial Genome and Function in Human Lymphoblastoid Cells”
Bibliothèque Universitaire, Joseph Fourier University, France on September 5, 2013.
5. Satyamoorthy K
“Epigenetic Changes due to DNA Methylation in Human Epithelial Tumors”
Amphitheatre Boucherle of Health Campus, Joseph Fourier University, France on September 4, 2013.
6. Satyamoorthy K
“International collaborations to enhance education, research and training; and for the students to gear up for being 'world citizens' ”
Graduating Ceremony of outgoing Students at Joseph Fourier University, France on August 30, 2013
7. Satyamoorthy K
“Model-Based Reasoning in Science and Medicine in India”
Summer School 2013 – Interactive Training Initiative organized by Archamps Technopole, France on August 27, 2013.
8. Satyamoorthy K
“Epigenetic Changes due to DNA Methylation in Human Epithelial Tumors”
International Conference on Biotechnology for Innovative Applications organized by Amrita Vishwa Vidyapeetham University, Kollam, Kerala during August 10-14, 2013.
9. Satyamoorthy K
“DNA Methylation Mechanisms and Relevance of Biosignatures to Human Cancers with Special Relevance to Cervical Cancer Progression”
Flinders University, Adelaide, Australia on April 10, 2013.
10. Satyamoorthy K
“Microbial Communities from Diabetic Foot Ulcers and Interactions with the Host Factors”
9th Indo-Australian Biotechnology Conference 'Global health priorities in infection and immunity' at Burnet Institute, Melbourne, Australia and chaired a session during April 7-9, 2013.
11. Satyamoorthy K
“Confounding Factors for Personalised Medicine”
EU Science: Global Challenges Global Collaboration Conference at European Parliament, Brussels, during March 4-7, 2013.

12. Satyamoorthy K
“DNA Methylation, Mechanisms and Relevance of Biosignatures in Cervical Cancer Progression”
32nd Convention of Indian Association for Cancer Research Emerging Trends in Cancer research: Road to prevention & cure and International Symposium on Infection and Cancer organized by Dr. BR Ambedkar Center for Biomedical Research (ACBR), University of Delhi during February 13-16, 2013.
13. Satyamoorthy K
“Architecture of Epigenome in Human DNA and its implication in Health”
Symposium and Workshop on Epigenomics and Cancer Informatics organized by Manipal Life Sciences Centre, Manipal University, Manipal during January 10-12, 2013.
14. Joshi MB
“New Insights into Neutrophil (Dys)function in Diabetes”
Biohealth Computing (BioHC), Joseph Fourier University, Grenoble. 24 August – 7 September, 2013.
15. Shama Prasada K
“Example of Cancer Epigenome Analysis- Manipal Experience”
Symposium and Workshop on Epigenome and Cancer Informatics, Manipal University, Manipal during 10-12 January 2013.
16. Shama Prasada K
“Microarray Platforms and Types for DNA Methylation and miRNA profiling”
Symposium and Workshop on Epigenome and Cancer Informatics, Manipal University, Manipal during 10-12 January 2013
17. Manjunath B Joshi, Apoorva Lad, Alevoor S Bharath Prasad, Aswath Balakrishnan, Lingadakai Ramachandra, Kapaettu Satyamoorthy
“Inefficient NETosis: Cause for Predisposition to Recurrent Infections in Type 2 Diabetes”
International Conference on Biotechnology for Innovative Applications, Amrita University during 10-14 August, 2013.
18. Sanjay ER, Annapoorna S, Muthusamy A, Rupal G, Poornima P, Shashikala T, Vidhu SB, Radhakrishna Rao M and Satyamoorthy K
“Organogenetic responses of medicinally valuable *Phyllanthus* species in vitro for the production of somaclonal variants”
5th International Conference on Medicinal Plants and Herbal Products (ICMPHP), organized by Manipal College of Pharmaceutical Sciences, Manipal University, Manipal during 25-27 January 2013.
19. Aswath Balakrishnan, Kapaettu Satyamoorthy, Manjunath B Joshi
“Inflammation Induced Epigenetic Changes in Endothelial Cells: Role in Vascular Insulin Resistance”
International Conference on Biotechnology for Innovative Applications, at Amrita

University during 10-14 August, 2013

20. Vijendra Prabhu, Edward Mark Fernandez, BS Satish Rao and KK Mahato
 “Non-invasive, in vivo fluorescence technique as an objective tool for monitoring wound healing following low level laser therapy”
 SPIE BOIS 2013, held at The Moscone Centre, San Francisco, California, USA, 2013

Posters

21. Vasudeep Shetty, Vidhu Sankar Babu, Abitha Thomas, Padmalatha Rai S, Muthusamy Annamalai and Satyamoorthy Kapaettu
 “Protoplast Isolation and Fusion – An unique platform for identifying elite micro colonies and atypical hybrid micro shoot initiation in *Dendrobium*”
 Amrita Bio Quest 2013 - International conference on biotechnology for innovative applications, Amrita School of Biotechnology, Amrita University, Kollam during 10-14 August, 2013
22. Poornima P, Rupal G, Sanjay ER, Nagendra P, Shashikala T, Vidhu SB, Muthusamy A, Satyamoorthy K
 “*In vitro* organogenesis and induction of variability in *Withania somnifera* L. for improved withanolides – a pharmacologically active biomolecule”
 International Conference on Biotechnology for Innovative Applications, Amirta School of Biotechnology, Amrita University, Kollam during 10-14 August 2013
23. Vidhu SB, Vasudeep S, Abitha T, Padmalatha Rai S, Muthusamy A, Satyamoorthy K
 “A novel and rapid method of inducing protocorm like bodies for micropropagating *Dendrobium ovatum*, for its conservation and bioproduction of dendrophenol”
 International Conference on Biotechnology for Innovative Applications, Amirta School of Biotechnology, Amirta University, Kollam during 10-14 August 2013
24. Venu Seenappa, Shubhi Sinha, Bidyadhar Das, Manjunath B Joshi, Kapaettu Satyamoorthy
 “Influence of Single Nucleotide Polymorphisms on Transcriptional Regulation of PEPCK Isoforms: Role in Tumor Cells”
 International Conference on Biotechnology for Innovative Applications” at Amrita BioQuest, Amritapuri during 10-14 August, 2013
25. Vidhu Sankar Babu, Vasudeep Shetty, Abitha Thomas, Padmalatha Rai, Annamalai Muthusamy and Satyamoorthy Kapaettu
 “A Novel and Rapid method of inducing Protocorm like Bodies for micropropagating *Dendrobium ovatum*, for its conservation and bioproduction of Dendrophenol”
 Amrita Bioquest International Conference at Amritapuri Campus, Kollam during August 10-14, 2013
26. Poornima Poojary, Rupal Gogia, Nagendra P, Sanjay ER, Shashikala Tantry, Vidhu Sankar Babu and Annamalai Muthusamy
 “*In vitro* organogenesis and induction of variability in *Withania somnifera* L. for improved withanolides – a pharmacologically active biomolecule”

Amrita Bioquest International Conference at Amritapuri Campus, Kollam from August 10-14, 2013

27. Murali TS, Kavitha P, Spoorthi J, Deepika VB, Bharath Prasad AS, Ramachandra L, Raviraj Acharya, Satyamoorthy K
 “Aminoglycoside resistance in Enterococci isolated from Diabetic Foot Ulcers”
 International Conference on Biotechnology for Innovative Applications, Amrita Bio Quest 2013, Cochin during August 10-14, 2013.

2013 – National (28)

Papers/Talks

1. Satyamoorthy K
 “Epigenetics and DNA methylation during health and disease”
 National Symposium on “Cancer Biology” organized by Department of Studies in Biochemistry, University of Mysore, Mysore during November 29-30, 2013.
2. Satyamoorthy K
 “Applying for research grants – Key considerations”
 Pre-Colloquium workshop on Publishing in Biomedical Journals and developing a worksite wellness program organized by School of Allied Health Sciences, Manipal University, Manipal on September 25, 2013.
3. Satyamoorthy K
 Delivered lecture for the workshop on “Extramural Research Funding: Opportunists and Challenges” organized by Yenepoya University, Mangalore on May 29, 2013.
4. Satyamoorthy K
 “Epigenomic modulation by nutrients for better health”
 Brain Storming session on Nutriepigenomics sponsored by Department of Biotechnology, New Delhi at CFTRI, Mysore on June 7, 2013.
5. Satyamoorthy K
 “Personalized Medicine”
 CME and Workshop on “Onco-Genopath” organized by Department of Pathology and Department of Medical Oncology, KMC, Mangalore and chaired a session on May 11, 2013.
6. Satyamoorthy K
 “Tips for Research Collaboration and Research Funding”
 Seminar for Ph.D. Guides organized by MCOPS, Manipal University, Manipal on April 27, 2013.
7. Delivered lecture in a half-day Seminar programme for Research Grants and Research Ethics at KMC, Mangalore on April 19, 2013. (Dr. K Satyamoorthy)
8. Vidhu Sankar Babu
 Resource person for a training program on DST-DBT Fast Track Funding for Faculty of Manipal University, organized by Directorate of Research (Health Sciences/Technical) - at MCOPS Manipal University, Karnataka on 22 January, 2013.

9. Joshi MB
“Angiogenesis associated proteins: potential therapeutic targets in cancer”
National conference on recent discoveries in protein science, Organized by Karnataka State Higher Education Council, Bangalore on 31 January 2013
10. Muthusamy A
“Plant cell, tissue and organ culture: advances in biotechnological application”
Department of Biotechnology Sponsored Popular Lecture organized by PG & Research Department of Zoology, Rajah Serfoji Government College (Autonomous), Thanjavur on 31 January 2013.
11. Vidhu Sankar Babu
Resource person for a training program on DST-Fast Track Funding for Faculty of Manipal University, by Directorate of Research (Health Sciences/Technical) - at MIT Library Auditorium, Manipal on 15 March 2013
12. Satish Rao BS
“Best practices for writing scientific Manuscripts”
AICTE sponsored Quality Improvement Program at Manipal College of Pharmaceutics Sciences, Manipal University, Manipal during 3 June-13 July 2013
13. Muthusamy A
“Induction of genetic variability for improved agronomical characters and disease resistance in crop plants”
Summer School and AICTE sponsored quality improvement program, Manipal College of Pharmaceutical Sciences, Manipal University, Manipal, Karnataka on 26 June, 2013.
14. Vidhu Sankar Babu
Resource person for a training program in Summer School for Research Scholars organized by, Directorate of Research, Manipal University, Manipal from 3 June to 2 July, 2013, Manipal University, on “New Techniques in Plant Tissue Culture” at MCOPS, Manipal University on 29 June, 2013.
15. Herman S D’Souza
“Effects of lead poisoning in general population and lead based workers”,
CME program held at Department of Biochemistry, Mandya Institute of Medical Sciences, Mandya on 24 August, 2013.
16. Vasudevan TG
“Gene Cloning”
National Workshop on Basic Techniques in Molecular Biology and Bioinformatics in Pharmacogenomics held at JIPMER, Puducherry during August 26-31, 2013.
17. Satish Rao BS
“Undergoing the Single Cells-Introduction to the basics of Flow Cytometric Technology and its applications”
KSTA Special Lecture Series at Department of Applied Zoology, Mangalore University, Mangalore on 28 September, 2013.

18. Satish Rao BS
 “Radio modifiers – Preclinical Studies and clinical Significance”
 KSTA Special Lecture Series at Department of Applied Zoology, Mangalore University, Mangalore on 28 September 2013.
19. Satish Rao BS
 “Anticancer radiosensitizing effect of plumbagin & Juglone as free & microsphere, liposome based targeted drug delivery systems”
 AITC Sponsored Faculty Development Program at Manipal College of Pharmaceuticals, Manipal University, Manipal during 14-26 October, 2013.
20. Joshi MB
 “Consequences of Pro-inflammatory conditions in metabolic syndrome”
 2nd Annual Meeting of Society of Biological Chemists-India, 26 October, 2013, Manipal University, Manipal
21. Murali TS
 "Fungal endophytes: A perspective on their chemical diversity"
 2nd Annual Meeting of Society of Biological Chemists-India, 26 October, 2013, Manipal University, Manipal
22. Phani MN
 “Genetic Variants: Key to Type 2 Diabetes Predisposition and Personalized Medicine”
 Annual Meeting of Society of Biological Chemists (India) Coastal Karnataka Chapter, organized by School of Life Sciences, Manipal University, Manipal on October 26, 2013
23. Chakrabarty S
 “Construction of human BAC library: Application in cytogenetic disorders”
 Annual meeting of Society of Biological Chemists (India) Coastal Karnataka Chapter, organized by School of Life Sciences, Manipal University, Manipal on October 26, 2013
24. Vidhu Sankar Babu, Vidya KS, Raghavendra Upadhy, Satish Rao BS and Kapaettu Satyamoorthy
 “Time reliant functional assays substantiate chemopreventive & radioprotective prospective of *Morinda citrifolia*.L (Noni) fruit extract”
 Eighth National Symposium “Noni for Sustainable Wellness” organised by International Society for Noni Science and World Noni Research Foundation held at GKVK Campus, University of Agricultural Sciences, Bangalore, Karnataka during 29-30 October, 2013 (**Best Oral Presentation Award**)
25. Murali TS, Spoorthi J, Deepika VB, Kavitha P, Bharath Prasad K, Ramachandra L, Raviraj Acharya, Satyamoorthy K
 “Fungal Communities from Diabetic Foot Ulcers”
 National seminar on Current Perspectives of Fungi in Health Care and Environment, Bangalore University, Bangalore during 13-14 March, 2013.

Posters

26. Vijendra Prabhu, Edward Mark Fernandez, BS Satish Rao and KK Mahato
 “*In vivo* autofluorescence technique to monitor the wound healing progression-A pre-clinical study”
 DAE-BRNS National Laser Symposium (NLS-21) held at Bhabha Atomic Research Centre (BARC), Mumbai during 6-9 February, 2013.
27. Mallika Priya, BS Satish Rao and KK Mahato
 “Development and optimization of pulsed laser induced photoacoustic spectroscopy setup for clinical applications”
 DAE-BRNS National Laser Symposium (NLS-21) held at Bhabha Atomic Research Centre (BARC), Mumbai during 6-9 February, 2013.
28. Gupta H, Saadi AV, Hande MH, D’Souza S, Gopinath PM, Satyamoorthy K
 “Variants of ADORA2A and GRK5 Genes modulate Susceptibility of Malaria in a South Indian Population”
 6th Annual KSTA Conference: Science and Technology for Promoting Innovative Research and Development held at Christ University, Bangalore, 20-21 December, 2013

2014 – International (14)

Papers/Talks

1. Mallika Priya, Chandra S, Satish Rao BS, Ray S, Shetty P, Mathew S, Mahato KK
 “Photoacoustic spectroscopy based evaluation of breast cancer condition, Diagnosis and Treatment of Diseases in the Breast and Reproductive System”
 ‘SPIE Photonics West BiOS’ held during February 7-12, 2015 San Francisco, California, United States.
2. Joshi MB, Venu S, K. Satyamoorthy.
 Context dependent regulation of PEPCK isoform genes by RNA stability and DNA promoter methylation in human cells.
 Mitochondrial Biology: from Molecules to Disease and 4th Annual Conference of the Society for Mitochondrial Research and Medicine (SMRM), Manipal. December 8-9, 2014
3. Phani NM, Bellampalli R, Adhikari P, Nagri SK, Sc DS, Gopinath PM, Satyamoorthy K, Padmalatha Rai S
 Population specific risk association of potassium channel gene (*KCNJ11*) polymorphisms for type 2 diabetes.
 International Conference of Human Genetics and 39th Annual conference of Indian Society of Human Genetics (ISHG) Ahmedabad. January 22–25, 2014

Posters

4. Joshi MB, Pai S, Kotambail A, Sharma PSVN, Satyamoorthy K.
 “Investigation of Plasma Metabolomics of Bipolar Disorder Patients”

- Indo-US symposium on Mass spectrometry based metabolomics in disease biology, Trivandrum. January 2014.
5. Balakrishnan A, Satyamoorthy K, Joshi MB.
 “Role of IL-6/JAK/STAT pathway in inducing vascular insulin resistance”
 International Conference on Human Genetics and 39th Annual Meeting of the Indian Society of Human Genetics (ISHG), Ahmedabad. January 23-25, 2014.
 6. Venu S, Sinha S, Das B, Joshi MB, Satyamoorthy K.
 “Genetic and Epigenetic Regulation of Human PEPCCK Isoforms”
 International Conference on Human Genetics and 39th Annual Meeting of the Indian Society of Human Genetics (ISHG), Ahmedabad. January 23-25, 2014
 7. Balakrishnan A, Satyamoorthy K, Joshi MB.
 “Inflammation induced epigenetic changes in endothelial cells: implications in metabolic syndrome”
 Joint IUBMB-RCB Advanced School-2014, Gurgaon. November 24-29, 2014.
 8. Venu S, Joshi MB, Das B, Satyamoorthy K.
 “Interplay between Phosphoenolpyruvate Carboxykinase isoforms in maintaining glucose homeostasis as a prosurvival effect”
 Mitochondrial Biology: from Molecules to Disease and 4th Annual Conference of the Society for Mitochondrial Research and Medicine (SMRM), Manipal. December 8-9, 2014.
 9. Ravishankara, Shreeshakala, Padmalatha Rai S, Gopinath PM, Satyamoorthy K.
 “Modulation of 5-Fluorouracil cytotoxicity due to intracellular folate deficiency under the influence of folate metabolism gene polymorphisms”
 10th Indo-Australian Conference on Biotechnology-Epithelial Development & Disease-New Frontiers & Therapies held at Manipal. April 11-13, 2014
 10. Ravishankara, Shreeshakala, Padmalatha Rai S, Keerthana Prasad, Deepthi C, Gopinath PM, Satyamoorthy K
 “Development of allele specific hybridization assay and computer aided tool for detection of genetic variations in folate pathway genes”
 International Conference on Human Genetics and 39th Annual Meeting of Indian Society of Human Genetics held at Ahmadabad, India. January 22-25, 2014
 11. Phani NM, Bellampalli R, Adhikari P, Nagri SK, D’Souza S, Gopinath PM, Satyamoorthy K, Padmalatha Rai S
 “Impact of KCNJ11, TCF7L2, SLC30A8, IGF2BP2, PPARG, SLC47A1, STK11, HHEX, KCNQ1, CDKAL1, FTO, CYP2C9, ADIPOQ, CAPN10 Gene Polymorphisms on Risk of Type 2 Diabetes and Therapeutic Response to Sulfonylurea and Metformin Therapy”
 International conference of human genetics and 39th Annual conference of Indian Society of Human Genetics (ISHG), Ahmedabad January 22–25, 2014 (**Best poster award**)

12. Rupal G, Sanjay ER, Prabhu V, Mahato KK, Nagendra P, Poornima P, Shashikala T, Vidhu SB, Muthusamy A. 2014.
“In vivo and in vitro responses of brinjal (*Solanum melongena* L.) var. Mattu Gulla to He-Ne laser”
International Symposium-Trends in Plant Science Research, Centenary Celebrations, Department of Botany, University of Calcutta, February 15-16, 2014. P. 5
13. Mallya S. et al. 2014.
“Scavenging Small RNA-Seq Data to Predict Mitochondrial Encoded miRNA”
International Conference on Computational Methods in Engineering and Health Sciences (ICCMEH-2014) held at Manipal University, Manipal.
14. Smriti S, Saadi A, Ramamurthy B, Shukla A, Satyamoorthy K, Girisha KM
“Evaluation of multiplex ligation dependent probe amplification (MLPA) for diagnosis and carrier detection in families with Dystrophinopathies”
Indo-US Symposium on Genomic Insights into Human Morphogenesis: Prenatal, Postnatal and Molecular Dymorphology. November 7-9, 2014; BM Birla Science Centre, Hyderabad India.

2014 – National: 14

Papers

1. **Phani NM**, Bellampalli R, Adhikari P, Nagri SK, D’Souza S, Gopinath PM, Satyamoorthy K, Padmalatha Rai S.
Genetic risk assessment of *KCNJ11* and *PPARG* gene polymorphisms on type 2 diabetes in South-Asian population: A case-control and Meta-Analysis approach.
Manipal University research colloquium at Manipal University on April 11-12, 2014
2. Poornima P, Nitika L, **Muthusamy A**, Shama Prasada K, Sanjay ER, Ravishankara B, Shashikala T, Vidhu SB, Satyamoorthy K.
Impact of 5-azacytidine on *in vitro* seed germination, growth and DNA Methylation patterns of Ashwagandha [*Withania somnifera* (L.) Dunal]
National Conference on Recent Trends in Bioprospecting of Plants, Department of Plant Science, Bharathidasan University, Tamil Nadu on March 28-29, 2014.

Posters

3. Vijendra Prabhu, Satish Rao BS, Mahato KK
Action of Red Laser Light Irradiation on Cellular Parameters in Wounded Human Skin Fibroblasts
DAE-BRNS National Laser Symposium (NLS-22), Department of Atomic and Molecular Physics, MIT Manipal, January 8-11, 2014.
4. Vijendra Prabhu, Acharya A, Satish Rao BS, Bharath HR, Mahato KK
Laser induced autofluorescence studies of wound granulation tissues from non-healing wounds- A clinical study

- DAE-BRNS National Laser Symposium (NLS-22), Department of Atomic and Molecular Physics, MIT Manipal, January 8-11, 2014.
5. Mallika Priya, Satish Rao BS, Mahato KK.
Prognostic Potential of Photoacoustic Spectroscopy in Breast Tumor Development.
DAE-BRNS National Laser Symposium (NLS-22), Department of Atomic and Molecular Physics, MIT Manipal, January 8-11, 2014.
 6. Manjunath S, Satish Rao BS, Satyamoorthy K, Mahato KK
Understanding the Footsteps of protein unfolding by Laser Induced Autofluorescence.
DAE-BRNS National Laser Symposium (NLS-22), Department of Atomic and Molecular Physics, MIT Manipal, January 8-11, 2014.
 7. Mallika Priya, Satish Rao BS, Ray S, Shetty P, Mathew S, Mahato KK
Pulsed laser induced photoacoustic spectroscopy in discriminating normal from breast cancer subject.
DAE-BRNS National Laser Symposium (NLS-23) held at Department of Physics, Sri Venkateswara University, Tirupati, December 3-6, 2014.
 8. Manjunath S, Satish Rao BS, Satyamoorthy K, Mahato KK
Autofluorescence Based Protein Detection in SDS-TCEP PAGE.
DAE-BRNS National Laser Symposium (NLS-23), Department of Physics, Shri Venkateshwara University, Tirupati, December 3-6, 2014.
 9. Bharath HR, Prabhu V, Chandra S, Satish Rao BS, Mahato KK.
Influence of low power lasers in tissue regeneration of burn injuries in swiss albino mice.
DAE-BRNS National Laser Symposium (NLS-23), Department of Physics, Shri Venkateshwara University, Tirupati, December 3-6, 2014.
 10. Phani NM, Bellampalli R, Adhikari P, Nagri SK, D'Souza S, Gopinath PM, Satyamoorthy K, Padmalatha Rai S
Integrated Analysis of Common Genetic Variants Can Determine Significant Risk of Type 2 Diabetes and Therapeutic Response to Metformin and Sulfonylurea Therapy.
Joint IUBMB-RCB Advanced School-2014. Diabetes and Metabolic syndrome. Networks, Crosstalks and Intervention. November 24-29, 2014
 11. Muthusamy A, Sanjay ER, Nagendra P, Poornima P, Rupal G, Shashikala T, Radhakrishna Rao M, Vidhu SB, Satyamoorthy K.
Modulation of bioactive compounds in *Phyllanthus* species through *in vitro* culture and somaclonal variations.
Manipal Research Colloquium, Directorate of Research (Health Science), Manipal University, Manipal – 576104, Karnataka April 11-12, 2014.
 12. Poornima P, A Muthusamy, V Prabhu, KK Mahato, Sanjay ER, Nagendra P, Shashikala T, Vidhu SB, Satyamoorthy K.
Establishment of protocol for organogenesis and He-Ne laser induced variations in *Withania somnifera* L. for enhanced bioactive molecules

Manipal Research Colloquium, Directorate of Research (Health Science), Manipal University, Manipal, Karnataka April 11-12, 2014.

13. Murali TS, Hitendra Negi.

Molecular diversity and species delimitation in endophytic *Colletotrichum* isolates
National Conference on Fungal Diversity and Biotechnology for Food and Chemicals.
Annamalai University, Chidambaram, Tamil Nadu, February 27-28, 2014

14. Hitendra Negi, Deepika V Bhat, Murali TS, Satyamoorthy K.

Secretome analysis of fungal endophytes for bioactive potential
National Conference on Fungal Diversity and Biotechnology for Food and Chemicals.
Annamalai University, Chidambaram, Tamil Nadu, February 27-28, 2014

* **Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)**

* **Citation Index** – range / average - NA

* **SNIP** - Nil

* **SJR** - Nil

* **Impact Factor** – range / average - 4

* **h-index**– Nil

23. Details of patents and income generated (2012-14)

#	Title	Application No.	Status	Date of Filing	Contributors
1	Helium-Neon laser irradiation enhances germination of eggplant seeds (<i>Solanum melongena</i> L.) var. Mattu Gulla	1504/CHE/2012	Provisional	16/04/2012	Muthusamy A, Mahato KK, Satyamoorthy K, Gopinath PM, Radhakrishna Rao M, Vidhu SB, Vijendra Prabhu, Pratibha PK
2	Highly sensitive method for the detection and control of <i>Plasmodium falciparum</i> in humans	1263/CHE/2012	Provisional	30/03/2012	Satyamoorthy K, Saadi Abdul Vahab, H Manjunath Hande, Sydney D'Souza, Himanshu Gupta
3	Autofluorescence based technology for non-invasive collagen detection	4773/CHE/2012	Provisional	15/11/2012	Mahato KK, Vijendra Prabhu, Satish Rao BS, Subash Chandra, Satyamoorthy K, Pramod Kumar

4	Highly sensitive method for the detection and control of Plasmodium falciparum and Plasmodium vivax	2528/CHE/2013	Complete Filed	11/06/2013	Satyamoorthy K, Saadi Abdul Vahab, Vasudevan TG, Shikha Srivatsava, H Manjunath Hande, Sydney D'Souza, Himanshu Gupta
5	Novel sodium channel blocker as an anticancer agent from sea anemone Actinia equina extract	5283/CHE/2013	Provisional	18/11/2013	Satyamoorthy K, Raghavendra Upadhyya, Sneha S Shetty, Indrani Karunasagar, Vasudevan TG

Income Generated: Nil

24. Areas of consultancy and income generated - Nil

25. Faculty selected nationally/ internationally to visit other laboratories in India and abroad

Dr K Satyamoorthy

- Visited Maastricht University, The Netherlands during November 10 – 13, 2014.
- Visited Queensland University, Brisbane, Federation University, Melbourne, and Flinders University, Adelaide, Australia during October 11-20, 2014.
- Visited Archamps Technoploe, Joseph Fourier University, France during August 27 - September 08, 2013.
- Visited Binus University, Indonesia during June 28 - July 05, 2013
- Visited Burnet Institute, Melbourne, Australia during April 06-09, 2013
- Visited Flinders University, Australia during April 09-11, 2013
- Visited European Parliament, Brussels for Global Challenges Global Collaboration Conference during March 07-09, 2013
- Visited National Institute of Radiological Sciences at Chiba, National Institute of Advanced Industrial Science & Technology at Ibaraki and Graduate School of Interdisciplinary New Science at Toyo University, Japan during December 02-09, 2012
- Visited Berlin, Germany for XX Biennial meeting of the International Society for Eye Research during July 20-26, 2012.
- Visited Addis Ababa, Ethiopia for 13th World Congress on Public Health held in Addis Ababa during April 21-27, 2012.
- Visited Rome, Italy for GRaPH-International Symposium during April 20-27, 2012.

Dr. Padmalatha Rai S

Visited University of Nottingham, UK in connection with Manipal-Nottingham joint Ph D programme in Life Sciences during November 11-14, 2013, along with Dr Krishna K Mahato, Professor, Biophysics Unit, School of Life Sciences

Dr. Roopa Nayak

Selected as a summer research fellow during June - July 2009 sponsored by IASc (Bangalore),

INSA (New Delhi) and NASI (Allahabad) and worked under the guidance of Dr Satish Patil, SSCU, IISc, Bangalore

Dr. Manjunath Joshi

Erasmus Mundus Fellowship to attend and deliver lectures at Biohealth computing Erasmus Mundus Program at University Joseph Fourier, Grenoble, France from August 28 to September 7, 2013.

Dr. Vidhu Sankar Babu

1. Attended CIMAP Winter School Hands on training on Molecular Biology programme at CIMAP Lucknow, December 15 -31, 2003
2. Attended C-CAMP hands on Basic Flow Cytometry Course from December 17 - 21, 2009 at National Centre for Biological Sciences, TIFR, Bangalore, Karnataka, India
3. Attended Refresher course in Plant Taxonomy from December 6 - 10, 2010 at Tropical Botanic Garden and Research Institute, Pacha, Palode, Thiruvananthapuram, Kerala, India

Dr. Shama Prasada K

Visited National Institute of Radiological Sciences (NIRIS), Chiba, Japan from March 8-16, 2014

26. Faculty serving in

a) National committees b) International committees c) Editorial Boards d) any other (please specify)

Dr K Satyamoorthy

a) National committees

- President, Society for Mitochondrial Research and Medicine – India
- Vice President, Society of Biological Chemists - India
- Life Member, Indian Society of Human Genetics
- Life Membership of Society for Biotechnologists (India), Cochin
- Member, Biotechnology Consortium of India Ltd.
- Member of the Expert group on Translational Research for Products and Processes from Medicinal and Aromatic Plants of the DBT, GOI, New Delhi
- Member of the Expert Group on the Pharmacogenomics of the ICMR, GOI, New Delhi
- Member of the Scientific Advisory Board of Central Council for Research in Ayurvedic Sciences (CCRAS), GOI, New Delhi.
- Member of the Academic Committee of the Centre for DNA Fingerprinting and Diagnostics (CDFD), Hyderabad
- Member of the Task Force Committee, Directorate of Industries, Trade & Commerce, Govt of Goa.
- Member of the Research Advisory Board of the Aravind Medical Research Foundation, Madurai.

b) International committees

- Member American Association for Cancer Research since 1996

c) Editorial Boards

- Editorial Board Member of “Cancer Biology and Therapy”, “Public Health and Genomics” and The Scientific World Journal”
- Editorial Board Member of International Journal of Human Genetics

Dr PM Gopinath

Editorial Board Member of International Journal of Human Genetics

Dr Padmalatha Rai

Reviewer for Medicinal Chemistry Research Journal

Dr Manjunath B Joshi

Editorial Board Member of Scientific World Journal (Cell Biology)

Reviewer for FASEB Journal, FEBS Letters, Cancer Chemotherapy and Pharmacology, International Journal of Biomedicine Science, Nutrition, Metabolism and Cardiovascular Diseases

Life member of Society of biological chemistry, India

Life member of Society of mitochondrial research and medicine, India

Dr Sanjiban Chakrabarty

- Executive member of the Society for Mitochondrial Research and Medicine (SMRM)-India
- Life member of European Association for Cancer Research
- Life member of Society of Biological Chemist, India
- Life member of the Society for Mitochondrial Research and Medicine (SMRM)-India
- Editorial Manager, Public Health Genomics Journal, Karger AG.

Dr. Herman D’Souza

Member of Association of Clinical Biochemists of India (ACBI) and Society of Biological Chemists of India (SBCI)

Dr. A Muthusamy

Memberships in Scientific Societies:

Indian Society of Genetics & Plant Breeding (Life Member),
Society of Biological Chemists (India) (Life Member), IISC, Bangalore
Swamy Botanical Club (Life Member), Bharathidasan University, India.
Society for Mitochondrial Research and Medicine (Life Membership)
International Cotton Genome Initiative [ICGI]

Ad hoc reviewer for the following journals (International & National):

Photochemistry & Photobiology – B, Australian Journal of Crop Science,
Biologia (Springer), Journal of Plant Biochemistry & Biotechnology,
PNAS-India. Sec.B: Biol. Sci. Journal of Tropical Agriculture,
Indian Journal of Agricultural Sciences, Journal of Swamy Botanical Club and

Plant Omics Journal, J. Forestry Research and Molecular Biotechnology (Springer), Scientia Horticulturae and Comptes rendus Biologies

Dr. Shama Prasada K

Editorial Manager, Public Health Genomics Journal

Others (membership)

- Life member of Society of Biological Chemists, India
- Life member of Society for Mitochondrial Research and Medicine-India

Dr. Bobby Paul

- Life member of Society of Biological Chemists, India

27. Faculty recharging strategies

All faculty members undergo pedagogy training when they join the department. They are also encouraged to attend conferences, workshops, training programmes to rejuvenate and recharge themselves.

28. Student projects

- percentage of students who have done in-house projects including inter-departmental projects – 70%
- percentage of students doing projects in collaboration with other universities / industry / institute – 30%

29. Awards / recognitions received at the national and international level by

- Faculty
- Doctoral / post-doctoral fellows
- Students

Awards - faculty

Prof K Satyamoorthy

- Honorary Professor, School of Chemistry and Molecular Biosciences, University of Queensland, Brisbane, Australia
- Erasmus Mundus Professor, France, EU – 2011 – 2014.
- Dr. P.A.Kurup Memorial Endowment Award – 2013
- Research Scientist, Wistar Institute, Philadelphia – 2003
- Visiting Professor, UNSW, Sydney, Australia – 2008
- Dr TMA Pai Endowment Chair in Translational Genome Science

- Wesley Fellowship, Kansas, USA – 1988
- Birla Fellowship, Mumbai – 1987
- Lady Tata Fellowship, Mumbai – 1985

Prof PM Gopinath

- GSF prize awarded by the Council for Radiation and Environmental Research, Germany.
- Fellow, Alexander von Humboldt Foundation, Germany
- Expert in the SAP (Special Assistance Programme) of UGC, New Delhi. Guru Nanak Dev University, Amritsar
- Received Dr. L. D. Sanghvi Oration Award, given once in two years, by the Indian Society of Human Genetics.

Dr. Sanjiban Chakrabarty

- Best Research Paper at Manipal Research Colloquium 2014

Dr. Manjunath Joshi

- Travel award by European society of cardiology for oral presentation at European Society of cardiology meeting, Vienna, September 2007
- Best poster award: Indo-US symposium on “Mass spectrometry based metabolomics in disease biology” Trivandrum, India. January 2014.

Dr. Vidhu Sankar Babu

- Best Paper Presentation award at the National Symposium on Innovative and Modern Technologies for Agricultural Productivity, Food Security and Environmental Management held at Saffron Boutique Hotel, Mangalore, Karnataka during July 22-23, 2011 for the paper entitled “*Spathoglottis plicata* - An orchid with superior decarboxylation efficiency”
- Best Oral Presentation Award in 8th National Symposium “Noni for Sustainable Wellness” organized by International Society for Noni Science and World Noni Research Foundation held at GKVK Campus, University of Agricultural Sciences, Bangalore, Karnataka on October 29-30, 2013 for the paper entitled “Time Reliant Functional Assays substantiate Chemopreventive & Radioprotective prospective of *Morinda citrifolia* L. (Noni) Fruit Extract”
- CSIR-NET (2002 and 2006)
- Fast Track Young Scientist Grant from Science and Engineering Research Board (SERB), Department of Science and Technology, Government of India- 2012-2015

Dr. A Muthusamy

- 2nd Prize in Oral Presentation of the paper at ISPP Zonal Conference on Plant Physiology & Crop Improvement at SBST, VIT University, Vellore, TN on 22nd October 2010
- Overseas Travel and Perdiem Award: The Council of Scientific and Industrial Research (CSIR), and Indian National Science Academy [INSA], Govt. of India, New Delhi were awarded Full Travel Grant and Perdiem respectively for the participation and presentation of a paper at 3rd International Cotton Genome Initiative [ICGI] Workshop held at Nanjing Agricultural University, Nanjing, China during 3-6th June 2002.

Dr. Shama Prasada K

- International travel fellowship by DBT, Government of India to attend 10th Asia Pacific Conference on Human Genetics, Held at Kuala Lumpur, Malaysia, 5-8, December, 2012
- Certificate of appreciation for Young Investigator Award at 10th APCHG, December 5-8, 2012, Kuala Lumpur, Malaysia

Dr. Bobby Paul

- Received best paper award in International Conference on Computational Methods in Engineering and Health Sciences, Organized by the Director research, Manipal University, 17-19 December, 2014.

Dr. T.S. Murali

- Awarded DST-SERB sponsored Fast Track grant for Young Scientists in 2010

Mr. Sandeep Mallya

- Won the 3rd prize in the poster competition in the Indo-US Bilateral Workshops & Conferences on "Big Data Analysis and Translation in Disease Biology" held at New Delhi during January 18-22, 2015.

Awards - scholars/students

- **Mr Harish Rotti** (PhD scholar) – INSPIRE fellowship by DST, Government of India, 2010-2013
- **Ms Kavitha** (PhD scholar) – INSPIRE fellowship by DST, Government of India, 2011-2013
- **Ms Kavitha** (PhD scholar) - Best poster award for “Genotyping of *Staphylococcus aureus* isolates from diabetic foot ulcer” at 3rd World Congress Conference on Diabetes & Metabolism in Hyderabad in 2012
- **Mr Ashok Kumar** (PhD scholar) - Best poster award for the poster entitled ‘ γ -radiation induced methylation and expression profiles in human cancer cell lines’ at the International Conference on Cancer Prevention, Diagnosis and Treatment held at Jaipur, 21-22 January 2012.
- **Mr MN Phani** (PhD scholar) - Best poster award for poster “Association of genetic variants in *KCNJ11*, *TCF7L2*, *SLC30A8* and *IGF2BP2* genes for type 2 diabetes and response to Sulfonylurea and Metformin in South Indians” (NM Phani, PS Rai, P Adhikari, SK Nagri, SC D’Souza, K Satyamoorthy) at 3rd World Congress on Diabetes and Metabolism, Hyderabad (India), 24-26 September 2012.
- **Mr MN Phani** (PhD scholar) - Best poster award for “Impact of *KCNJ11*, *TCF7L2*, *SLC30A8*, *IGF2BP2*, *PPARG*, *SLC47A1*, *STK11*, *HHEX*, *KCNQ1*, *CDKALI*, *FTO*, *CYP2C9*, *ADIPOQ*, *CAPN10* Gene Polymorphisms on Risk of Type 2 Diabetes and Therapeutic Response to Sulfonylurea and Metformin Therapy” (NM Phani, PS Rai, P Adhikari, SK Nagri, SC D’Souza, K Satyamoorthy) at International conference of human genetics and 39th Annual conference of Indian Society of Human Genetics (ISHG) Ahmedabad (India) 22–25 January, 2014.
- **Mr MN Phani** (PhD scholar) - Certificate of Appreciation for the award of young scientist for “Population specific risk association of potassium channel gene (*KCNJ11*) polymorphisms for type 2 diabetes at International conference of human genetics and 39th Annual conference of Indian Society of Human Genetics (ISHG) Ahmadabad (India) 22–25 January, 2014.
- **Mr Ravishankara B** (PhD scholar) - Young scientist travel award, Development of Allele Specific Hybridization Assay and Computer Aided Tool for Detection of Genetic Variations in Folate Pathway Genes at International conference of human genetics and 39th Annual conference of Indian Society of Human Genetics (ISHG) Ahmadabad (India) 22–25 January, 2014.
- **Mr Rohit Bharath & Ms Avika Roy** (MSc Medical Biotechnology) – received Erasmus

Mundus scholarship for the BioHealth Computing program at Joseph Fourier University, Grenoble for the year 2013-2014.

- **Mr Pratik Vyas & Ms Prakriti Haldia** (MSc Molecular Biology and Human Genetics) – received Erasmus Mundus scholarship for the BioHealth Computing program at Joseph Fourier University, Grenoble for the year 2013-2014.
- **Ms Apoorva Jnana & Ms Surabhi Mishra** (MSc Medical Biotechnology) – received Erasmus Mundus scholarship for the BioHealth Computing program at Joseph Fourier University, Grenoble for the year 2014-2015.
- **Mr Arjuna Sreenivasan** (MSc Bioinformatics) – received PreDoc scholarship of Joseph Fourier University, Grenoble for the year 2014-2015.
- **Ms Aarushi Jain** (BSc Biotechnology) – received scholarship for semester studies at Flinders University, Australia during 2013
- **Mr Anant Kakkar & Mr Joel Andrade** (BSc Biotechnology) – received scholarship for semester studies at Flinders University, Australia during 2014

30. Seminars/Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

2012

Refresher Course on Biotechnology and Molecular Biology Techniques, Indo-US Symposium on Brain Disorders, SBCI-Manipal Chapter

Funding Agencies
National Academy of Science, Bangalore
DBT, New Delhi
Indian National Science Academy, New Delhi
INDO-US Science and Technology Forum
Society of Biological Chemists, India

Participants/Resource Persons

Refresher Course	Indo-US Symposium
Dr. J Nagaraju	Dr. SS Agarwal
Dr. Utpal Nath	Dr. J Gleeson
Dr. DN Rao	Dr. IC Verma
Dr. P Kondaiah	Dr. JM Graham Jr
Dr. V Nagaraja	Dr. JC Carey
Dr. K Thangaraj	Dr. R Kukreti
Dr. K Ramnarayan	Dr. M Muranjan
Dr. Usha Vijayaraghavan	Dr. K Thangaraj
Dr. I Karunasagar	Dr. JA Golden
Dr. K Somasundaram	Dr. A Paciorowski
Dr. KP Gopinathan	Dr. M Kabra
Dr. K Muniyappa	Dr. EH Sherr
SBCI-Manipal Chapter	Dr. KM Girisha
Dr. V Nagaraja	Dr. SR Phadke
Dr. Ashok Prabhu	Dr. G Mirzaa

Dr. G Sathisha	Dr. A Dalal
Dr. BS Satish Rao	Dr. S Danda
Dr. R Somasundaram	Dr. N Udupa
Dr. P Rao	Dr. PM Gopinath
Dr. YM Shivarajashankara	Dr. S Ali

2013

Refreshers Course for teachers on 'Modern Genetics: Concepts and Practice', Symposium and Workshop on "Epigenomics and Cancer Informatics", Annual Meeting of Coastal Karnataka Chapter of Society of Biological Chemists India (SBCI)

Funding Agencies
Indian Academy of Science, Bangalore
Indian National Science Academy, New Delhi
National Academy of Science, Allahabad
Society of Biological Chemists, India
Indian Council of Medical Research (ICMR), New Delhi
Medical Council of India (MCI), New Delhi
National Centre for Cell Sciences, Pune

Participants/Resource Persons

Symposium and Workshop	Refresher Course
Dr. Sanjeev Galande	Dr. D.N. Rao
Dr. Sharmila Bapat	Dr. R. Mukhopadhyaya
Dr. Lekha Dinesh Kumar	Dr. V. Nagaraja
Dr. Angela Brand	Dr. K. P. Gopinathan
Dr. Helmut Brand	Dr. Jayarama S. Kadandale
Dr. Kshitish Acharya K	Dr. P. Kondaiah
Dr. Tapas K. Kundu	Dr. P N Rangarajan
Dr. Randeep Singh	Dr. Mitesh Shetty
Dr. Raj P. Warriar	Dr. K. Thangaraj
SBCI - Coastal Karnataka Chapter	Dr. S.P.Thyagarajan
Dr. Umesh Varshney	
Dr. Kumar Somasundaram B.	
Dr. Sathees C. Raghavan	
Dr. Rajeshwar Achur	
Dr. Chenne Gowda	

2014

10th Indo Australian Workshop on Biotechnology – Epithelial Development & Disease, SMRM Conference on "Mitochondrial Biology: from Molecules to Disease, Symposium on Human Cytogenetics and Genetic Toxicology, Refresher Course on "Bioinformatics in Modern Biology", Society of Biological Chemists (India) Coastal Karnataka Chapter

Funding Agencies
National Academy of Science, Bangalore

Indian National Science Academy, New Delhi
National Science Academy, Allahabad
Society of Biological Chemists, India
Department of Biotechnology (DBT), New Delhi
Council of Scientific & Industrial Research (CSIR), New Delhi
Indian Council of Medical Research (ICMR), New Delhi
Medical Council of India (MCI), New Delhi

Participants/Resource Persons

10 th Indo-Australian Workshop	SMRM Conference
Dr. Pawan Kumar Gupta	Dr. Lalji Singh
Dr. Prabha Nair	Dr. Satish P. RamachandraRao
Dr. Sudhir Krishna	Dr. Upender Manne
Dr. Rajesh Gokhale	Dr. Anshu Bharadwaj
Dr. Jomon Joseph	Dr. Josef Finsterer
Dr. M. R. Pillai	Dr. Gayathri N
Dr. Geeta Vemuganti	Dr. Aruna Gowda
Dr. P. Dasaradhi	Dr. Suresh Mishra
Dr. D. Balasubramanian	Dr. Naresh Babu V. Sepuri
Dr. M. Panicker	Dr. Kumarasamy Thangaraj
Dr. Polani Sheshagiri	Dr. Mercy P. Davidson
Dr. Mohan Wani	Dr. Keshav K Singh
Dr. A. A. Hardikar	Dr. Amutha Boominathan
Dr. Maneesha Inamdar	Dr. Debkumar Pain
Dr. N. S. Raviraj	Dr. Sundaresan Periasamy
Dr. Geeta Jotwani	Dr. Bruce Cohen
Dr. Alok Srivastava	Dr. Rana Singh
Dr. K. Dharmalingam	Dr. Ilora Ghosh
Dr. Ramesh Bhonde	
Dr. Zee Upton	Refresher Course Bioinformatics
Dr. Pritinder Kaur	Dr. N. Mukunda
Dr. Allison Cowin	Mr. G. Madhavan
Dr. Erik Thomson	Dr. K. Guruprasad
Dr. Mahendra Rao	Dr. K. Acharya
Dr. Jane Visidar	Dr. Anantharamanan
Dr. Jian Li	Dr. R. Manimekalai
Dr. Roger Nation	Dr. Renu Durairaj
Dr. Joe Rothnagel	Dr. Sharmila Mande
Dr. David Leavesley	Dr. Shekar Mande
Dr. Fiona Wood	Dr. K. Thangaraj
Dr. Ken Beagley	Dr. V. Nagaraja
Dr. Mark Kendall	
Dr. Robin Marks	Human Cytogenetics Symposium
Dr. Richard Kefford	Dr. P.C. Kesavan
Dr. Nick Hayward	Dr. N. Jaya Shetty
Dr. A. A. Hardikar	Dr. Suresh Abraham
	Dr. S.T. Santhiya
SBCI – Coastal Karnataka Chapter	Dr. Chandra R. Samuel
Dr. V. Nagaraja	Dr. K. Thangaraj
Dr. Umesh Varshney	
Dr. D.N. Rao	Flow Cytometry Workshop

Dr. Indrani Karunasagar	Dr. Friedrich Otto
Dr. K. Shamaprasada	Dr. Venkatachallam
Dr. P.Kondaiah	Dr. H. Krishnamoorthy
Dr. K. Somasundaram	
Dr. K.R.Chandrashekar	
Dr. Anirban Chakraborty	
Dr. Subrahmanyam Gangavarapu	
Mr. Kamalesh Mumbrekar	
Mr. Himanshu Gupta	

31. Code of ethics for research followed by the departments

Research in the department of biotechnology follows universally practised ethics. Work is carried out to resolve issues in human health and the environment. The Department does not discriminate any individual based on their gender, religion or race. Researchers are encouraged to have an open mind-set in their scientific and professional activities, with ideas and results that are original, which do not infringe upon the rights of others. Animal studies are conducted according to the UGC guidelines, through the Ethical Committee of the Manipal University, ensuring safety of all parties concerned. All laboratories come under the ISO certification for quality and environment management and the researchers in those laboratories are encouraged to strictly follow the guidelines.

32. Student profile course-wise: [Details for 2014-15]

#	Name of the Course (refer to question no. 4)	Applications received	Selected		Pass percentage	
			Male	Female	Male	Female
1	BSc Biotechnology	575	13	27	67	100
2	MSc Medical Biotechnology	186	5	9	50	100
3	MSc Molecular Biology and Human Genetics		7	12	100	89
4	MSc Bioinformatics	11	5	4	100	100
5	PG Diploma in Cellular and Molecular Diagnostics	17	3	14	100	100
6	Certificate Course in Bioinformatics	10	6	4	100	100
7	PhD	96	3	3	In Progress	

33. Diversity of students

#	Name of the Course (refer to question no. 4)	% of students from the same University	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
1	BSc Biotechnology	-	23	73	4
2	MSc Medical Biotechnology	46	21	33	0
3	MSc Molecular Biology and Human	11	57	32	-

#	Name of the Course (refer to question no. 4)	% of students from the same University	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
	Genetics				
4	MSc Bioinformatics	-	33	67	-
5	PG Diploma in Cellular and Molecular Diagnostics	-	41	59	-

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

(Based on information available)

GATE – 4

CSIR-JRF/NET – 17

35. Student progression

Student progression	Percentage against enrolled
UG to PG	80
PG to MPhil	0
PG to PhD	50
PhD to Post-Doctoral	10
Employed	60
Campus selection	
Other than campus recruitment	
Entrepreneurs	

36. Diversity of staff

Percentage of faculty members who are graduates	
of the same University	16
from other universities within the State	42
from universities from other States	34
from universities outside the country	8

37. Number of faculty who were awarded PhD, DSc and DLitt during the assessment period

Details	2012	2013	2014
Number of faculty awarded PhD	1	0	0

38. Present details of infrastructural facilities with regard to

- a) Library – Departmental Library with over 200 subject-specific books
- b) Internet facilities for staff and students – available, 1 GB LAN, Wi-Fi
- c) Total number of class rooms - six
- d) Class rooms with ICT facility
- e) Students’ laboratories - four
- f) Research laboratories – twenty one
 1. **Molecular biology laboratory:** Facilities necessary for all molecular biology related work is available in four separate laboratories. Laboratory with routine instrumentations such as PCRs, Gel doc systems, western blots, electrophoresis units etc.
 2. **Mammalian cell culture laboratory:** There are half a dozen fully equipped with microscopes (including fluorescence) in tissue culture laboratories available for research, diagnostic and teaching purposes.
 3. **Microarray laboratory:** Agilent microarray 2 micron scanner with bioanalyser and hybridisation ovens to undertake microarray array analysis for high throughput gene expression, epigenetics and SNP analysis
 4. **DNA Sequencing laboratory:** DNA sequencer ABI-3130 Genetic Analyser with 16 capillaries for sequence and fragment analysis purposes.
 5. **Flow Cytometry laboratory:** Flow cytometers (BD FACS Calibur) are available for Teaching, Research and Diagnostic purposes.
 6. **Mass Spectrometry laboratory:** ESI-QTOF with HPLC for proteomics analysis.
 7. **Imaging laboratory:** Fluorescent scanner and high resolution image capture microscopy.
 8. **Microbiology laboratory:** State of the art microbiology laboratory
 9. **Atomic Absorption spectrometry laboratory:** Procedures for elemental analysis of clinical, environmental and biological samples are available
 10. **HPLC Laboratory:** Three separate HPLC machines with the detectors such as UV, visible, fluorescence, electrochemical and PD are available.
 11. **Radioisotope laboratory:** Separate radioactive material handling facility with liquid scintillation counters, scanners etc. are available.
 12. **Biophysics laboratory:** The Biophysics laboratory conducts experiments on biological/ pre-clinical/ clinical samples applying Laser Induced Fluorescence and Photoacoustic Spectroscopy to evaluate their spectral information related to diseased and non-diseased conditions. Experiments of Low Level Laser Therapy (LLLT) for tissue regeneration are also conducted in this laboratory.
 13. **Common Instrumentation Facility:** It consists of large scale bacterial incubator/shaker, high speed and ultra high speed centrifuges, frozen and paraffin block preparation microtomes.
 14. **Tissue culture facility:** Well equipped tissue culture room for the maintenance of

human normal and tumour cell lines, mouse tumour cells lines, and repository for experimentation.

15. **Animal house facility:** The centralised, state-of-the-art, air-conditioned animal house with separate breeding, experimentation and sterilization rooms with relevant instrumentations. The facility mainly houses mice of various strains (Balb/c, Swiss albino, C57BL6) as well as rats.
16. **Animal tumour facility:** Routine transplantable tumour maintenance for experimentation in the form of both solid (fibrosarcoma and melanoma), ascities form (Ehrlich, P388, Daltons lymphoma etc.) and nude mouse facility for growing xenograft tumours.
17. **Irradiation facilities:** In-house: Faxitron CP160 X-ray machine
18. **Genetic toxicology and Analytical facility:** With fluorescence (Olympus, Carl Zeiss) & light microscopes and image analysis systems, spectrophotometers (Shimadzu) for routine biochemical and cytotoxicity assays
19. **Bioinformatics lab:** Well equipped Computers with Linux/Windows Operating System, and Sun Server system for data analysis (including microarray data) with a good storage capacity.
 - a. **Computer Lab:** Computers inbuilt with Linux (Ubuntu, CentOS) and Windows operating systems are dedicated for student purposes.
 - b. **Cluster facility:** To analyse bulk data generated from the genomic, proteomic platforms and to host in-house bioinformatics tools bioinformatics department has a cluster of SunFire X4100 servers.
 - c. **Manipal Computational Biology Interface (MCBI):** Bioinformatics department has developed an in-house tool which connects Life Science content management system (LS-CMS), Local Blast programs, Post-epigenomic Analysis Pipeline and Mass spectrometry search engines etc to analyse data locally. We use Python, Java, C++ as tool development programming and R, MatLab as statistical programming language.
20. **Plant Biotechnology lab:** Well-equipped culture room for the plant cell, tissue and organ culture for different experiments.
21. **Green House facility:** MLSC has state of the art independent green house of 40×80 feet in size for plant hardening of in vitro raised plantlets and for further experiments. Green house also has 100 important medicinal plants for research purpose.

39. List of doctoral, post-doctoral students and Research Associates

- a) from the host University

Doctoral Students

1. Bharath Prasad AS
2. Neetha John
3. Smitha Bhat

4. Samatha Bhat
5. Kavitha
6. Phani MN
7. Manjunath S
8. Chinchu Jayaprakash
9. Shubhankar Das
10. Bharath HR
11. Vinay Koshy Varghese
12. Vaibhav Shukla
13. Swathy PS
14. Melisa Jovita Andrade
15. Mangala Hegde
16. Raghushaker

Research Fellows

1. Rayzel Candida Fernandes
2. Rohit Bharath
3. Akshaykumar A Nayak
4. Supriti Ghosh

b) from other universities

Doctoral Students

1. Vishwanatha
2. Kamalesh D Mumbrekar
3. Ravishankar
4. Anantha Padmanabha
5. Venu S
6. Himanshu Gupta
7. Pushpendu Paladhi
8. Mallika Priya
9. Poornima Poojary
10. Balakrishnan A
11. Abitha Thomas
12. Yashvanthi Borkar
13. Raghu KS
14. Suma Prabhu
15. Deepika V Bhat
16. Monica Shirley Mani
17. Manik Vohra
18. Ipsita Pujary
19. Kiran KR
20. Manoj Bhat

Research Fellows

1. Vasudeep Shetty
2. Shreesha Bhat K
3. Shamprasad BR

40. Number of postgraduate students getting financial assistance from the University

23

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology. – Based on discussions in the Scientific Advisory Committee meetings, with research experts in academia and industry, combined with inputs from faculty, new programmes are developed. These developments are then further fine-tuned based on inputs during the Board of Study meetings before the new programme details are finalised.

42. Does the department obtain feedback from

a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

Yes, feedback on curriculum is obtained from faculty members during the various discussions that happen at SOLS. Based on the outcome of these discussions, necessary modifications are made in the teaching-learning-evaluation, subject to approval in the Board of Study meetings.

b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Yes. Based on the feedback, necessary curriculum changes, infrastructure developments and changes in teaching-learning methods are brought into the department

c. alumni and employers on the programmes offered and how does the department utilize the feedback?

Final year students from all courses provide online feedback to the University, the details of which are made available to SOLS, for further action where needed. Efforts are underway to formulate suitable method to obtain feedback from alumni.

43. List the distinguished alumni of the department (maximum 10)

Name (degree)	Credentials
Dr Chidananda (PhD)	Research Associate, Washington University, USA
Dr Raghu Radhakrishnan (PhD)	Professor, MCOBS, Manipal
Dr Satyajit Patra (PhD)	Asst. Professor, MUA, St. Kitts & Nevis
Dr Shamaprasad K (PhD)	Asst. Professor, SOLS, Manipal
Dr Roshan Mascarenhas (PhD)	Post-Doctoral Fellow, Ohio State University, USA
Ms Gayathri (MSc)	PhD graduate from University of California, USA
Ms Dhanya Nambiar (MSc)	Research Scholar, JNU, New Delhi (Fullbright Fellow)
Mr Sunil Kalmadi (MSc)	Post-Doctoral Fellow, NIMHANS, India
Ms Niyati Khetarpal (MSc)	PhD student, NII, New Delhi
Mr Vishal Hegde (MSc)	PhD student, University of Cologne, Germany
Mr Swapnil Mulekar (BSc)	Director and CEO, Mulekar HealthCare Pvt. Ltd.

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

Selected students participate in the leadership program initiative of the Manipal University. Students are also encouraged to participate in the various conferences/seminars/workshops conducted by the department (details given in q30 above), which include lectures and other interactive sessions with external subject experts. Students also have the opportunity to interact with several visiting scientists and other experts, who visit the campus regularly. These initiatives enrich the student experience.

45. List the teaching methods adopted by the faculty for different programmes.

Black/white board teaching, using MS-Power point presentations, audio-visual aids, lecturing, quizzes, pre-arranged and impromptu seminars, demonstrations etc.

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

Nil

47. Highlight the participation of students and faculty members in extension activities.

Student Council of SOLS, every year, takes part in social activities. It has contributed funds and several help in kind, by visiting orphanages and old-age homes in and around Udupi and Manipal. Some of the recent visits were to Asha Nilaya, a school for mentally-challenged special children; Ozanam, an old age home; Viswasada Mane Orphanage; Shirdi Sai Baba Cancer Hospital, Manipal.

They also organise food fest every year [titled ‘Bonheur Culinaire’ in 2009, ‘Ambrosia’ since then] open for everyone willing to enjoy the culinary delights that the students whip up from meagre resources and imagination.

Students have won several awards and accolades in various cultural fests and competitions held at the inter-collegiate competitions of the University, such as VERVE, REVELS, UTSAV etc. over the years

48. Give details of ‘beyond syllabus scholarly activities’ of the department.

The Student Council of SOLS conducts Prakaya (where minds meet) every year, wherein students from other colleges are given a platform to showcase their cultural and literary talents. This event helps in developing planning and organizational skills among the students of SOLS.

Students of SOLS conceived and organized a ‘Research Awareness Programme’ in 2009, to neighbouring high school students and elucidated the importance of scientific research in the development of a country, especially India.

Students also participated in quiz and poster competitions held at Manipal University. They also took part in the biotechnology poster presentation of BioBiz 2010 at Bangalore.

They regularly participate in National Biotechnology Symposium ‘Symbiot’ organized by constituent institutions of Manipal University.

They undertook a ‘Go Green’ campaign to plant saplings and a cleaning drive of the campus to promote environmental awareness and cleanliness, as part of the Swach Bharath call (2014). They participated in the Rashtriya Ekta Diwas, Maatrbhasha Diwas, and International Students Day celebrations by organising essay-writing, debates and drawing competitions.

Students Council (2014) published quarterly e-newsletter covering scientific research reports of current interest by the students. They set up a DebSoc and Model United Nations Clubs to promote healthy debate of concerned issues.

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

The institution is certified for quality and environmental management systems through ISO 9001:2008 and ISO 14001:2004 certifications by TUV Rheinland.

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

Our School has published over 220 articles in peer-reviewed international journals in the fields of Molecular Biology, Genetics, Pharmacogenomics, Plant Biotechnology, Radiation Biology, Biophysics, Microbiology, and Biochemistry, contributing to new knowledge.

We have conducted 6 Teachers’ Training courses to spread knowledge

We have conducted ~18 workshops and ~12 conferences

51. Future plans of the department.

Continue to contribute to new knowledge by discovery through research and development in relevant areas.

Establish, sustain and operate as top research Institute in the world.

Strive for translation of existing and future research programs.

Generate students equipped with cutting edge capabilities and quality values of the highest order

52. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strengths – Academic excellence (ranked number three among private Biotechnology

schools in India), merit-based admissions, Basic and Translational Research programme, state-of-the-art infrastructure, industry-academia interactions, best human resources, hospital, serving the community through high-end diagnostics.

Weaknesses – Lack of Government grants/support (UGC), faculty, awareness and accessibility across the country

Opportunities – Undertake state-of-the-art teaching and research, national and international collaborations (private and public), expansion of diagnostics at the regional and national level

Challenges – To be at the top of the national and international ranking, attract top-quality research scholars, industry placement of students due to locational/regional constraints, developing research programs into substantial contribution to society.

Evaluative Report of the Department
Department of Radiobiology and Toxicology, SOLS

1. Name of the Department : Division of Radiobiology and Toxicology
 [Department of Radiobiology, until 2007]

2. Year of establishment : 1986

3. Is the Department part of a School/Faculty of the University?

Yes, it is part of School of Life Sciences

4. Names of programmes / courses offered (UG, PG, MPhil, PhD, Integrated Masters; Integrated PhD, etc.) - PhD

5. Interdisciplinary courses and departments involved: PhD – KMC, MCOPS,
 Biostatistics

6. Courses in collaboration with other universities, industries, foreign institutions, etc.

Nil

7. Details of programmes / courses discontinued, if any, with reasons : Nil

8. Annual/ Semester/Choice Based Credit System : Not Applicable

9. Participation of the department in the courses offered by other departments.

1. **School of Life Sciences:** Involved in teaching theory, practical, seminars, laboratory rotations, research project work for BSc (Biotechnology), MSc (Molecular Biology and Human Genetics), MSc (Medical Biotechnology), MSc (Bioinformatics) and PG Diploma in Cellular and Molecular Diagnostics.

2. **School of Allied Health Sciences:** Theory Classes for BSc Medical Radiation Technology (MRT) and MSc Medical Radiation Physics (MRP)

3. **Manipal Institute of Technology:** Theory classes on Radiation Biology to Biomedical Engineering

10. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Assistant Professors)

Designation	Sanctioned	Filled
Professor	2	2
Associate Professors	-	-
Assistant Professors	-	-
Lecturer	1	1

11. Faculty profile with name, qualification, designation and specialization (DSc/DLitt/ PhD/MPhil, etc.)

#	Name	Qualification	Designation	Specialization	No. of Years of experience	No. of PhD students guided for the last 4 years
1	Dr BS Satish Rao	PhD	Professor and Head	Radiobiology and Toxicology	23	5
2	Dr Krishna K Mahato	PhD	Professor	Laser Spectroscopy	22	5
3	Mr Kamalesh DM	MSc, MPhil	Lecturer	Radio sensitivity and Radiogenomics	07	-

12. List of senior Visiting Fellows, faculty, adjunct faculty, emeritus professors

Senior Visiting Fellows	Affiliations
Dr Awtar Krishan Ganju	University of Miami, Miller School of Medicine, Miami, USA.
Dr Vivek Tanvade	Genome and Gene Expression Data Analysis Division, Bioinformatics Institute, Singapore.
Dr H Krishnamurthy	National Center for Biological Sciences, Bangalore.
Dr Padma Narayanan	Amgen, Inc. USA
Dr MG Ormerod	Institute of Cancer Research, England
Dr Avinash N Bhishey	Cancer Biologist, Former Director Cancer Research Institute (TMH), Mumbai
Dr Gopal C Kundu	Scientist F, National Center for Cell Science, Ganeshkhind, Pune

13. Percentage of classes taken by temporary faculty – programme-wise information: Nil

14. Programme-wise Student Teacher Ratio - Not applicable, since the division does not conduct graduate programmes on its own, but contributes to the programmes of sister departments.

15. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Details	Sanctioned	Filled
Academic support staff (technical)	4	4
Administrative staff	1	1

16. Research thrust areas recognized by funding agencies

Cellular and Molecular Radiation biology, Experimental Oncology, Toxicology, Targeted drug delivery, Biodosimetry

Biophysics:

In vitro/ in vivo applications of fluorescence and photoacoustic spectroscopy,

Proteomics and Protein Dynamics, Developing optical instrumentations for early detection of diseases, Low Level Laser Therapy (LLLT) for tissue regeneration

17. Number of faculty members with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies and grants received project-wise.

#	PI	Year	Name of the project	Name of the funding agency (all National)	Total grant received (sanctioned) (in rupees)
1	Dr. BS Satish Rao	2012	γ -H2AX foci analysis for the management of early triage and its semi-automatization for high-throughput analysis	BRNS	22,45,642 (24,31,000)
2	Dr. BS Satish Rao	2015	Investigations on the Prenatal and Postnatal EMF Radiation exposure in a Mouse Model.	DST - SERB	20,00,000 (54,70,000)
3	Dr. BS Satish Rao	2015	Mitochondria as an Early Indicator of Cellular Stress upon Xenobiotic and Radiation Exposure	ICMR	(27,09,000)
4	Dr. KK Mahato	2012	Evaluation and optimization of the use of laser radiation for burn wound therapy - An <i>in vivo</i> experimental study	DAE/BRNS	23,59,750 (24,89,500)
5	Dr. KK Mahato	2014	Evaluation of the predictive potential of photoacoustic spectroscopy as an objective tool for diagnosing breast cancer conditions: A pilot study.	ICMR	2,57,600 (2,57,600)

18. Inter-institutional collaborative projects and grants received

a) All India collaboration:

Prof. Depankar Chatterji, Molecular Biophysics Unit, IISc, Bangalore-560012

Prof. SV Bhat, Dept. of Physics, IISc, Bangalore-560012

Prof. MAN Razvi, Dept. of Physics, King Abdulaziz University, Jeddah, Saudi Arabia

b) International:

India –Japan Cooperative Science Programme

Project Title: Population based human genetic variations and impact on radiation effects. Agency: DST, Govt of India

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, etc.; total grants received (from 2012 to 2014)

Funding Agency	Total Grants Received (in Rs.)	Total Grants Sanctioned (Rs.)
DBT	6,40,163	6,43,000
ICMR	11,39,925	12,51,720
VGST - Spice	40,000	40,000
BRNS	18,23,692	18,63,550
BRNS	15,51,300	15,51,300
ICMR	2,57,600	2,57,600

20. Research facility / centre with

State recognition - Nil

National recognition - Centre of Excellence for Radiation biodosimetry – by Atomic Energy Regulatory Board (AERB), Department of Atomic Energy, Government of India. This is one among the three centers chosen by AERB in India.

International recognition – Nil

21. Special research laboratories sponsored by / created by industry or corporate bodies : Nil

22. Research output in last three years

Details		2012	2013	2014
Completed funded research projects		3	1	1
Completed non-funded research projects		0	0	0
Completed PhD research projects		0	0	1
Completed PG research projects		4	3	2
Completed UG research projects		2	3	3
Publications	International	7	3	11
	National	0	0	0
Books		0	0	0
Chapters in books		0	0	0
Conference presentations	International	13	0	6
	National	0	5	9

Completed funded research projects

#	Project Title	Funding Agency
1	Elucidation of the genetic basis for normal tissue radiosensitivity (2012)	DBT
2	Development of fiber optic probe based low level laser therapy (LLLT) for tissue regeneration (2012)	LSRB/DRDO
3	Predictive potential of fluorescence spectroscopy as an objective tool for evaluating burn wound granulation tissues (2012)	ICMR
4	Formulation and Screening of Pegylated Liposomal Plumbagin for improved Pharmacokinetics and Pharmacodynamics with reduced Toxicity against Human Breast Cancer (MCF-7) Xenograft in Nude Mice. (2013)	ICMR
5	Engineering of PEGylated super paramagnetic iron oxide nanoparticle	VGST SPICE

conjugated geldanamycin against breast cancer cells. (2014)	Project
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Completed Ph.D. research projects

#	Name	Thesis Title	Year
1	Dr. P. B. Ravikiran	“Wound healing potential of nigella sativa in mice exposed to different doses of gamma radiation”.	2014

Completed PG research projects

No	Name	Thesis Title	Year
1	Hitendra Negi	Genetic polymorphisms and its role in radiotherapy induced acute skin reactions.	2012
2	Vishnu Chandran	Influence of tetrathiomolybdate on the Radiosensitizing effect of cisplatin under Oxidative and hypoxic conditions.	2012
3	Asna Tungekar	Development of a simpler and cost effective method for fluorescence in situ hybridization using quantum dots	2012
4	Elroy Joe Pereira	Autofluorescence characterization of cancer and normal cell lines	2012
5	Ajanta Paul	Role of Flavonoids in Amelioration of Mitochondrial Dysfunction Induced by Mercury Toxicity: An In Vitro Study Using HepG2 Cells.	2013
6	Aabir Chakraborty	Discrimination of cancerous and noncancerous spectral data by PCA, KNN based statistical analysis	2013
7	Uday M. Sannakki	Laser induced fluorescence study of cervical cancer samples	2013
8	Valita Lobo	Role of single nucleated polymorphism in breast cancer predisposition.	2014
9	Nishchal	Autofluorescence imaging of acidic and basic native page	2014

Completed UG research projects

#	Name	Thesis Title	Year
1	Harshith	Role of Thymol in Mitigating Mercury Induced Cytotoxicity in Hepato-cellular Carcinoma (HepG2) Cells: A Post Treatment Scenario.	2012
2	Edward Mark Fernandes	In vivo Laser Induced Fluorescence (LIF) as an Objective Tool to Monitor Wound Healing Following Low Level Laser therapy.	2012
3	Geetika Datta	Genetic Predictors Of Chemo radiotherapy Induced Acute Skin Toxicities	2013
4	Pooja Shridhar	Analysis of SOD, GST and TGF- β 1 Plasma Levels, Their Single Nucleotide Polymorphisms and its Association with Radiotherapy Induced Adverse Reactions in Cancer Patients	2013
5	Anusha Acharya	Predictive Potential of Fluorescence Spectroscopy as an Objective Tool to Evaluate Wound Granulation Tissues.	2013
6	Preeta Ananthanarayanan	Engineering of Pegylated Superparamagnetic Iron Oxide Nanoparticle Conjugated Geldanamycin Against Breast Cancer Cells.	2014
7	Moushumi Goswami	Influence of selected gene variants on the chemotherapy and radiotherapy induced normal tissue toxicity in breast cancer patients.	2014
8	Manchi Vathsalya	The effect of low level laser irradiation on inflammatory response during burn wound repair - A pre-clinical study.	2014

Publications:

* Number of papers published in peer reviewed journals (national / international)

National: 0

International: 21

2012**International**

1. Goutham HV, Mumbrekar KD, Vadhiraja BM, Fernandes DJ, Sharan K, Guruprasad KP, Satyamoorthy K, Satish Rao BS. 2012
DNA double strand break analysis by γ -H2AX foci: A useful method for determining the over-reactors of radiation induced acute reactions among head and neck cancer patients.
Int J of Radiat Oncol Biol Phys. 84:e607-612.
2. Agarwala S, Nageshwar Rao B, Mudholkar K, Bhuwania R, Satish Rao BS. 2012
Mangiferin, a dietary xanthone protects against mercury-induced toxicity in HepG2 cells.
Environmental Toxicology. 27:117-127.
3. Kiran Aithal B, Sunil Kumar MR, Nageshwar Rao B, Udupa N, Satish Rao BS. 2012
Tumor growth inhibitory effect of juglone and its radiation sensitizing potential: in vivo and in vitro studies.
Integrative Cancer Therapies. 11:68 – 80.
4. Prabhu V, Satish Rao BS, Chandra S, Kumar P, Rao L, Guddattu V, Satyamoorthy K, Mahato KK. 2012
Spectroscopic and Histological Evaluation of Wound Healing Progression Following Low Level Laser Therapy (LLLT).
Journal of Biophotonics. 5:168–184.
5. Varshini J, Srinag BS, Kalthur G, Krishnamurthy H, Kumar P, Rao SBS, Adiga SK. 2012
Poor sperm quality and advancing age are associated with increased sperm DNA damage in infertile men.
Andrologia. 44:642–649.
6. Wagh A, Mahato KK, Lakshmikanth R, Rajaramakrishna R, Kamath SD. 2012.
Optical properties of Eu₂O₃ doped lead fluoroborate glass.

American Institute of Physics, Conference Series.1447, 537-538

7. Muthusamy A, Pratibha PK, Prabhu V, Mahato KK, Vidhu SB, Radhakrishna Rao M, Gopinath PM, Satyamoorthy K. 2012

Influence of Helium-Neon laser irradiation on seed germination in vitro and physico-biochemical characters in seedlings of brinjal (*Solanum melongena* L.) var. Mattu Gulla. Photochem.Photobiol. DOI: 10.1111/j.1751-1097.2012.01162.x.

2013

International

8. Vasudev Ballal N, Nageshwar Rao B, Kundabala M, Seetharama Bhat, Satish Rao BS. 2013.

Assessment of genotoxic effect of Maleic acid and EDTA: A comparative in vitro experimental study.

Clin Oral Investig. 5:1319-1327.

9. Kumar D, Upadhya D, Raj S, Rao BSS, Guruprasad K, Adiga SK.

The extent of paternal sperm DNA damage influences early post-natal survival of first generation mouse offspring.

Eur J Obstet Gynecol Reprod Biol. (2013) 166 (2):164-167.

10. Prabhu V, Fernandes E.M, Rao BSS, and Mahato KK.

Non-invasive, *in vivo* fluorescence technique as an objective tool for monitoring wound healing following Low Level Laser Therapy.

Proc. of SPIE, (2013) 8565: 85650L-1-7.

2014

International

11. Mumbrekar KD, Fernandes DJ, Goutham HV, Sharan K, Vadhiraja BM, Satyamoorthy K, Bola Sadashiva SR. 2014

Influence of double-strand break repair on radiation therapy-induced acute skin reactions in breast cancer patients.

Int J Radiat Oncol Biol Phys. 88(3):671-676.

12. Venkatesh GH, Manjunath VB, Mumbrekar KD, Negi H, Fernandes DJ, Sharan K, Banerjee S, Bola Sadashiva SR. 2014

Polymorphisms in radio-responsive genes and its association with acute toxicity among head and neck cancer patients.

PLoS One, 9(3): e89079.

13. Nishan B S, Shubhankar Das, B. Nageshwar Rao, B S Satish Rao. 2014

Thymol, a Monoterpene Phenolic Derivative of Cymene, Abrogates Mercury Induced Oxidative Stress Resultant Cytotoxicity and Genotoxicity in HepG2 (Hepatocarcinoma) Cells.

Environ Toxicol. Feb 27.doi: 10.1002/tox.21971.

14. Vijendra Prabhu, Rao BSS, Edward Mark Fernandes, Anuradha C K Rao. Keerthana Prasad and Mahato KK. 2014

Objective assessment of endogenous collagen in vivo during tissue repair by laser induced fluorescence.

PLoS One. 9(5):e98609. (1-15).

15. Mallika Priya, Satish Rao BS, Satadry Ray and Mahato KK. 2014

Prediction of absorption coefficients by pulsed laser induced photoacoustic measurements.

Spectrochim Acta A Mol Biomol Spectrosc. 127:85-90.

16. Priya M, Satish Rao BS, Ray S, Mahato KK. 2014

Photoacoustic spectroscopy in the monitoring of breast tumor development: A pre-clinical study.

Proc. of SPIE. 8943: 894347, 1-6

17. Prabhu V, Satish Rao BS, Mahato KK. 2014

Alterations in Cell migration and Cell viability of Wounded Human Skin Fibroblasts Following Visible Red light Exposure.

Proc. of SPIE, 8932: 89320C-1-7.

18. Prabhu V, Satish Rao BS, Mahato KK. 2014

Efficacy of Multiple Exposure with Low level He-Ne Laser Dose on Acute Wound healing – A Pre-Clinical Study

Proc. of SPIE, 8932: 89320T-1-6.

19. Prabhu V, Acharya A, Satish Rao BS, Kumar P, Sharan A, Mahato KK. 2014

Prognostic Prospective of Laser Induced Fluorescence as an Objective Tool to Evaluate Collagen Deposition in Thermal Wounds- An *ex vivo* Study.

Proc. of SPIE, 8926: 892608-1-7

20. Samuelraj S, Prabhu V, Chandra S, Koshy S, Acharya S, Mahato KK. 2014

Does Ozone Enhance the Remineralizing Potential of Nanohydroxyapatite on Artificially Demineralized Enamel? A Laser Induced Fluorescence Study.

Proc. of SPIE, 8929: 892903-1-8.

21. Manjunath S, Satish Rao BS, Satyamoorthy K, Mahato K. 2014
Nature of Autofluorescence in Human Serum Albumin under its Native, Unfolding and Digested forms.
Proc. of SPIE, 8935: 893520-1-6.

Conference presentations

International

1. Satish Rao BS
“Anticancer, radiosensitizing potential of plumbagin and juglone as free and microsphere, liposome based targeted drug delivery platforms”
BNERC and IJAA Joint International Symposium on Advanced Science and Technology, Toyo University, Japan, Dec 8 2012.
2. Satish Rao BS
“Significance of DNA double strand break and its repair for the prediction of radiotherapy induced normal tissue acute toxicity”
National Institute of Radiological Science, Chiba, Japan, Dec 3, 2012.
3. Satish Rao BS
‘Prediction of radiotherapy induced normal tissue acute toxicity: Molecular significance of DNA double strand breaks and its repair’
International Conference on Radiation Biology (ICRB–2012), ACTREC, Tata Memorial Centre, Navi Mumbai, Nov 22-24, 2012.
4. Satish Rao B.S
Association of DNA Damage and Repair with Radiotherapy Induced Acute Skin Reactions in Breast Cancer Subjects.
39th Annual Meeting of European Radiation Research Society (ERR2012) held at VietrisulMare, Italy during 15-19 October 2012.
5. Satish Rao BS
“Protective effect of zingerone, a dietary compound against radiation induced damage”
International Conference on Emerging frontiers and challenges in radiation Biology, Govt. Dungar College, Bikaner, Jan 24-25, 2012.
6. Satish Rao BS
“Anticancer, radiosensitizing effect of Plumbagin and Juglone as free and microsphere, liposome based targeted drug delivery platforms”,

- International Conference on Cancer prevention, diagnosis and treatment (ICCPDT-2012), Jaipur, Jan 21-22, 2012.
7. Archana PR
'Role of Thymol in curtailing radiation injury: an in vitro study',
International Conference on Cancer Prevention, Diagnosis & Treatment (ICCPDT-2012), Jaipur, Jan 21-22, 2012.
 8. Kamalesh DM
'Evaluating the predictive potential of DSB repair kinetics in radiotherapy induced acute skin reactions',
International Conference on Cancer Prevention, Diagnosis & Treatment (ICCPDT-2012), Jaipur, Jan 21-22, 2012.
 9. Goutham HV
'Association between polymorphisms in genes of NHEJ pathway and acute reactions of radiotherapy in head and neck cancer patients',
International Conference on Cancer Prevention, Diagnosis & Treatment (ICCPDT-2012), Jaipur, Jan 21-22, 2012.
 10. Shubhankar Das, BS Satish Rao,
"Radiation antagonistic effects of hydroalcoholic extract of Saracaindica- An in vitro study using Chinese hamster Lung fibroblast (V79) cell",
International Symposium on Emerging trends in Free Radicals, Antioxidants and Nutraceuticals on Health, Disease and Radiation Biology, Kolkata, Jan 12-14 2012 (Poster).
 11. Satish Rao BS
'Cytoprotective Effect of Mangiferin against Methylmercury Induced Cellular Damage in IMR-32, Human Neuroblastoma Cells by the Inhibition of Oxidative Stress'
International Symposium on Emerging Trends in Free Radicals, Antioxidants and Nutraceuticals on Health, Disease and Radiation Biology, Kolkata, Jan 12-14, 2012.
 12. Mahato KK
Photoacoustic Spectroscopy: Technique and Applications
International conference on Physics of Materials and Materials based Device Fabrication. Shivaji University, Kolhapur, Maharashtra, India, 17th January – 19th January, 2012.
 13. Mahato KK, Kamath SD and Priya M.

18th Symposium on Thermophysical Properties, NIST, Boulder, Colorado 80305-3337, USA. June 24-29, 2012.

14. Mumbrekar KD, Fernandes DJ, Goutham HV, Sharan K, Vadhiraja BM, Satyamoorthy K, Satish Rao BS.

Sequence variants in DSB repair genes and radiotherapy induced acute normal tissue toxicity in breast cancer patients.

‘ICRM -2014 Conference’ held at King Faisal Specialist Hospital & Research, Riyadh, Saudi Arabia during February 17- 20, 2014.

15. Satish Rao BS, Mumbrekar KD, Fernandes DJ, Goutham HV, Sharan K, Vadhiraja BM and Satyamoorthy K.

Predictive significance of DNA double strand break repair on radiotherapy induced acute skin reactions in breast cancer patients.

‘ICRM -2014 Conference’ held at King Faisal Specialist Hospital & Research, Riyadh, Saudi Arabia during February 17- 20, 2014.

16. Satish Rao BS

DNA double strand break repair pathway plays a significant role in determining the radiotherapy induced normal tissue toxicity among head-and-neck and breast cancer

International Conference on Radiation Biology – ICRB -2014, Institute of Nuclear Medicine and Allied Sciences, Delhi during 11-13, November 2014.

17. Das S, Joshi MB, Satyamoorthy K, Satish Rao BS.

Mitochondria and ionizing radiation: their inter relationship toward cellular dysfunction.

International Conference on Radiation Biology - 2014 held at INMAS, New Delhi, India during 11-13 November 2014.

18. Nayak AKA, Mumbrekar KD, Satish Rao BS

γ -H2AX foci analysis in human lymphocytes: A biological tool for assessment of early triage during mass exposure of radiation.

International Conference on Radiation Biology -2014 held at INMAS, Delhi during 11-13 November 2014.

19. **Mumbrekar KD**, Fernandes DJ, Shamaprasada K, Nakayama F, Imai T, Vadhiraja BM, Satyamoorthy K, Satish Rao BS

Genetic Variation CD44 Confer Susceptibility to acute skin reaction in breast cancer patients undergoing radiotherapy.

International Conference on Radiation Biology -2014 held at INMAS, Delhi during 11-13 November 2014. **(Oral Presentation)**

National

1. Satish Rao BS
2nd Annual Meeting of Coastal Karnataka Chapter of Society of Biological Chemists (India)
School of Life Sciences, Manipal on 26 October 2013.
2. Prabhu S, Mutalik S, Udupa N, Satyamoorthy K, Satish Rao BS
Synthesis, charecterization and toxicological evaluation of pegylatedsuperparamagnetic iron oxide nanoparticles
6th Bangalore Nano Conference, Bangalore during 4-6, December 2013.
3. Das S, Joshi MB, Satyamoorthy K, Satish Rao BS.
Mitochondrial Damage as a Key Indicator of Mercury Intoxication in Human Fibroblast Cells.
IX National Research Scholars Meet in Life Sciences–2013 at ACTREC, Mumbai, India during 19-20 December 2013.
4. Priya M, Satish Rao BS, Mahato KK
Development and optimization of pulsed laser induced photoacoustic spectroscopy setup for clinical applications.
DAE-BRNS National Laser Symposium (NLS-21), Bhabha Atomic Research Centre, Mumbai, 6-9 February 2013.
5. Prabhu V, Satish Rao BS, Mahato KK.
In vivo autofluorescence technique to monitor the wound healing progression-A pre-clinical study
DAE- BRNS National Laser Symposium (NLS-21), Bhabha Atomic Research Centre, Mumbai, 6-9 February 2013.
6. Das S, Joshi MB, Satyamoorthy K, Satish Rao BS.
Ionizing radiation induced mitochondrial damage is mediated by oxidative stress and DNA damage.
IV Annual Conference of the Society for Mitochondrial Research and Medicine held at Manipal University, Manipal during 8-9 December 2014.
7. Prabhu V, Rao BSS, Mahato KK
Action of red laser light irradiation on cellular parameters in wounded human skin fibroblasts.
DAE-BRNS National Laser Symposium (NLS-22), at MIT, Manipal University, Manipal, during January 8-11, 2014

8. Prabhu V, Acharya A, Rao BSS, Bharath HR, Mahato KK
Laser induced autofluorescence studies of wound granulation tissues from non-healing wounds- A clinical study.
DAE-BRNS National Laser Symposium (NLS-22) at MIT, Manipal University, Manipal, during January 8-11, 2014.
9. Priya M, Satish Rao BS, Mahato KK
Prognostic Potential of Photoacoustic Spectroscopy in Breast Tumor Development.
DAE-BRNS National Laser Symposium (NLS-22), at MIT, Manipal University, Manipal, during 8-11 January, 2014
10. Priya M, Satish Rao BS, Ray S, Mahato KK
Photoacoustic Spectroscopy in monitoring breast tumor development in xenograft model.
Manipal Research Colloquium during April 11-12, 2014. (Oral presentation)
11. Manjunath S, Satish Rao BS, Satyamoorthy K, Mahato KK.
Understanding the Footsteps of Protein Unfolding by Laser Induced Autofluorescence
DAE-BRNS National Laser Symposium (NLS-22) at Manipal University, Manipal, during January 2014.
12. Priya M, Satish Rao BS, Ray S, Shetty P, Mathew S, Mahato KK
Pulsed laser induced photoacoustic spectroscopy in discriminating normal from breast cancer subject
DAE-BRNS National Laser Symposium (NLS-23) at Sri Venkateswara University, Tirupati, during December 3-6, 2014.
13. Manjunath S, Satish Rao BS, Satyamoorthy K, Mahato KK.
Autofluorescence Based Protein Detection in SDS-TCEP PAGE.
DAE-BRNS National Laser Symposium (NLS 23) at Sri Venkateswara University, Tirupati, during 3-6 December, 2014.
14. Bharath HR, Prabhu V, Chandra S, Satish Rao BS, Mahato KK
Influence of Low Power Lasers in Tissue Regeneration of Burn Injuries in Swiss albino mice
DAE-BRNS National Laser Symposium (NLS-23) at Sri Venkateswara University, Tirupati, during December 3-6, 2014.

* **Monographs** - Nil

* **Chapters in books** - Nil

* **Edited books** - 1

1. Radio modifiers in Human Health- (Co-edited), Eds. P Uma Devi, KS Bisht and BSS Rao, NISCOM, Delhi, India.

* **Books with ISBN with details of publishers** - 1

1. "Introduction to Radiation Biology" P Uma Devi, Nagarathnum and BSS Rao, McMillan, New Delhi, India

* **Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)**

* Citation Index – range / average

* SNIP : NA

* SJR : NA

* Impact Factor – range / average – 3.7

* h-index : NA

23. Details of patents and income generated : Nil

24. Areas of consultancy and income generated :

Cytotoxicity/Genotoxicity/Biophysics

25. Faculty selected nationally/ internationally to visit other laboratories in India and abroad:

Dr. B.S. Satish Rao

1. Visiting Scientist, Division of Life Sciences, Research Reactor Institute, Kyoto University, Osaka, JAPAN (June 1999 – May 2000).
2. Visiting Research Scholar, University of Texas Health Science Center at San Antonio, Texas, USA (July 2000 – June 2001).
3. UICC International Cancer Technology Transfer Fellowships (ICRETT) & Visiting Faculty, Sylvester Cancer Center, Department of Radiation Oncology, University of Miami School of Medicine, USA (June – Aug 2002).
4. Visiting Faculty, University of New South Wales, Australia, (2008-2011).
5. Visiting Research Fellow: The University of New South Wales, Australia (2008 -2011).

26. Faculty serving in

a) National committees

Dr BS Satish Rao

- Indian Society for Radiation Biologists (Life Member and Ex. Executive Member)
- Indian Society of Human Genetics (Life Member)

- Indian Society for Free Radical Biology (Life Member)
- Indian Association for Hyperthermic Oncology and Medicine (Member)
- Society for Biological Chemists, India (Life Member)

Dr. Krishna Kishore Mahato

- Life Member, Laser Spectroscopy Society of India
- Life Member, Society of Biological Chemist, India (SBCI)
- Life Member, Society of Mitochondrial Research and Medicine (SMRM)-India

Mr. Kamalesh D Mumbrekar

- Life Member: Indian Society for Radiation Biology
- Member: Society for Biological Chemist, India (SBCI)

b) International committees

Dr BS Satish Rao

International Society for Mangiferin Research (Life member, Vice-general Secretary)

Dr. Krishna Kishore Mahato

Member, American Society of Laser Medicine and Surgery

c) Editorial Boards -

Dr. B. S. Satish Rao - Journal of Medical Physics

d) any other (please specify) - Nil

27. Faculty recharging strategies

All faculty members undergo pedagogy training when they join the department. They are also encouraged to attend conferences, workshops, training programmes to rejuvenate and recharge themselves.

28. Student projects

percentage of students who have done in-house projects including inter-departmental projects - Nil

percentage of students doing projects in collaboration with other universities / industry / institute – Nil

29. Awards / recognitions received at the national and international level by

Faculty

Dr. BS Satish Rao

National:

- Distinguished Alumni Award by Kasturba Medical College Manipal, MAHE, 2004.

International:

- YOUNG SCIENTIST TRAVEL GRANT European Society for Hyperthermic Oncology to attend 12th ESHO conference at Bergen, Norway (1991).
- YOUNG SCIENTIST TRAVEL GRANT award by COSTED-IBN to attend the first Asian Society for Hyperthermic Oncology, Fukuoka, Japan (1996).
- UICC International Cancer Technology Transfer Fellowships (ICRETT) & Visiting faculty, Sylvester Cancer Center, Department of Radiation Oncology, University of Miami School of Medicine, FL 33136, USA (June – Aug 2002).
- Honor role of the Journal of Radiation Research Terasima Award- Best Paper Award for the paper entitled “DNA-PK: the major target for wortmannin-mediated radiosensitization by the inhibition of DSB repair via NHEJ pathway. J. Radiat. Res. 44 (2003) 151-159; by the Japanese Journal of Radiation Research for the year 2003 (Second-author).
- NIH’s International training and Research in Environmental and Occupational Health (ITREOH) Fogarty Program Grant to attend workshop on Health Effects on Pesticides, Colombo, Sri Lanka (Sept. 5- 9, 2005).
- International Public Health Summer Institute Training - Sponsorship by Sparkman Center for Global Health, The University of Alabama at Birmingham, USA (7th July to 1st August 2008)
- International Travel grant support from CCSTDS, Govt. of India & organizers of the 1st International Symposium on Mangiferin held at Nanning, China – Participation as an International Expert (2009)
- Paper selected for ASTRO CME for CREDIT: Predictive and prognostic significance of glutathione levels and DNA damage in cervix cancer patients undergoing radiotherapy (Int J of RadiatOncolBiol Phys. 2010; 78:343-9. (doi:10.1016/j.ijrobp.2009.08.014)

Dr Krishna Kishore Mahato

Invited as resource person to the following International Conferences/Workshops:

- Indo-French Workshop in Biomedical Applications of vibrational spectroscopy and Imaging, during 13-15 February 2010 at CRI-ACTREC, Mumbai, India.
- International Conference on Multifunctional Materials (ICMM-2010) during 6-9 December 2010 at the Department of Physics, Banaras Hindu University, Varanasi, India.
- International Workshop on Biomedical Sciences and Technologies (IWBMS – 2011), 2-4 March 2011, Anna University, Chennai, India.
- 1st international conference on Physics of Materials and Material-based Device Fabrication (ICPM-MDF-2012) 17-19 January 2012, Shivaji University, Kolhapur, India.
- Eighteenth Symposium on Thermophysical Properties, 24-29 June 2012, NIST, Boulder, Colorado, USA.

Doctoral / post-doctoral fellows**Mr. Goutham HV (Research Fellow)**

- Young Scientist Award - International Conference on Radiation Biology-2010, at Sri Ramachandra University, Chennai, 15-17 November 2010 for the paper 'Fluorimetric analysis of radiation induced DNA double strand break and repair by a modified neutral filter elution method'.
- ICMR Travel grant (Young Scientist Category) to present paper 'Polymorphisms in DNA double strand break response pathway and its impact on radiosensitivity' at the International Congress of Radiation Research - 2011 held at Warsaw, Poland.
- CICS Partial travel grant (Young Scientist Category) to present paper 'Polymorphisms in DNA double strand break response pathway and its impact on radiosensitivity' at the International Congress of Radiation Research - 2011 held at Warsaw, Poland.

Mr. Akshay Kumar A Nayak (Research Fellow):

- Best Poster Award : γ -H2AX Foci Analysis in Human Lymphocytes: A Biological Tool for Assessment of Early Triage During Mass Exposure of Radiation at ICRB 2014 hosted by INMAS, New Delhi, India (Authors: Akshaykumar A. Nayak, Kamalesh D. Mumbrekar, Donald J Fernandes, Satish Rao B. S)

Mr VijendraPrabhu (Research Fellow)

- DST International travel grant for Young Scientist, 2011
- Senior Research Fellowship from ICMR, 2012

30. Seminars/conferences/workshops organized and the source of funding (national / international) with details of outstanding participants, if any. – Nil

Actively involved in hosting refresher courses, workshops, seminars, conferences and science camps organised by School of Life Sciences

31. Code of ethics for research followed by the departments

Research at DRT follows strict ethical guidelines of the University and UGC, India. Tissue culture is the preferred method of research, although animal studies are carried out when required, according to the guidelines and approval of the University Ethical Committee. Plagiarism in any form is denounced, while due credit is given to deserving people. No discrimination is practiced based on gender, religion or race.

32. Student profile course-wise: Not Applicable, since DRT does not offer courses on its own. It helps the School of Life Sciences and Manipal University in conducting courses

33. Diversity of students: Not Applicable, for reasons as mentioned above (q 32)

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

Shubhankar Das (CSIR NET-lectureship 2010 cleared; Roll number 303370; AIR-21/981); GATE 2011 cleared (Roll number BT1143202, AIR- 1878/16425)

35. Student progression

Student progression	Percentage against enrolled
UG to PG	NA
PG to MPhil	NA
PG to PhD	NA
PhD to Post-Doctoral	NA
Employed Campus selection Other than campus recruitment	100% of our PhD graduates have got employment through conventional process of application, interview and selection
Entrepreneurs	NA

36. Diversity of staff

Percentage of faculty who are graduates	
of the same University	0
from other universities within the State	66
from universities from other States	33
from universities outside the country	0

37. Number of faculty who were awarded PhD, DSc and DLitt during the assessment period - Nil

38. Present details of infrastructural facilities with regard to –

- Library
- Internet facilities for staff and students
- Total number of class rooms
- Class rooms with ICT facility
- Students' laboratories
- Research laboratories

Learning resources of the departments - library, computers, laboratories and other resources: The division has computational facilities with 24 hour internet facility and online access to the central library, Manipal University. The laboratory has facilities such as:

- Air conditioned animal house** with breeding and rearing facility for mouse strains such as BALB/c and C57BL mice, and Nude mice facilities and expertise for routine anticancer drug screening (using human cancerous cells growing *in vitro* and transplantable animal tumor models *in vivo*), toxicological screening activities and these services are also extended to industry, university and institutional requirements.
- Tissue culture facility:** A dedicated area assigned to tissue /cell culture activities with the basic instrumentations for handling mouse, human normal and cancerous cells for experimentation.

- c) **Irradiation facility:** The ^{60}Co – tele-therapy facility for gamma irradiation is currently being utilized and in-house FAXITRON CP 160-X-ray irradiation facility for the exposure of cultured cells is on its way of procurement.
- d) **Molecular laboratory:** With basic instrumentations such as PCR, Gel running and documentation along with routine laboratory instrumentation.
- e) **Microscopic facility:** It is equipped with light and fluorescent microscopes with image acquisition and analysis systems.
- f) **Spectroscopy facility:** There are two spectroscopy laboratories with state-of-the-art facilities.

39. List of doctoral, post-doctoral students and Research Associates

a) from the host university

- 1) Mr Shubankar Das – PhD student
- 2) Mr Manjunath S – PhD student

b) from other universities

- 1) Mr Kamalesh D Mumbrekar – PhD student
- 2) Ms Suma Prabhu – PhD student
- 3) Mr Vijendra Prabhu – PhD student
- 4) Ms Mallika Priya – PhD student

40. Number of post graduate students getting financial assistance from the University

– Nil

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology. – Nil

42. Does the department obtain feedback from

- a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
- b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
- c. alumni and employers on the programmes offered and how does the department utilize the feedback?

Nil – the department does not obtain individual feedback from the following personnel,

but utilizes the feedback provided by them to SOLS and MU.

43. List the distinguished alumni of the department (maximum 10)

Name	Credentials
Dr. Goutham HV	Senior Scientist, Strand Life Sciences, Bangalore
Dr. Ravikiran PB	Post-doctoral Researcher, USA
Dr. Kiran Aithal B (2011)	Senior Scientist, Aurigene Discovery Technologies Limited, Bangalore
Dr. Sunil Kumar MR (2011)	Scientist, Novartis Health Care Pvt Ltd, India.
Dr. Archana PR (2011)	Selection Grade Lecturer, MMMC, Manipal.
Dr. Nageshwar Rao B (2011)	Associate Professor, Mamata Medical College, Khammam
Dr. Sudha Kamath (2009)	Associate Professor, MIT, Manipal
Dr. Mallikarjuna Rao KVN (2008)	Asst. Professor, GSL Medical College, Hyderabad
Dr. Venkatesh P (2006)	Director, TotipotentRX Cell Therapy Pvt. Ltd.
Dr. Koti Reddy T (2005)	Sugen Life Sciences (P) Ltd., Hyderabad

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts – Nil

45. List the teaching methods adopted by the faculty for different programmes – Nil

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored? Nil

47. Highlight the participation of students and faculty in extension activities.- Nil

48. Give details of 'beyond syllabus scholarly activities' of the department. – Nil

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

The department is part of the quality and environmental management systems of the Manipal University and is certified to be ISO 9001:2008 and ISO 14001:2004 compliant.

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

51. Future plans of the department.

- Strengthening the divisional thrust areas of ongoing research activities by the incorporation of advanced technologies in the field of molecular biology.
- Efforts to increase the research funding from both national and international resources by giving more emphasis on translational research activities.
- To conduct trainings, workshops and conferences in the thrust areas of our research interests for strengthening the prospects of scientific collaborative activities.

Biophysics:

- Participate actively in different activities of SOLS.
- Generate sufficient external funding, Government as well as from private sector, to carry out scientific research and to establish the department as one of the recognized centres in the area of Biophysics in India.
- Initiate new collaborations with well-established research laboratories in India and abroad.
- Involve more and more people from other departments of the Manipal University in the interdisciplinary research programmes to create research awareness.
- As per requirement, time to time upgrade the syllabus of Physics, Biophysics and any other related subjects/courses.
- Create a Biophysics programme that supports an interdepartmental PhD programme in materials science and life sciences.
- Increase the strength of teaching and non-teaching staff

52. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strengths: One of the most nationally & internationally recognized Radiation Biology laboratory; State of the art research infrastructure; excellent animal house facility; Recognized center of excellence in Radiation Biodosimetry

Strong knowledge base, scientific outcomes, infrastructure, Institutional support, Inter and Intra Institutional collaborations in the field of Laser Spectroscopy

Weaknesses: Need for more efforts for human resource development in the field of radiation biology

In the field of Biophysics/Laser Spectroscopy there is less number of faculties, low generation of external funding, weak international collaborations, own teaching programme nil, Centre of excellence nil

Opportunities: Creation of human resources; teaching and research in radiation biology; research focused on delivering practical solutions for radiation exposure/toxicology related health aspects

Challenges: To create further research opportunities and to excel in radiation biology; to be recognized as a top centre of excellence in radiation biodosimetry

Generate more external funding for biophysics-related research, initiate international collaborations, innovative research programmes and academic courses

1. **Name of the Department:** **Department of Statistics**
2. **Year of establishment:** August 2006
3. **Is the Department part of a School/Faculty of the university?**
Yes, Part of KMC Manipal
4. **Names of Programmes/ Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**
 - M.Sc. Biostatistics
 - Certificate course in Biostatistics, Epidemiology and Research Methodology
 - PhD
5. **Interdisciplinary courses and departments involved**
Nil
6. **Courses in collaboration with other universities, industries, foreign institutions, etc.**
Executive education program in Biostatistics, conducting at Novartis, Hyderabad
7. **Details of programmes / courses discontinued, if any, with reasons**
Nil
8. **Annual/ Semester/Choice Based Credit System**
Semester Scheme
9. **Participation of the department in the courses offered by other departments**
Department teaches various courses of other institution of the university
 - Undergraduate and Post Graduate Courses of Allied Health Sciences
 - Manipal College of Nursing
 - School of Life Sciences
 - School of Regenerative Medicine, Bangalore
 - Postgraduate Program of Manipal College of Dental Sciences
 - School of Management
 - Master of Public Health
 - Medicine-Kasturba Medical College

10. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)

Designation	Sanctioned	Filled
Professor	02	02
Associate Professors	02	02
Asst. Professors	03	03

11. Faculty profile with name, qualification, designation and specialization (D.Sc./D.Litt./ Ph.D./M.Phil., etc.)

#	Name	Qualification	Designation	Specialization	No. of year Experience	No. of Ph.D. students guided for the last 4 years
1.	Dr. N Sreekumaran Nair	M.Sc (Statistics), PhD	Professor and Head	Stochastic process	29	11
2.	Dr. Manjunatha Prasad	M.Sc. (Mathematics), PhD	Professor	Linear algebra	28	03
3.	Dr. Shreemathi S Mayya	M.Sc. (Statistics), PhD	Assoc. Prof. Senior scale	Tool construction	32	04
4.	Dr. Binu V. S	M.Sc. (Statistics), PhD	Assoc. Prof.	Statistical genetics	15	02
6.	Dr. Vasudeva Guddattu	M.Sc. (Statistics), PhD	Asst. Prof. Senior scale	Categorical data modeling	10	NIL
7.	Ms. Ashma Dorothy Monteiro	M.Sc. (Statistics) M. Phil (Statistics)	Asst. Prof. Senior scale	Operations research	09	NIL
8	Ms. Nilima	M.Sc. (Statistics)	Asst. Prof.	Categorical Data Analysis	02	NIL

12. List of senior Visiting Fellows, faculty, adjunct faculty, emeritus professors

1. Prof. Sanjay Zodpey, Director, IIPH, New Delhi.
2. Dr. M Kumaran, Department of Statistical Sciences, Kannur University campus, Kannur.
3. Prof. K. R. Sundaram, Head, Department of Biostatistics, Amrita Institute of Medical Sciences & Research Centre, Kochi.
4. Dr. T. E. S. Raghavan, University of Illinois, Chicago.
5. Dr. R.B. Bapat, Indian Statistical Institute, New Delhi.
6. Prof. R. Balakrishnan Bharathidasan University, Tiruchirapalli, India.
7. Prof. Abraham Berman, Technion - Israel Institute of Technology, ISRAEL.
8. Prof. Rajarama Bhat, Indian Statistical Institute, Bangalore, India.
9. Prof. Rajendra Bhatia, Indian Statistical Institute, Delhi, India.
10. Prof. Arup Bose, Indian Statistical Institute, Kolkata, India.

11. Prof. Steve Haslett, Massey University, New Zealand.
12. Prof. Surender Kumar Jain, Distinguished Emeritus Professor, Ohio University, USA.
13. Prof. Andre Leroy, Univerite d'Artois, FRANCE.
14. Prof. Arbind Kumar Lal, Indian Institute of technology, Kanpur, India.
15. Prof. S.K. Noegy, Indian Statistical Institute, Delhi, India.
16. Prof. Sukanta Pati, Indian Institute of Technology, Guwahati, India.
17. Prof. Simo Puntanen, University of Tampere, FINLAND.
18. Prof. T.E.S. Raghavan, University of Illinois at Chicago, USA.
19. S Prof. harad Sane, Indian Institute of Technology, Mumbai, India.
20. Prof. Bhaba Kumar Sarma, Indian Institute of Technology, Guwahati, India.
21. Prof. Ajith Eqbal Singh, INSA, Senior Scientist, Delhi, India.
22. Prof. K.C. Sivakumar, Indian Institute of Technology, Madras, India.
23. Prof. Sivarama Krishnan Sivasubramanian, Indian Institute of Technology, Bombay, India.
24. Prof. Murali K, Srinivasan, Indian Institute of Technology, Bombay, India
25. Prof. Wasin So, San Jose State University, California, USA.
26. Prof. V.S Sundar, Institute of Mathematical Sciences, Chennai, India.
27. Prof. H. Kulkarni, Indian Institute of technology, Chennai, India.
28. Dr. AshwiniMathur, Novartis Heathcare Pvt. Ltd., Hyderabad, India.
29. Dr. ViswanathIyer, Novartis Health care Pvt Ltd, Hyderabad.
30. Prof. Nagaraj Rao C, Associate Professor, Vijaya College,R.V Road, Bangalore
31. Prof. Inge Hutter, Prof. Inge Hutter, University of Groningen,The Netherlands.
32. Prof. K. Srinath Reddy, President, Public Health Foundation of India Bernard Lown Professor of Global Cardiovascular Health, Harvard School of Public Health
33. Prof. S B Javali, Incharge,Department of Biostatistics & Informatics, SDM College of Dental Sciences & Hospital,Sattur, Dharwad - 580 009
34. Dr. Surendra Yajamany, GlaxoSmithKline Pharmaceuticals Embassy Link, Bangalore
35. Dr. P Mohanchandran Nair, Professor& Head, Department of Demography, University of Kerala.
36. Dr. Anjana, Madras Diabetes Research Foundation, Chennai.

37. Dr. Mohan, Director, Madras Diabetes Research Foundation, MDRF, Chennai
38. Dr. Fabian Tibaldi, Biostatistics Expert Leader, Glaxo Smith Kine Biologicals, Belgium.
39. Dr. Sheela Misra, Professor of biostatistics, University of Luknow, Luknow.
40. Dr. Naveen Karkada, Manager Biostatistics, GlaxoSmithKline Pharmaceuticals Embassy Link, Bangalore
41. Dr. Babu L. Verma, Professor of Biostatics, ,MLB Medical College/Hospital, University of Jhansi, Uttar Pradesh.
42. Dr. Binukumar. B., Assistant Professor, Biostatistics, National Institute of Mental Health and Neuro Sciences, Bangalore.
43. Dr. Shrinivas Darak, Faculty of Spatial Sciences, University of Groningen, the Netherlands.
44. Prof. Balu. P.S, Professor, Department of Community Medicine, JJM Medical College, Davanagere.
45. Dr. Anjana Dube, Director, Data processing Centre Bangalore, Ministry of Statistics and Programme implementation.
46. Shri. H. Borah, Deputy Director General Social Statistics Division, Central Statistics Office, Ministry of Statistics and Programme implementation, New Delhi
47. Dr. K. Thennarasu, Professor, Department of Biostatistics, NIMHANS, Bangalore – 560 029.
48. Mr. Shashidhar Joshi, Clinical Statistics, Quantitative Sciences - India (QSI), Glaxo SmithKline Pharmaceuticals Limited.
49. Mr. Ashim Dhar, Principal Consultant, Tata Consultancy Services.
50. Dr. Ashutosh Gupta, PhD, Biostatistics and Programming Manager, QSIRD Projects Clinical Platforms & Sciences, GSK.
51. Dr. P Venkatesan ,Professor, Faculty of Research, Department of Community Medicine, Sri Ramachandra Medical College & Research Institute Sri Ramachandra University, Porur, Chennai-600 116.
52. Dr. Williams, O. Dale, Professor & Chair, Biostatistics, Robert Stempel College of Public Health and Social Work, Florida.
53. Dr. Elissa Ladd, Associate Professor MGH Institute of Health Profession, Boston MA, USA.
54. Prof. K.R Thankappan, Professor and Head, Achutha Menon Centre for Health Sciences Studies, Trivandrum, Kerala.
55. Prof. K. Srinath Reddy, President, PHFI, New Delhi.

56. Dr. Rajmohan, Officer-in-charge, Institute of Occupation Research, ICMR, Bangalore.
57. Dr. Kenneth C. Earhart Shaikh Shah Hossain, Centers for Disease Control and Prevention, India,
58. Dr. Shaikh Shah Hossain, Centers for Disease Control and Prevention, India,
59. Dr. Ajay Bailey University of Groningen, The Netherlands.

13. Percentage of classes taken by temporary faculty – programme-wise information

Nil

14. Programme-wise Student-Teacher Ratio

M.Sc. Biostatistics

6:1

Certificate course in Biostatistics, Epidemiology and Research Methodology

4:1

15. Number of academic support staff (technical) and administrative staff: sanctioned and filled

No. of administrative staff:

Sanctioned: 03

Filled: 03

16. Research thrust areas recognized by funding agencies

- Evidence based public health
- Epidemiology, Systematic review and meta analysis
- Stochastic modeling for non-communicable diseases
- Biostatistics, Error analysis
- Public health modeling
- Statistical Genetics
- Matrix Methods
- Generalized Inverses
- Covariance Matrices
- Combinatorial Matrix Theory
- Measurement and evaluation in education
- Quality assessment in higher education
- Spatial Epidemiology.

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies and grants received project-wise.

No. of faculty with ongoing projects from national funding agencies: 02

International funding agencies: 01

a) National

Total grant received: 24, 39,528/-

#	Title of Project	Funding Agency	Amount	Date of sanction and Duration
1.	“PHD Students’ Contribution to the Advancement of Knowledge: A Study of Teachers in Colleges and Universities of Karnataka State”.	ICSSR	4,32,688/-	May, 2012 2 years
2.	A prospective multi centre, surgeon controlled non-randomized study of the role of early containment in children with onset of Legg-Calve-Perthes’ disease between 6 and 8 years of age	Nil	--	July 2012 5 years
3.	ICMR Virology Network Laboratory Grade-I at Manipal	ICMR	4,96,31,900/-	March, 2010 5 years
4.	Aetiology of Acute Encephalitis Syndrome (AES) in India and Establishment of ICMR sample banks of AES cases” – a multisite prospective initiative	ICMR	1,04,76,449/ -	March, 2011 - 3 years
5.	Molecular epidemiology of rotavirus diarrhea in children under five in Southwest India- A hospital and laboratory based study	ICMR	38,75,688/-	March 2012 3 years
6.	Promoting Research – Perception and Practices in educational institutions of India – A Cross Sectional Study	DST	20,06,840/-	August 8,2014 02 Years
7.	Distribution of non-polio Enterovirus serotypes in children with Hand Foot and Mouth Disease(HFMD)in Kerala, Karnataka and Goa States	ICMR	49,72,716	03 years

b) International

Total grant received: 61, 67,543.4/-

#	Title of Project	Funding Agency	Amount	Date of sanction and Duration
1.	Determinants of Neonatal Pneumonia and Factors associated with mortality due to Neonatal Pneumonia “A Systematic Review combined with Qualitative Research Approach”	INCLIN	45,80,640	02 years
2.	Systematic Review: The most effective rehabilitation measures for NCD-related disability that have been applied across different contexts that can result in improved functioning (i.e. reduce impairment, improve activities and participation)	WHO	\$24,840	September 5,2014 1Year

	or at least maintain or prevent loss of functioning.			
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18. Inter-institutional collaborative projects and grants received

a) All India collaboration b) International

#	Title of Project	Funding Agency	Amount	Date of sanction and Duration
1.	A prospective multi centre, surgeon controlled non-randomized study of the role of early containment in children with onset of Legg-Calve-Perthes' disease between 6 and 8 years of age	Nil	--	July 2012 5 years
2.	ICMR Virology Network Laboratory Grade-I at Manipal	ICMR	4,96,31,900/-	March, 2010 5 years
3.	Aetiology of Acute Encephalitis Syndrome (AES) in India and Establishment of ICMR sample banks of AES cases" – a multisite prospective initiative	ICMR	1,04,76,449/ -	March, 2011 - 3 years
4.	Molecular epidemiology of rotavirus diarrhea in children under five in Southwest India- A hospital and laboratory based study	ICMR	38,75,688/-	March 2012 3 years
5.	Promoting Research – Perception and Practices in educational institutions of India – A Cross Sectional Study	DST	20,06,840/-	August 8,2014 02 Years
6/	Distribution of non-polio Enterovirus serotypes in children with Hand Foot and Mouth Disease(HFMD)in Kerala, Karnataka and Goa States	ICMR	49,72,716	03 years
7.	Determinants of Neonatal Pneumonia and Factors associated with mortality due to Neonatal Pneumonia "A Systematic Review combined with Qualitative Research Approach"	INCLEN	45,80,640	02 years
8.	Systematic Review: The most effective rehabilitation measures for NCD-related disability that have been applied across different contexts that can result in improved functioning (i.e. reduce impairment, improve activities and participation) or at least maintain or prevent loss of functioning.	WHO	\$24,840	September 5,2014 1Year

Total grant received: 7,25,50,496.4/-

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, etc.;

#	Title of Project	Funding	Amount
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		Agency	Rs.
1.	“PHD Students’ Contribution to the Advancement of Knowledge: A Study of Teachers in Colleges and Universities of Karnataka State”.	ICSSR	4,32,688/-
2.	Promoting Research – Perception and Practices in educational institutions of India – A Cross Sectional Study	DST	23,12,880

Total grants received: 14, 02,000/-

20. Research facility / centre with

- state recognition

Nil

- national recognition

Nil

- international recognition:

Yes, Cochrane public health group satellite Centre’s.

21. Special research laboratories sponsored by / created by industry or corporate bodies

Nil

22. Publications:

Details		2012	2013	2014
Publications		18	24	27
Books			01	01
Monographs			-	-
Chapters in books			02	-
Edited book			1	1
Conference presentations	International	1	5	5
	National	1	3	4

- * Number of papers published in peer reviewed journals (national/ international)

2012: (18)

- 1 SyalNeeru, Nair NS, LavanyaRai –

Iron Sucrose Versus Oral Iron Therapy in Pregnancy Anemia;

Indian Journal of Community Medicine; Issue 4/ Vol. 37/ October 2012

- 2 AttibelePalakshaManjunath, NidhikaChhabra, ShivarudraiahGirija, Nair NS – Pain relief in laparoscopic tubal ligation using intraperitoneal lignocaine: a double masked randomized controlled trial.

- European Journal of Obstetrics & Gynecology and Reproductive Biology
2012.06.035.
- 3 BhageerathyReshmi, Nair NS, Sabu. K.M, B. Unnikrishnan –
Awareness, Attitude and their correlates towards health insurance in an urban south Indian population.
Management in health XVI/1/2012; pp.32-35
 - 4 S. Geena Mary; Nair NS ; J Roopalekha –
Analysis of the satisfaction profile of patients using a hospital based health insurance scheme: a cross sectional study;
Management in health XVI/2/2012; pp. 32-35
 - 5 KM Prasad; G. Sudhakara and H.S. Sujatha–
Partition of Graph with its Complete Sub-graphs, Advances and Applications in Discrete Mathematics, To appear in July 2012
 - 6 Ravindra B Bapat, Steve Krirkland, KM Prasad, SimoPuntanen –
Lectures on Matrix and Graph Methods 2012 at Manipal University Press, Manipal
 - 7 NM Nandini, SM Nandish, P Pallavi, SK Akshatha, AP Chandrashekhar, S Anjali, MuraliDhar –
Manual Liquid Based Cytology in Primary Screening for Cervical Cancer – a cost Effective Preposition for Scarce Resource Settings.
Asian Pacific Journal of Cancer Prevention, Vol 13. 2012
 - 8 BakthavathsalamSreenivasSudha, Mysore ShikanthSunitha, SanthebatchahalliMahalingappaNataraj, MuraliDhar –
A study of reduction in breath-holding time in smokers and recovery among ex-smokers in bus depot workers.
International Journal of Health & Allied Sciences. Vol. 1, Issue 3, July – Sept. 2012.
 - 9 VedapriyaDandeRajasekar, LavanyaKrishnagopal, Anuj Mittal, Zile Singh, Anil J Purty, VS Binu, Iillayabharathi–
Prevalence and risk factors for hypertension in a rural area of Tamil Nadu, South India;
Indian journal of medical specialties 2012;3(1):12-17
 - 10 VS Binu V.S., Nair N.S., Manjunatha Prasad K., Kalesh K. M.

Estimation of Uncertainty Associated with Intensity Ratio in CDNA Microarray Experiments. Research & Reviews:

A Journal of Statistics 2012, 2(2).

- 11 DeekshaPandey, VidhiVanya, SauravBhagat, VS Binu, JyothiShetty – Awareness and attitude towards human papillomavirus (HPV) vaccine among medical students in a premier medical school in India.

PLOS One 2012, 7(7), e40619.

- 12 SH Subba, V.S. Binu, M.S. Kotian, N. Joseph, AB Mahamood, N. dixit, A George, P. Kumar, S. Acharya, P. Reddy –

Future specialization interests among medical students in southern India. The National Medical Journal of India; vol. 25, No. 4. 2012

- 13 Guddattu V, Rao A.

On the use of marginal and conditional likelihood method for estimating inflated parameter in Zero Inflated Poisson Regression model.

ProbStat Forum 2012; 4: 10–20

- 14 Prabhu V, Rao S B S, Chandra S, Kumar P, Rao L, Guddattu V, Satyamoorthy K, Mahato K K.

Spectroscopic and histological evaluation of wound healing progression following Low Level Laser Therapy (LLLT).

J Biophotonics. 2012 Feb;5(2):168-84;

- 15 Aithal VU, Bellur R, John S, Varghese C, Guddattu V.

Acoustic Analysis of Voice in Normal and High Pitch Phonation: A Comparative Study.

Folia PhoniatrLogop. 2012; 64 (1):48-53.;

- 16 Devi Elsa Sanatombi, PrabhuRavindra, Bhanumathi PP, SequieraLeena, MayyaSreemathi S, Bairy KL, Manu Mohan K –

Identification of Health Problems of Patients Undergoing Hemodialysis Using Self Care Deficit Theory and Application of Nursing Process Approach Care International Journal of Nursing Education. Jan. - June 2012. Vol. 4, No.

- 17 Bhaktha G, Nayak BS, Mayya S, Shantaram M,

Is HbA1c a risk factor for type 2 diabetic subjects without macro and micro vascular complications? Arch PhysiolBiochem. 2012 Feb 2.

PMID:22295973 [PubMed]

18 S. Geena Mary” , Nair N.S, J. Roopalekha ,

A Study of factors influencing the acceptability , Utilization Pattern and cost benefit analysis of a hospital based health insurance scheme : A cross sectional study

2013: (24)

1. Ms. Seena Biju, Dr. N. Sreekumaran Nair-
An Internal Audit of Student Satisfaction using Multilevel Models Based on Prioritized Explanation variables.
International Journal of Information Processing & Management. Vol 4; page 15-28; January 2013. **Indexed, International.**
2. Karanth L, Jafaar S H, Kanagasabai S, Nair N S , Barua A-
Anti D administration after spontaneous miscarriage for preventing Rhesus alloimmunisation
The Cochrane Library. Issue 3, 1-17, March 2013. **Indexed, International.**
3. Karanth L, Kanagasabai S, Nair N S, Barua A
Desmopressin acetate (DDAVP) for preventing and treating acute bleeds during pregnancy in women with congenital bleeding disorders.
The Cochrane Library- page 1-10; April 2013, **International, Indexed.**
4. Pallavi Upadhyaya, Mohanan P, K Manjunatha Prasad-
Barriers to adoption of B2B e-marketplaces: an empirical study of Indian manufacturing MSMEs
Review of Integrative Business & Economics – Rev. Integr. Bus. Econ. Res. Vol 2(1).**International, Indexed.**
5. K Manjunatha Prasad, KS Mohana-
Core-EP inverse; Linear and Multilinear algebra, 2013; Taylor & Francis.
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Verbal and Numerical aptitude of Graduate Nursing Students At Entry Level; GRA.
Global Research Analysis; Volume 2; Issue 3.**Indexed, International.**
7. Maxie Andrade, Anice George, Shreemathi Mayya

- Measurement of Caring: An ICE Berg Phenomenon;
Volume 2; Issue 3; Paripex- Indian Journal of Research, **International, Indexed.**
8. Giri DK, Kundapur PP, Bhat GS, Bhat KM, Guddattu Vasu-
Periodontal Disease and obesity in an Indian population.
Nepal Journal of Medical Sciences; Volume 02, Number 02, July-December 2013; page: 144 – 148. **Indexed, International.**
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Factors Determining Quality Of Life of Geriatric Patients with HIV/AIDS: A Cross Sectional Study in South India.
IOSR Journal of Pharmacy, Volume 3, Issue 9 (October 2013), Page: 63-67
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A Study to Assess Knowledge and Practice in Relation to Universal Precautions and Awareness Regarding Post-Exposure Prophylaxis for HIV Among Interns of A Medical College in Mysore District, South India.
International Journal of Recent Scientific Research - Vol. 4, Issue, 10, pp.1554-1557. **Indexed, International.**
11. Shivananda Kalludi, Ravindra Maradi, Murali Dhar, Raghavendra Babu, Manjunath Sathyanarayanachar -
Introducing Physiology Practical Demonstration in Course Curriculum for the First Year Nursing Students
Journal of Clinical and Diagnostic Research. 2013 Sept, Vol-7(9): 1989-1991 **Indexed, International.**
12. Elsa Sanatombi Devi, Shreemathi S Mayya, Bairy KL, Anice George, Manu Mohan K –
Comparative analysis of the Outcome of two teaching – learning approaches adopted for teaching pharmacology –
International Journal, indexed of Nursing Education. July – December 2013, Vol. 5, No. 2. **Indexed, International.**
13. Jyothi Chakrabarty, M.S. Vidyasagar, Donald Fernandes, Vinutha Bhat, Nagalakshmi, Ganapathi Joisa and Shreemathi S Mayya –
Effectiveness of Pranayama on the Levels of Serum Protein thiols and Glutathione in Breast Cancer Patients Undergoing Radiation Therapy: A Randonmized Controlled Trial.

Indian J Physiol Pharmacol 2013; 57(3): 225 – 232 **indexed, national**

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15. Mrs. Maxie Andrade, Dr. Shreemathi Mayya-

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16. Mrs, Maxie Andrade., Dr. Anice Georeg, Dr. Shreemathi Mayya,

Measurement of caring: An ICE Berg Phenomenon.

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17. Mrs, Maxie Andrade., Dr. Anice Georeg, Dr. Shreemathi Mayya

Verbal and Numerical aptitude of graduate nursing. Vol 2 March 2013,

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Economic development of woman through home based business
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Combinatorial Matrix Theory and Generalized Inverses of Matrices
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Demystifying Systematic Reviews
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 2. Sreekumaran Nair N, Ravishankar N, Melissa Glenda Lewis-
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Vol (1) 2014, **Indexed-National.**
 3. Mannat Mohanjeet Singh, Shradha S. Parsekar, Sreekumaran N. Nair-
An Epidemiological Overview of Child Sexual Abuse
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 Policy prescription from systematic review evidence on conditional cash transfer for improving uptake of health interventions in low and middle income countries
 Global Journal of Medicine and Public Health
 Vol.3, No.5 December 2014. gjmedph.org, **Indexed-International**
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 Matrix Product (Module-2) Of Graphs
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7. Anjali Ollapally, Prithi Jain, Ashma Monteiro
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Population Specific Impact of Genetic Variants in KCNJ11 Gene to Type 2 Diabetes: A Case-Control and Meta-Analysis Study

Case-Control and Meta-Analysis Study of KCNJ11 Gene Variants in T2D: September 2014 | Volume 9 | Issue 9 | e107021, **Indexed-International**.

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Effect of limited access dressing on hydroxyproline and enzymatic antioxidant status in non-healing chronic ulcers

Indian Journal of Plastic Surgery May-August 2014

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The Sphericity Deviation Score: A Quantitative Radiologic Outcome Measure of Legg-Calve' Perthes Disease Applicable at the Stage of Healing and at Skeletal Maturity:

A Quantitative Radiologic Outcome Measures

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 Journal of Global Infections Diseases,
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 Non-replaced Mandibular First Molars and Temporomandibular Joint Dysfunction
 Vol (3) January-June 2014.
17. N. Ravishankar a, Anusha Mujja b, Melissa Glenda Lewis a,N. Sreekumaran Nair
 A tool to measure complexity in public health interventions
 Clinical Epidemiology & Global Health (2014).
 Vol 1-7April, 2014, **International-Indexed**
18. Radhakrishnan Rajesh, Sudha Vidyasagar, Danturulu Muralidhar Varma, Vasudeva Guddattu, Naren Ramanlal Pate, Manju Varghese, Poornima Pulagam
 Evaluating the effects of combination antiretroviral therapy regimens and the development of adverse drug reactions in Indian human immunodeficiency virus positive patients
 Saudi Journal for Health Sciences - Vol 3, Issue 2, May-Aug 2014, **Indexed-International**.
19. Preethy D, Souza, Anice George, Sreekumaran Nair, Judith Noronha, Vishnu Rejith, B. Unnikrishnan, Shivanada Bhat
 Resources for evidence- based health care: accessibility and availability
 Journal of Education and practice:
 ISSN 2222- 1735 (paper) ISSN 2222 – 288X (Online), Vol 5. No. 7, 2014. **International-Indexed**
20. Dr. Monica Charlotte Solomon, Dr. M S Vidyasagar, Dr. Donald Fernandes, Dr. Vasudeva Gudattu
 Clinico – Pathological correlation of the expression of cycline D1 and Bcl – 2 in oral squamous cell carcinomas – A Tissue Microarray study
 ISSN No. 2277-8179: International journal of scientific research:

ISSN Directory, Paris. - Page 64-68. Impact factor – 0.3317 Volume 3, issue 2 Feb 2014. - **Indexed – International.**

21. Ahamed Shafeeq B M, Dr Binu VS

Spatial Patterns of Crimes in India using Data Mining Techniques

ISSN: 2277-3754 International Journal of Engineering and innovative Technology

(IJEIT- Volume 3, Issue II, May 2014. **Indexed – International.**

22. Sundar Kumar Veluswamy, Arun G Maiya, Suma Nair, Vasudev Guddattu, N Sreekumaran Nair, Sudha vidyasagar

Awareness of chronic disease related health benefits of physical activity among residents of a rural south Indian region; A cross – sectional study

International Journal of behavior nutrition physical activity-Vol11 (1), Feb2014, **Indexed International.**

23. Mrs. Maxie Andrade, Dr Shreemathi Mayya, Dr. Anice George

Academic performance and nursing aptitude: A Correlation

International Journal of Scientific

ISSN director pairs. Impact factor 1.865- Vol 3- **Indexed – International**

24. Geetha Bhakta, Shivananda Nayak, Shreemathi Mayya, Manjula Shantaram

Scenario of Anthropometric variable with Leptin in Diabetic Subjects free from Micro and Macro Vascular Disease

Research Journal of Pharmaceutical, Biological and chemical sciences – May-June 2014.

ISSN: 0975 – 8585- Original – **Indexed– International** – 0.35 (Indexed in Scopus, Elsevier, Google scholar)

25. Ashton Bionel D' Souza, Nichelle Mrinali Saldanha, Ashma Dorothy Monteiro and Harshavardhan H

Comparison of Intrathecal Hyperbaric 0.5% Bupivacaine, Isobaric 0.5% Levobupivacaine and Isobaric 0.75% Ropivacaine for lower abdominal surgeries.

International Journal of Health Science and Research

Indexed-International. (Vol 4, January 2014 (22-29).

26. Geetha Bhaktha, B Shivananda Nayak, Shreemathi Mayya, and Manjula Shantaram

Adiponectin levels in diabetic subjects without any pre-existing micro and macrovascular complications.

Asian Journal of Biochemical and Pharmaceutical Research

Issue 2 (Vol. 4) 2014 ISSN: 2231-2560 CODEN (USA): AJBPAD.

27. Maxie Andrade, Shreemathi S Mayya, Anice George

Assessment of Nursing Aptitude on Entry to Nursing Programme: Can it be Assessed?

International Journal of Nursing education.

* **Monographs**

Nil

* **Chapters in Books**

1. K Manjunatha Prasad, K S Mohana, and Y Santhi Sheela. Matrix Partial Order associated with Space Preorder, “Combinatorial Matrix Theory and Generalized Inverses of Matrices” Eds. Ravindra B. Bapat, Steve Kirkland, K. Manjunatha Prasad and Simo Puntanen, SPRINGER India, 2013 p 195 – 226. DOI: 10.1007/978-81-322-1053-5_17 (http://dx.doi.org/10.1007/978-81-322-1053-5_17)
2. K Manjunatha Prasad, G Sudhakara, H S Sujatha, and M Vinay. Matrix Product of Graphs, “Combinatorial Matrix Theory and Generalized Inverses of Matrices” Eds. Ravindra B. Bapat, Steve Kirkland, K. Manjunatha Prasad and Simo Puntanen. SPINGER India 2013, p 41 – 56. DOI: 10.1007/978-81-322-1053-5_4 (http://dx.doi.org/10.1007/978-81-322-1053-5_4)

* **Edited Books**

1. Steve Kirkland K. Manjunatha Prasad, Sukanta Pati and Simo Puntanen (Eds), Linear Algebra with Applications (ISBN: 978-93-82460-20-6), Manipal University Press, December 2014.
2. Ravindra B. Bapat, Steve Kirkland K. Manjunatha Prasad, and Simo Puntanen (Eds), Combinatorial Matrix Theory and Generalized Inverses of Matrices, (ISBN: 978-81-322-1052-8 (Print) 978-81-322-1053-5 (Online)) SPRINGER India 2013. DOI 10.1007/978-81-322-1053-5.

23. Details of patents and income generated:

Nil

24. Areas of consultancy and income generated

Areas of consultancy: Statistics, Epidemiology and Research Methodology

Dept. faculty runs a consultancy centre which provide consultancy in Research design, data processing, statistical analysis and use of various statistical packages for the benefit of research scholars, Graduates, Post graduates & Faculty members. Center provide consultancy for Research design, data analysis, report writing, also provide guidance PhD scholars, Conduct summer courses for research student & contribute to the research committee in evaluating PhD Protocols, interim reports etc.

Revenue generated: These Services are provided free of cost.

25. Faculty selected nationally/ internationally to visit other laboratories in India and abroad

National: 07 (Invited to conduct the Workshops/Training Program.etc.)

International: 01

26. Faculty serving in

a) National committees b) International committees c) Editorial Boards d) any other (please specify)

Dr. N Sreekumaran Nair

- Editorial Board member, scientific report, Nature group of publication.
- Director, Cochrane Public Health group South Asian satellite and Public Health Evidence South Asia (PHESA)
- Coordinator, South Asian Cochrane Network (SACN), Manipal site, Manipal
- Statistical editor, Cochrane collaboration Public Health Review Group.
- Statistical editor, Cochrane Collaboration Acute Respiratory Infection Group
- Member, task force, ICMR
- Member, curriculum committee, AYUSH PG programme
- Reviewer, Indian journal of Medical Research
- Steering committee member, Cochrane collaboration, South Asia Network
- Member, Developing country stipend committee, Cochrane Collaboration
- Member, Executive Committee of Indian Society for Medical Statistics
- Fellow of Academy of General Education (FAGE), Manipal, India
- Member, Institutional Research committee, Manipal University, Manipal
- General Secretary, International Biometric Society, Indian region
- Fellow, Indian Society for Medical statistics – FSMS, Co-Chaired 22nd Cochrane Colloquium

Dr. K Manjunatha Prasad

- Electronics Journal of Linear Algebra(Special Editor)
- International Journal of Fuzzy Mathematics Archives
- Research & Review: Journal of Statistics, STM Journal

- Editor Journal of RRJS
- National pool of resource person for Central university of Kerala
- Reviewer - NDS
- Reviewer – Linear & multi linear algebra
- Reviewer- ELAS

Dr. Binu V S

- Member of Scientific editors for the Journal of Medicines Use in Developing Countries, published by Discipline of Social and Administrative Pharmacy, School of Pharmaceutical Sciences, University Sains Malaysia, Malaysia
- Statistical advisor for International Journal of Physiotherapy & Rehabilitation
- Member of International Biometric Society, Indian region.
- Reviewer for Indian Journal of Medical Research.
- Member in Board of Studies for Allied Health Science PG courses of Manipal University.
- Member in Board of Studies for M.Sc. Biostatistics Course of Manipal University.

Dr. Vasudeva Guddattu

Reviewer - Indian Journal of Medical Research

Ms. Ashma Dorothy Monteiro

- Reviewer - Indian Journal of Medical Research
- Member - Board of Studies, Department of Statistics, St. Agnes College (Autonomous) Mangalore.

27. Faculty recharging strategies

- Internal training
- External training
- Nominating for conferences
- Workshops
- Seminars
- Symposiums etc.

28. Student projects

- percentage of students who have done in-house projects including inter-departmental projects-61%

- percentage of students doing projects in collaboration with other universities / industry / institute - 39%

29. Awards / recognitions received at the national and international level by

Faculty

- Dr. N. Sreekumaran Nair awarded T.M.A Pai endowment chair for systematic review evidence in public health for the second consecutive year.
- Dr. Shreemathi S Mayya awarded Presented a paper entitled ‘Publications of dissertations: Quality,Quantity and the Associated Factors’ during the 2nd International Conference of Higher Education Research on February 25-26, 2014 at the Ritz-Carlton, Kuala Lumpur, Malaysia and received best paper award.

Doctoral / post doctoral fellows

- Mr. Ravishankar awarded “Developing Countries Stipend” to attend 22nd Cochrane Colloquium at Hyderabad.
- Ms. Melissa Lewis received Anne Anderson award during 22nd annual Cochrane Colloquium held in Hyderabad.
- Ms. Melissa selected for the winter school on Bayesian analysis organized by the applied statistics unit.
- Dr. Preethy D’ Souza was awarded the second best research paper in the “International conference on Inequity in Maternal and Child Health: Situations and Solution”, held at Indian Institute of Public Health, Gandhinagar (IIPHG)” from Nov 30 - Dec1 2013 for the systematic review “Interventions for preventing obesity among children in South Asian region”.
- Ms. Maxie Andrade paper presented on “Nursing aptitude: Can it be measured?” In the 2nd International Conference on Higher Education Research, by IAMURE Multidisciplinary Research, held between February 25-26, 2014 in Malaysia. **Awarded Best Oral Presenter**
- Ms. Maxie Andrade Paper presented on “Ensuring competent nurse workforce: A proactive approach to transform practice and population health” in the national conference on Protecting Women’s and Children’s Health through proactive nursing, Organized by Sri Vonoba Bhave College of Nursing Silvassa, Dadra Nagar Haveli, between 10-12 October 2014. Awarded Best Scientific paper

Students

- Ms. Nisha Joseph, Ms. Nidhi Menon, Ms. Reshma M.Sc. Biostatistics students awarded in appreciation of presenting a Research paper in “Directorate of Census operations and Institute of Social and Economic change [ISEC] at Bangalore sponsored by UNDP.

30. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

Workshops: 05

Conferences/Symposium: 01

#	Title of the Seminar/ workshop/ conference	National/ International	Funding Agency	Outstanding Resource persons
1.	Conference on Linear Algebra & its Applications from 18-20 December 2014	International	DST CSIR NBHM INSA	Dr. R.B. Bapat R. Balakrishnan Abraham Berman Rajarama Bhat Rajendra Bhatia Arup Bose Steve Haslett Surender Kumar Jain Andre Leroy S.H. Kulkarni Arbind Kumar Lal S.K. Noegy Sukanta Pati Simo Puntanen T.E.S. Raghavan Sharad Sane Bhaba Kumar Sarma Ajith Eqbal Singh K.C. Sivakumar Sivarama Krishnan Sivasubramanian Murali K, Srinivasan Wasin So V.S Sundar
2.	Workshop on “Official Statistics” on 16th December, 2014	National	NASA	Dr. Anjana Dube Shri. H. Borah
3.	Workshop on “Systematic Reviews and Meta Analysis” November 22-23, 2014	National	Nil	Dr. Unnikrishnan B Dr. Suma Nair Dr. Prasanna Mithra Dr. Judith Noronha
4.	Workshop On Data Manipulation And Statistical Analysis Using SAS - August 1-3, 2014	National	Nil	Mr. Pradeep Acharya Mr. Raghavendra Devadiga Ms. Madhura Saralaya Ms. Amitha Puranik
5.	Workshop on statistical methods in epidemiology– 26-30 May 2014.	National	MCI	

#	Title of the Seminar/ workshop/ conference	National/ International	Funding Agency	Outstanding Resource persons
6.	Workshop on Survey Research & Statistical Analysis: 12 – 14 August, 2013	National	Nil	

31. Code of ethics for research followed by the departments

As set by university ethics committee

32. Student profile course-wise:

Name of the Course (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
M.Sc. Biostatistics (2013 -14)	78	14	22	100	100
Certificate course in Biostatistics, Epidemiology and Research Methodology (2013-14)	305	143	140	100	100

33. Diversity of students

Name of the Course (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.Sc. Biostatistics (2013-14)	Nil	29	61	Nil

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

Nil

35. Student progression

Student progression	Percentage against enrolled
UG to PG	--
PG to M.Phil.	--
PG to Ph.D.	6
Ph.D. to Post-Doctoral	--
Employed	
Campus selection	72
Other than campus recruitment	11
Entrepreneurs	--

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	Nil

from other universities within the State	57%
from universities from other States	43%
from universities outside the country	--

37. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period 01

38. Present details of infrastructural facilities with regard to

- a) Library: yes
- b) Internet facilities for staff and students: yes
- c) Total number of class rooms: 02
- d) Class rooms with ICT facility: 02
- e) Students' laboratories: 01
- f) Research laboratories: 01

39. List of doctoral, post-doctoral students and Research Associates

- a) from the host university:
 - Ms. Mellissa Glenda Lewis

b) from other universities

Doctoral Students:

- Mr. Shivashankar
- Ms. Leena Sequira
- Ms. Santhi Sheela
- Ms. Vinitha Acharya
- Ms. Divya Shenoy
- Mr. Kalesh M Karun
- Mr. Ravi Shankar
- Ms. K R Banumathe

40. Number of post graduate students getting financial assistance from the university.

3 (scholarship on tuition for Konkani speaking and AGE students)

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

Before commencement of the programme the stake holders including, likely employers and academicians have been contacted and their feedback regarding viability and employability have been obtained. The programme structure, syllabus, mode of delivery etc have been debated in the dept. and then presented to the board of studies. Some of the external members from academic and industry, regularly involved in this exercise, are:

- Dr. Venkatesan, TRC, ICMR, Chennai
- Dr. Jayanti Gupta, VP Clinical Development Semler Research Centre Pvt Ltd, J.P.Nagar, Bangalore
- Dr. Amit Bhattacharyya, GlaxoSmithKline Pharmaceuticals Embassy Link, Bangalore
- Prof. Jayaseelan, CMC, Vellore
- Dr. Ashwini Mathur, Novartis Healthcare Pvt. Ltd. Madhapur, Hyderabad
- Dr. Viswanath Iyer, Novartis Health care Pvt Ltd, Hyderabad

42. Does the department obtain feedback from

- a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

Yes; feedback is regularly obtained regarding content, syllabus, method of teaching, delivery & evaluation etc

- b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Yes; We collect feedback from the students at the end of the course. Based on their feedback, relevant actions are taken.

- c. alumni and employers on the programmes offered and how does the department utilize the feedback?

Yes; we collect feedback from the employers and alumni. The feedback is used to modify the course content, course delivery, training and evaluation.

43. List the distinguished alumni of the department (maximum 10)

- Chethana Kalmady, Statistician, Novo Nordisk Service Center, Pvt., Ltd., Bangalore
- Pradeep Acharya, Sr. Statistician, Efficacy Life sciences Analytics Bangalore
- Lijina K, Jr. Statistician, Novo Nordisk Service Center, Pvt., Ltd., Bangalore
- Raghavendra, Associate Biostatistician, GSK, Bangalore
- Ramesh Vishwakarma, Sr. Biostatistician, GVK Biosciences, Ahmedabad.
- Ravikant Chaubey, Theorem India Pvt Ltd, Bangalore.
- Shivam Pandey, Indian Institute of Public Health, Delhi
- Madhura P, GSK, Bangalore
- Rajani, PPD, Bangalore.
- Reshma, Quanticate, Bangalore.
- Divya Nair H, Indian Institute of Public Health, Delhi

44. Give details of student enrichment programmes (special lectures / workshops /

seminar) involving external experts.

Special Lectures

- Dr. Ashwini Mathur, Dr. Vishwanth Iyear have given talks on “Opportunities for Biostatistics”
- Dr. Surendra Yajamany have given talk on “Role of Biostatisticians in Clinical Trials”
- Ashim Dhar have given talk on “Importance of Statistics in Health Science research”
- Dr. B.L Verma have given talk on “Future of Biostatistics”

Workshops

- Workshop on Survey Research & Statistical Analysis : 12 – 14 August, 2013
- National workshop on statistical methods in epidemiology – 26-30 May 2014.
- National Workshop On Data Manipulation And Statistical Analysis Using SAS - August 1-3, 2014
- Workshop on “Systematic Reviews and Meta Analysis” November 22-23, 2014.
- National Workshop on “Official Statistics” on 16th December, 2014.
- SAS training program – April and May, 2014

45. List the teaching methods adopted by the faculty for different programmes.

Class room discussion, seminars, case studies, case discussion, practical, consultancy, tutorial, Journal presentation etc.

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

- Performance and quality of students regarding their knowledge are measured by evaluators during sessional examination, presentation, internal and external evaluation of the university examination.
- We obtain feedback from industries who hire our student on their expertise in the subject as well as their suitability for the industry.

47. Highlight the participation of students and faculty in extension activities.

- Students conducted ANVESHYA, a fest for the undergraduate statistics students of all colleges in this region
- Providing consultancy
- VSO (Voluntary Service Organization) of the university
- UTSAV-Cultural Coordination Committee.

48. Give details of “beyond syllabus scholarly activities” of the department.

Conference presentation, conducting workshops, journal/ seminar presentation, consultancy etc.

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

ISO 9001: 2008 & 14001:2004 certified

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

PhD program, publications, students projects, proceedings, contributions to the text books, advanced workshops, conference presentations

51. Future plans of the department.

Vision

- To become Asia's leader in teaching, training, research and consultancy in applied statistical sciences
- Establish an institute for applied statistics (Manipal Institute of Applied Statistical Sciences (MIASS)) and achieve world class by 2015

Mission

Be the most preferred choice of

- Students for - training, internship and research
- Industry, governmental and nongovernmental organizations for - consultancy, training, placement and collaboration
- Faculty for - teaching, research collaboration, fellowship and training needs
- Researchers for - consultancy and collaboration
- Universities and funding organizations for – collaboration

52. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strengths:

- Good infrastructure and resources
- Exposure to faculty and students of different streams
- Alumni are placed in nationally and internationally recognized organization
- Collaboration with industries and Institutions
- Faculty members specialized in different areas

Weakness:

- Difficulty in getting good quality students
- Lack of funded projects
- Lack of fundamental research

Opportunities:

- Scope for national and international collaborations in view of university emphasizing more towards expansion and internationalization
- Scope for collaboration with other disciplines within the University
- Scope for imparting statistics, epidemiology and research methodology to the fraternity of other disciplines.

- Scope for multi-disciplinary research

Challenges:

- Attracting good quality students
- Most of the programs are relatively new and hence, we do not have a role model to follow
- Collaborating, communication, teaching statistics to non-statisticians.

1. **Name of the Department:** Department of Public Health

2. **Year of establishment:** 2009

3. **Is the Department part of a School/Faculty of the university?**

Yes

4. **Names of Programmes/Courses offered (UG, PG, MPhil, PhD, Integrated Masters; Integrated PhD, etc.):**

- Master of Public Health (MPH)
- Master of Social Work (MSW)
- Master of Hospital Administration (MHA)

5. **Interdisciplinary courses and departments involved:**

- Department of Statistics, Manipal
- School of Communication, Manipal
- School of Management, Manipal
- Department of Commerce, Manipal

6. **Courses in collaboration with other universities, industries, foreign institutions, etc.**

- **Foundation course on Global Health** (e-Learning) in collaborations with Maastricht University, The Netherlands and McMaster University, Canada

Foundation Course – 1 from (August to November) & Foundation Course – 2 from (Jan-April): In the course students from three universities attend online lectures through video conference facility. Students are divided into groups one student from each university (Manipal, Maastricht and McMaster). Here they were taught on emerging issues in Global Health and also on Grant writing which includes logical frame work and budgeting in the projects. Every Wednesday students will do group exercise through skype and once in fortnight they have online lecture class. In this experts from McMaster and Maastricht address these students on Global Health and Grant writing. Each groups will submit an assignment at the end of the course and present during Global Health Symposium in Manipal. This is a unique mode of teaching where students are exposed to the International learning.

- **Study Abroad Program:** Students from the following Universities visit Department of Public Health as a part of their study abroad program.
 - University of Maryland, USA
 - Ohio State University ,USA
 - Global Alliance, USA

- University of Miami
7. **Details of programmes/courses discontinued, if any, with reasons:** Nil
 8. **Annual/Semester/Choice Based Credit System:** Semester system-Credit based
 9. **Participation of the department in the courses offered by other departments:** Nil
 10. **Number of teaching posts sanctioned and filled (Professors/Associate Professors/Assistant Professors)**

	Sanctioned	Filled
Professor	1	1
Associate Professors	3	3
Assistant Professors	2	2
Senior Grade Lecturers	3	3
Lecturers	3	3

11. **Faculty profile with name, qualification, designation and specialization (DSc/DLitt/PhD/MPhil, etc.,)**

#	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided for the last 4 years
1	Dr.RamachandraKamath	MD	Professor	Community Medicine	15	-
2	Dr.Sanjay Pattanshetty	MD	Assoc. Prof. & coordinator – MPH Programme	Community Medicine	06	-
3	Dr.Prakash Narayan	Ph.D	Assoc. Prof.	Population Studies	12	-
4	Dr.SameerPhadnis	MD MPH	Assoc. Prof.	Community Medicine	06	-
5	Dr Lena Ashok	Ph. D	Asst. Prof. & Coordinator MSW Programme	Medical and Psychiatric Social Work	23	-
6	Dr.RajeshKamath	MBBS MHA	Asst. Prof.	Hospital Administration	04	-
7	Ms Ida D'Souza	M. Phil	Senior Grade Lecturer	Community Development	18	-
8	Ms.ShammyShiri	LL.B MPhil	Senior Grade Lecturer	Human Resource Management	14	-
9	Mr Teddy Andrews	MPhil	Senior Grade Lecturer	Medical and Psychiatric Social Work	12	-
10	Dr.Varalakshmi C	MBBS MPH	Lecturer	Public Health	11	-
11	Dr. Aarthy Rao	MBBS MPH	Lecturer	Public Health	05	-
12	Dr.AarthyRamasamy	MBBS MPH	Lecturer	Public Health	01	-

12. List of senior Visiting Fellows, faculty, adjunct faculty, emeritus professors:

SI No	Name	Organization
1	Dr Derek Lobo	Retired WHO Consultant
2	Dr.RajnarayanTiwari	National Institute of Occupational Health, Ahmedabad
3	Dr.Ravichandran	Regional Occupational Health Centre, Bangalore
4	Dr.Shamma	PHFI Hyderabad
5	Dr.RajnarayanTiwari	National Institute of Occupational Health, Ahmedabad
6	Dr. Anil Krishna	SRM University, Chennai

13. Percentage of classes taken by temporary faculty – programme-wise information:

30%

14. Programme-wise Student Teacher Ratio

MPH: 1 : 12

MSW: 1 : 12

MHA: 1 : 21

15. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Clerk – 1

Support Staff – 1

16. Research thrust areas recognized by funding agencies

- Nutritional and Health status of school children
- Anemia among tribal population
- Evaluation of PPI Programme
- Evaluation of MDA for Filariasis
- HIV/AIDS
- TB, Malaria
- Population based cancer registry
- Indoor Air Pollution
- Ageing
- Adolescent Health
- Cleft lip and cleft palate in children
- Cardiovascular disease registry
- Information technology in Public Health

- Disaster Management
- Supportive supervision of NACO supported Targeted Intervention Program
- Chronic diseases : Hypertension, Ulcerative Colitis, Diabetes, Cancer
- Child rights
- Gender sensitivity

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies and grants received project-wise.

Funding Agency	Grants Received (in INR)
Manipal Centre for European Studies	6,80,000
ISKCON	11,00,000
University of Alabama, USA	4,00,000
Karnataka Knowledge Commission	3,80,000
University of Alabama, USA	3,46,000
UNICEF	6,00,000
Women and Child welfare Department (WCD)	2,00,000
Zilla Panchayat, Udupi	70,000
Women and Children welfare Department, Udupi	2,00,000
University of Alabama	3,50,000
National Institute of Mental health and Neuro sciences, Bangalore	1,90,000
WHO	1,90,000
ITREOH	31602
UNICEF	23,00,000

18. Inter-institutional collaborative projects and grants received: Nil

a) All India collaboration b) International

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, etc.; total grants received – Nil

20. Research facility/centre with – Nil

- State recognition
- National recognition
- International recognition

21. Special research laboratories sponsored by/created by industry or corporate bodies – Nil

22. Research Output in last 3 years

	2010	2011	2012	2013	2014

Completed funded research projects		5	6	2	2	3
Completed non-funded research projects		--	1	--		
Completed PhD research projects		--	--	--		
Completed PG research projects		--	21	35	32	46
Completed UG research projects		--	--	--	--	--
Publications	International	11	3	5	5	7
	National	1	1	1	2	-
Books		--	--	--	--	--
Chapters in books		--	1	1		
Conference presentations	International	1	4	5	1	1
	National	--	4	5		

Publications:

* Number of papers published in peer reviewed journals (National / International) –22

1. Kumar A, Pandit V, Pattanshetty S, Roy S, Krish S. A profile of dengue cases admitted to a tertiary care hospital in Karnataka, South India. *Tropical doctor* 2010;40:45-46
2. Renjhen P, Kumar A, Pattanshetty S, Sagir A. A study on knowledge, attitude and practice of contraception among college students in Sikkim, India. *J Turkish-German GynecolAssoc* 2010; 11: 78-81
3. Rahaman H, Renjhen P, Kumar A, Pattanshetty S, Sagir A, Dubey H. A study on Emergency Contraceptive practice among nursing staff in Sikkim, India-A cross sectional study. *AMJ* 2010;3(10):667-671
4. Shetty RS, Pattanshetty S, Kamath A, Kamath S. Are our women aware of HIV/AIDS?-A cross-sectional study. *AMJ* 2010, 3(10):638-643
5. Pattanshetty S, Kumar A, Pandit V, Sneha K, Darshan BB. HIV-TB co-infection in southern India. *AMJ* 2010;3(10):689-690
6. Pattanshetty S, Nagaraj K, Kamath A, Baiyy R. Private practitioners approach in the diagnosis of pulmonary tuberculosis in southern India. *AMJ* 2010;3(9): 611-613
7. Kamath V, Pattanshetty S, Mithra P, Lena A. Prevalence of Overweight and Obesity among the rural school children in Udupaluk, South India. *AMJ* 2010;3(6):357-363
8. Kumar A, Kamath V, Kamath A, Rao C, Pattanshetty S, Sagir A. Nutritional status assessment of under-five beneficiaries of Integrated Child Development Services program in rural Karnataka. *AMJ* 2010;3(8): 495-498
9. Veena Kamath G, Prasanna Mithra P, Pattanshetty S, Asha Kamath, Anuja Balakrishnan, Tinni Mishra, Nisha Sinha, Lena A. Prevalence of hypertension in the paediatric population in Coastal South India. *AMJ* 2010; 3(11): 695-698
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* [Monographs](#) –Nil

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2. Teddy Andrews, (2011), “Exploring Innovations in Social Work Training Practices”, *Professional Social Work – Best Practices and Innovations in Teaching, Research and Extension*, Authorspress, New Delhi.

* [Edited books](#) –Nil

* [Books with ISBN with details of publishers](#) –Nil

* [Number listed in International Database \(For e.g.,Web of Science, Scopus, Humanities International Complete, Dare Database – International Social Sciences Directory, EBSCO host, etc.\)](#) –Nil

- * Citation Index – range / average - Nil
- * SNIP –Nil
- * SJR –Nil
- * Impact Factor – range / average -----
- * h-index ----

23. Details of patents and income generated: Nil

24. Areas of consultancy and income generated: Nil

25. Faculty selected nationally/ internationally to visit other laboratories in India and abroad: Nil

26. Faculty serving in : Nil

- a) National committees b) International committees c) Editorial Boards d) any other (please specify)

27. Faculty recharging strategies :

- Regularly supporting the faculty members to participate in workshops in their respective fields
- Pedagogy workshops for faculty members

28. Student projects

- percentage of students who have done in-house projects including inter-departmental projects – 100%
- percentage of students doing projects in collaboration with other universities/industry/institute –Nil

29. Awards/recognitions received at the national and international level by

- Faculty – **2012**-MsShammyShiri received a best paper award in an International Conference at Indonesia
2014-Ms Shammy Shiri received a best presenter award in an International Conference at Phuket Thailand.
2014-Dr. Sanjay M. Pattanshetty- Executive Board Member- Asian Health Literacy Association, Geneva office.
- Doctoral/post-doctoral fellows
- Students

30. Seminars/Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

- Global Health Symposium 2011 & 2012: 80 students (40 from Maastricht) and (40 from McMaster attended the symposium in Manipal. Four Faculty members from Maastricht, Four from McMaster University were the resource persons.
- Global Health Symposium 2013 in collaboration with Maastricht University, The Netherlands and McMaster University, Canada.
- International Workshop on Environment and Occupational Health in Collaboration with the National Institute of Occupational Health- Ahmedabad and the Regional & Government of Karnataka Occupational Health Centre-Bangalore
- Two days workshop on “ Qualitative research”
- Global health symposium in 2014- Attended by over 175 students, delegates from Maastricht, McMaster and Manipal Universities.
- Global health symposium in 2015- Attended by over 220 students, delegates from Maastricht, McMaster and Manipal Universities.
- Dog’s day out- Rabies awareness, in collaboration with the Department of Community Medicine, Rotary Club Manipal, Lion’s Club Manipal and the survodaya Trust.

Resource persons for the Symposium

1. Dr.Andrea Baumann, Director, Masters of Science in Global Health, McMaster University, Canada,
2. Dr.SanjayZodpey, Director,Public Health Education, Public Health Foundation of India, New Delhi
3. Dr. Donna Doane from the Asian Institute of Technology, Thailand
4. Dr. Thomas Krafft, Maastricht University
5. Dr Eva Pilot, Maastricht University
6. Dr. NerejaBhola from McMaster University, Canada,
7. Dr.Satishchandra, Surveillance Medical Officer, NPSP-WHO,
8. Dr.Sridhar, State Health Consultant, UNICEF,
9. Dr.SureshMariaselvam, SRM University, Chennai

2013

Dr.SureshMariaselvam, SRM University, Chennai

2014

10. Susan Barclay, McMaster University

11. Christopher Gombai, McMaster University

12. Michael Ladoceur, McMaster University

13. Andrea Baumann, McMaster University

14. Christopher Longo, McMaster University

15. Agnes Meershoek, Maastricht University

16. Anja Krumeich, Maastricht University

17. Nynke Dejong, Maastricht University

18. Thomas Krafft, Maastricht University

19. Eva Pilot, Maastricht University

- Public Health in emergencies: More than 100 Medical Officers from Udupi, Dakshina Kannada and Karwar districts of coastal Karnataka were trained in Public Health Emergencies. This project was funded by UNICEF.

Resource persons for the training

1. Dr. Shekar NIMHANS Bangalore
2. Dr.Anil Krishna SRM University
3. Dr.SureshMariaselvam SRM University
4. Dr.Satishchandra NPSP WHO
5. Dr.Pratap Red-R India
6. Dr.Chandan Gosh NIDM Delhi

- International workshop on Epidemiology and Biostatistics: More than 80 participants were participated from various medicals colleges in Karnataka.

Resource persons for the training

1. Dr. NagarajHaikady ,Ohio State University
2. Stan Lemeshow, Ohio State University

- International Conference on Environment and Occupational Health (EOH): The first International Conference on Environment and Occupational Health was held in Dec

2012. This was organized jointly with National Institute of Occupational Health (NIOH) Ahmedabad, Regional Institutional of Occupational Health (RIOH), Bangalore. More than 150 delegates participated in this conference.

Resource persons for the conference

1. Dr.NaliniSathiakumar, University of Alabama, USA
 2. Dr. P. K. Nag ,NIOH Ahmedabad
 3. Dr. TapanChakrabarti, NEERI
 4. Dr. Anjali Nag, NIOH Ahmedabad
 5. Dr. Arrigo. Italy
 6. Dr. Wultsch, Austria
 7. Dr.Nagappa, Pollution Control Board Bangalore
 8. Dr.Surendra, Joint Director Factories Bangalore
 9. Dr. ShyamPingle, IBM, Bangalore
 10. Dr.Nynke de Jong, Maastricht University
 11. Dr. Jayakumar,Malaysia
 12. Dr.Ravichandran, ROHC, Bangalore
- Workshop on Practicing Counseling :
 - Workshop on Cancer Registry : Cancer registry workshop was conducted to initiate hospital Based Cancer Registry and Population Based Cancer Registry in Manipal

Resource persons for the workshop

1. Dr. Gangadharan, Amrita Institute Of Medical Sciences & Research Centre, Cochin, India
2. Dr. Swaminathan,Department of Biostatistics and Cancer Registry, Cancer Institute (WIA), Chennai

31. Code of ethics for research followed by the departments: As per the University norms

32. Student profile course-wise:

Name of the Course (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
MPH 2009	20	11	2	100	
MPH 2010	35	12	5	100	
MPH 2011	70	24	11	Present 2 nd years	
MPH 2012	70	9	19	Present 1 st years	
MSW 2009	9	4	5	100	
MSW 2010	25	13	5	100	
MSW 2011	46	15	14	Present 2 nd years	
MSW 2012	45	8	13	Present 1 st years	
MHA 2011	16	1	4	Present 2 nd years	
MHA 2012	140	9	21	Present 1 st years	

Name of the Course (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
MPH 2013	89	12	20	Presently in 2 nd year	
MPH 2014	96	14	31	Presently in 1 st year	
MHA 2013	116	9	15	Presently in 2 nd year	
MHA 2014	120	11	27	Presently in 1 st year	
MSW 2013	31	6	7	Presently in 2 nd year	
MSW 2014	56	17	19	Presently in 1 st year	

33. Diversity of students 2013-14

Name of the Course (refer to question no. 4)	% of students from the same University	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
MPH 2009	35	0	45	20
MPH 2010	12	7	74	7
MPH 2011	12	20	60	8
MPH 2012	10	21	62	7
MPH 2013	28	16	56	0
MPH 2014	18	9	67	6
MSW 2009	0	77	23	0
MSW 2010	0	80	20	0
MSW 2011	0	80	20	0
MSW 2012	0	87	13	0
MSW 2013	0	77	23	0
MSW 2014	0	83	17	0
MHA 2010	35	65	0	0
MHA 2011	0	60	40	0
MHA 2012	10	27	60	3
MHA 2013	12	42	46	0
MHA 2014	11	21	68	0

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

Nil

35. Student progression

Student progression	Percentage against enrolled
UG to PG	----
PG to Mphil	3 MSW students
PG to PhD	-----
PhD to Post-doctoral	-----
Employed	

Student progression	Percentage against enrolled
<ul style="list-style-type: none"> • Campus selection • Other than campus recruitment 	100 %
Entrepreneurs	-----

36. Diversity of staff

Percentage of faculty who are graduates	
of the same University	20
from other universities within the State	60
from universities from other States	20
from universities outside the country	--

37. **Number of faculty who were awarded PhD, DSc and Dlitt during the assessment period –Nil**

38. **Present details of infrastructural facilities with regard to**

- Library –Yes
- Internet facilities for staff and students –Yes
- Total number of class rooms –5
- Class rooms with ICT facility –Nil
- Students' laboratories – Not Applicable
- Research laboratories –Not Applicable

39. **List of doctoral, post-doctoral students and Research Associates : Nil**

- from the host University
- from other universities

40. **Number of postgraduate students getting financial assistance from the University.**

Eight

41. **Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology. Nil**

42. **Does the department obtain feedback from**

- Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

Yes, through BoS

- Students on staff, curriculum and teaching-learning-evaluation and how does the

department utilize the feedback?

Yes, by semester wise students feedback

- c. Alumni and employers on the programmes offered and how does the department utilize the feedback? Nil

43. List the distinguished alumni of the department (maximum 10): Not applicable

44. Give details of student enrichment programmes (special lectures/workshops/seminar) involving external experts.

Guest lectures – 10

Name of the Resource Person	Organisation	Title
Dr. Srinath Reddy	Public Health Foundation of India, Delhi	Maternal and Child Health
Dr. Sanjay Zodpey	Public Health Foundation of India, Delhi	Human Resource in Public Health
Dr. NagarajHaikadi	Ohio State University, USA	Epidemiological Research in Public Health
Dr. Michael Bisesi	Ohio State University, USA	Environmental Health
Dr. Raj Warrior	Lousiana State University, USA	Cancer Research and Palliative Care
Dr. SwapanGarain	Tata Institute of Social Sciences, Mumbai	Social Entrepreneurship
Dr. Nalini	University of Alabama, USA	Occupational Health
Dr. Judith Read Guernsey	Dalhousie University, Canada	Environmental Health
Dr. Mogasale	Accine Initiative, Korea	Newer Vaccines
Dr. RamachandraBairy	District Health and Family Welfare, Udipi	Public Health System in India
Dr. Chandan Ghosh	Ministry of home affairs, New Delhi	Disaster management plan
Dr. Micheal S. Bisesi	Ohio State University	Environmental occupational health
Professor K. Srinath Reddy	President PHFI	Public Health in India
Dr. Vittal Mogasle	Health Economist	Role of health economist in decision making
Dr. Jayanth	Medical Officer, WHO Bangladesh	Immunization
Dr. Nandini K. Kumar	Chennai (ICMR)	Ethical principles in Public Health
Dr. Anil Krishna	SRM University, Chennai	Research Methodology
Dr. Swapan Garain	Tata Institute of social sciences, Mumbai	Social Entrepreneurship
Dr. Ved prakash G. M	(Admin and RI) State Program management	NRHM in UP

	Unit. National Rural Health Mission UP	
Dr. Ramachandra Bairy	District Health Officer, Udupi	Health care system in India
Dr. Donna Howard	Department of Behavioural and community Health, School of Public Health, Maryland University, USA	Adolescent Health
Dr. Jayantha Liyanage	WHO, Bangladesh	Immunization and Health
Dr. Unni Karunakara	Medicine sans frontier (MSF)	International Public Health
Mr. Bharat Shetty	NACO Delhi	HIV prevention and care
Dr. Raj Narayan Tiwari	NIOH Ahmedabad	Occupational health
Dr. Raj Warrior	U.S.A(Former Vice Chancellor Manipal University Manipal)	Public Health overview
Mr. Sandeep patil	Applied Cognition Systems Pvt.Ltd	Health and Technology
Dr. Mary Mathew	Professor of Pathology & Chair of Manipal Unit of UNESCO Chair in Bioethics	Bioethics
Dr.G. Arun Kumar	Head, Manipal Centre for Virus University	Ebola
Professor KVS Baliga		Personality Development

Workshops – 5

Title	Year
Cancer Registry	August 2011
Public Health in Emergencies	December 2010
PractisingCounselling	March 2011
Epidemiology and Biostatistics	December 2011
Qualitative Research	March 2012
Practicing Counselling,Qualitative Research methods	2013
Environment and Occupational Health, Qualitative Data Analysis	2013
Rabies	2014
Qualitative Data Analysis	2014

Seminars – 2

Name of the Seminar / Conference	Year	Title
Global Health Symposium	April 2011 &April 2012	Global Health
International Conference on	December 2012	Changing Paradigm of

Environment and Occupational Health		Environment and Occupational Health
Global Health Symposium	2013	Global Health
Global Health Symposium	2014	Global health

45. **List the teaching methods adopted by the faculty for different programmes.**

- Didactic lectures and field work

46. **How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?**

- Students performance and feedback

47. **Highlight the participation of students and faculty in extension activities.**

- Health screening camps
- Community based health education programmes
- Evaluation projects for the District Health Department
- Resource persons for state and national level programmes

48. **Give details of ‘beyond syllabus scholarly activities’ of the department.**

- Journal club
- Field research

49. **State whether the programme/department is accredited/graded by other agencies? If yes, give details.** No

50. **Briefly highlight the contributions of the department in generating new knowledge, basic or applied.** NA

51. **Future plans of the department.**

- To have a centre of excellence in the field of public health
- To have an National and International accreditations
- To establish institute as regional collaborative with WHO for training and research

52. **Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.**

Strengths	National and International collaborations
Weaknesses	NIL
Opportunities	Network with local organizations and government

	agencies
Challenges	NIL

1. **Name of the Department:** Department of Virus Research
2. **Year of establishment:** March 2010
3. **Is the Department part of a School/Faculty of the University?:**
Kasturba Medical College, Manipal,
4. **Names of Programmes/Courses offered (UG, PG, MPhil, PhD, Integrated Masters; Integrated PhD, etc.):**
MSc Clinical Virology, PhD
5. **Interdisciplinary courses and departments involved:** Nil
6. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
7. **Details of programmes/courses discontinued, if any, with reasons:** Nil
8. **Annual/Semester/Choice Based Credit System:** Semester with Credit System
9. **Participation of the department in the courses offered by other departments:**
MSc (Medical) Microbiology course - Basic training in Virology of the Department of Microbiology.
10. **Number of teaching posts sanctioned and filled (Professors/Associate Professors/Assistant Professors):**

	Sanctioned	Filled
Professor	1	1
Associate Professors	0	0
Assistant Professors	2	2
Lecturer	1	1

11. **Faculty profile with name, qualification, designation and specialization (DSc/DLitt/ PhD / MPhil, etc.,)**

#	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of PhD students guided for the last 4 years
1	Dr G Arunkumar	M. Sc. PhD	Professor	Medical Microbiology, Virology	15	3

#	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of PhD students guided for the last 4 years
2	Dr S Sabeena	MBBS, DGO	Asst. Prof.	Medicine, Surgery and Obstetrics and Gynecology	08	-
3	Dr Piya Paul Mudgal	M. Pharm, PhD	Asst. Prof.	Pharmaceutical Sciences	04	-
4	Ms. Anitha J	M. Sc.	Lecturer	Medical Microbiology	04	-

12. List of senior Visiting Fellows, faculty, adjunct faculty, emeritus professors

Adjunct faculty:

1. Dr H K Pradhan, Office of the WHO Representative to India, New Delhi
2. Dr. Madurai Savathree, Director, Global Clinical and Viral Laboratories, South Africa

Eminent visitors:

2010	
National	International
Dr V M Katoch, Secretary to Govt. of India, Department of Health Research (Ministry of Health & Family Welfare) & Director General Indian Council of Medical Research Ramalingaswami Bhawan, Ansari Nagar, New Delhi	--
Dr D A Gadkari Consultant ICMR Indian Council of Medical Research Ramalingaswami Bhawan, Ansari Nagar, New Delhi	--
Dr U C Chaturvedi Consultant ICMR Indian Council of Medical Research Ramalingaswami Bhawan, Ansari Nagar, New Delhi	--
A. C. Mishra Director National Institute of Virology, Pune	--
Dr. V. Ravi, Registrar & Professor of Neurovirology,	--

NIMHANS, Bangalore 560029	
Dr. ArunBaroka Sr. DDG (A) ICMR, D/o Health Research, MoHFW, GOI	--

2011	
National	International
Dr. Amita Jain Professor CSM Medical College Lucknow	Dr. Ken Earhart Country Director CDC, India Delhi
Prof. Thyagarajan Former Vice-Principal Sri Ramachandra University, Chennai	Dr. HariTunuguntla UMDNF Robert Wood Jhonson Medical school New Brunswick , USA
Dr. K R Rajesh Professor V M K V Medical College, Salem	--
Dr. Sharan Davis CDC, India	--

2012	
National	International
Dr. H.V. Murugkar Senior Scientist and Biosafety Officer High Security Animal Disease Laboratory (OIE REFERENCE LAB FOR AVIAN INFLUENZA) INDIAN VETERINARY RESEARCH INSTITUTE, Anand Nagar, Bhopal – 462 021	IAN Felton British Deputy High Commissioner for Karnataka
Dr. ShobhaBroor Professor of Microbiology Department of Microbiology & Centre for Community Medicine, AIIMS shobha.broor@gmail.com	--
Dr. ShashiKhare Addl. Director & HOD (Micro) National Centre for Disease Control 22- Sham NathMarg , New Delhi -54 shashi.khare@hotmail.com	--
Dr.RituChauhan NPO-Microbiology WHO Country office for India New Delhi chauhanr@searo.who.int	--
Dr. P. Ravindran Director, EMR Directorate General of Health Services, Ministry of Health and Family Welfare, New Delhi diremr@gmail.com	--
Dr George K Varghese Director of Medicine &	--

Infectious Diseases, MIOT Hospitals, Chennai	
Dr. Venkatesh State Surveillance officer Govt of Karnataka Bangalore	--
Dr. Utkarsh Betodkar State Surveillance Officer, Goa gassu.idsp@nic.in	--
Dr Amar Fettle, Consultant (Paed) State Nodal Officer-H1N1 Directorate of Health Services, Govt of Kerala	--
Renu B. Lal CDC Influenza Coordinator U.S. Embassy, New Delhi	--
Dr.Sribiju Nodal officer, H1N1 surveillance unit Taluk hospital Tirurangadi Malappuram,Kerala drsribiju@gmail.com	--
Dr. Michael Nodal officer, H1N1 surveillance unit Calicut, Kerala	--
Dr. S N Madusudana Prof. Virology NIMHANS	--

2013	
National	International
DR. P Rajendran Professor of Virology Sri Ramachandra Medical College, Chennai	Dr. Rama Ramani Lab for Viral Disease, Wadsworth Centre NYS Dept of health, 120 New Scotland New York-12208, USA
Dr. S Bhattacharya Variable energy cyclotron centre Kolkata	Dr. Peter Lund Bioscience University of Birmingham, UK
Dr. V M Katoch	Dr. Masato Akiba National Institute of Animal Health, Japan
	Dr. Keerthi S Gorge National Institute of Animal Health, Japan
	Prof. Didier Gosset Dean of Faculty Medicine Lille, France
	Prof Eric Boulanger

	Vice president Lille, France International relations
	Prof Vinny Cahill Trinity College Dublin
	Prof. Michael Bisasi Trinity College Dublin
	Prof. John Duffield Vice Principal Edinburgh, Napier University
	Prof. Ross Barnard Director, Biotechnology The University of Queensland
	Prof. David Springer Washington DC , USA
	Prof. William J Benjamin Birmingham, Alabama, USA
	Prof. David Brown Virus Reference Dept London, UK

2014	
National	International
S. M Chitre UM-DAE Centre for Basic Science University of Mumbai Mumbai	Adriana Darris Michigan, USA
Dr. C C Raut National Institute of Virology Bangalore Unit	Richard Stone Science Magazine Washington DC, USA
	Dr. Ravindranath Nayak Federation University Australia
	Roger Hewson PHE-Porton Down/WHOCC
	Prof. Kalai Mathew Florida International University
	Dr. Kenneth Earhart Director, Global Disease Detection- India Centre, Centre for Disease Control (CDC), USA
	Padmini Srikantiah Global Disease Detection- India Centre, Centre for Disease Control (CDC), USA
	Dr. Jenifer Clark Science Attache, French Embessy
	Dr. Lynette Menezes \AVP International University of South Florida

	Dr. Mark Sawdeman Faculty of Science & Technology Federation University Victoria Australia
	Janelle Winters American Society for Microbiology, USA
	Prof. Henry Walke CDC, BSPB
	Robert Massung CDC, USA
	Holly Briggs CDC, India
	Ida Chung CDC, USA
	William Nicholson CDC, USA

13. Percentage of classes taken by temporary faculty – programme-wise information

MSc Clinical Virology – 50%

14. Programme-wise Student Teacher Ratio: 1:1

15. Number of academic support staff (technical) and administrative staff: sanctioned and filled:

Details	Sanctioned	Filled
Technical Staff	36	36
Administrative Staff	03	03

16. Research thrust areas recognized by funding agencies

- i. Diagnostic Virology
- ii. Human Viral infections
- iii. Viral Encephalitis
- iv. Viral Diarrhea
- v. Respiratory viruses including Influenza
- vi. Emerging viral infections
- vii. Epidemiology of viral diseases
- viii. Translational research in virology

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies and grants received project-wise:

- a. **National –1**
- b. **International funding agencies –1**
- c. **Total grants received- 12**

Give the names of the funding agencies and grants received project-wise.:

#	Projects	Agency	TOTAL (Rupees)
1	ICMR Virology Network Laboratory (Grade-I) at Manipal -Dr G Arunkumar-PI	ICMR-DHR, MoHFW, GOI	5,94,06,727.00
2	Avian Influenza Project	NCDC MoHFW, GOI	2,25,32,982.00
3	Development of plasmonic biosensors using nanosphere lithography and surface enhanced raman spectroscopy (SERS) for rapid diagnosis of viral encephalitis	Dept of Biotechnology, Govt of India	6,45,000.00
4	“Aetiology of Acute Encephalitis Syndrome (AES) in India and Establishment of ICMR sample banks of AES cases”	ICMR-DHR, MoHFW, GOI	1,00,17,383.00
5	Evaluation and Development of Antiviral Products from Herbal Source	ICMR-DHR, MoHFW, GOI	40,98,796.00
6	Molecular epidemiology of rotavirus diarrhea in children under five in Southwest India- A hospital and laboratory based study	ICMR-DHR, MoHFW, GOI	27,85,038.00
7	Aetiology of Acute Encephalitis Syndrome outbreak in Gorakhpur, UP 2014	ICMR-DHR, MoHFW, GOI	29,46,250.00
8	Anti-Viral Herbal Product Development, Coordination of Anti-Rabies In vivo Testing, Safety Studies and Technology Transfer	ICMR-DHR, MoHFW, GOI	41,52,841.00
9	Distribution of Non-Polio Enterovirus serotypes in children with Hand Foot and Mouth Disease (HFMD) in Kerala, Karnataka and Goa States	ICMR-DHR, MoHFW, GOI	7,33,360.00
10	NVBDCP Apex Referral laboratory for Arboviral diseases (Dengue, JE and Chikungunya)- Non financial assets (Kits)	NVBDCP, MoHFW, Govt of India	28,64,440.00
11	UKIERI UK-US-India Trilateral Research in Partnership	British Council Division, UK	15,22,161.00
12	Hospital - Based Surveillance of Acute Febrile Illness in Western Ghat Region of India	CDC, Atlanta	2,63,61,494.00
	TOTAL (RS)		13,80,66,472.00

18. Inter-institutional collaborative projects and grants received

a) All India collaboration

#	Projects	Agency	TOTAL (Rupees)
1	Development of plasmonic biosensors using nanosphere lithography and surface enhanced raman spectroscopy (SERS) for rapid diagnosis of viral encephalitis	Dept of Biotechnology, Govt of India	6,45,000.00
2	“Aetiology of Acute Encephalitis Syndrome (AES) in India and Establishment of ICMR sample banks of AES cases”	ICMR-DHR, MoHFW, GOI	1,00,17,383.00
3	Evaluation and Development of Antiviral Products from Herbal Source	ICMR-DHR, MoHFW, GOI	40,98,796.00
4	Molecular epidemiology of rotavirus diarrhea in children under five in Southwest India- A hospital and laboratory based study	ICMR-DHR, MoHFW, GOI	27,85,038.00
5	Anti-Viral Herbal Product Development, Coordination of Anti-Rabies Invivo Testing, Safety Studies and Technology Transfer	ICMR-DHR, MoHFW, GOI	41,52,841.00
6	Distribution of Non-Polio Enterovirus serotypes in children with Hand Foot and Mouth Disease (HFMD) in Kerala, Karnataka and Goa States	ICMR-DHR, MoHFW, GOI	7,33,360.00
	TOTAL (RS)		2,24,32,418.00

b) International

#	Projects	Agency	TOTAL (Rupees)
1	UKIERI UK-US-India Trilateral Research in Partnership	British Council Division, UK	15,22,161.00
	TOTAL (RS)		15,22,161.00

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, etc.; total grants received.

#	Projects	Agency	TOTAL (Rupees)
1	ICMR Virology Network Laboratory (Grade-I) at Manipal -Dr G Arunkumar-PI	ICMR-DHR, MoHFW, GOI	5,94,06,727.00
2	Avian Influenza Project	NCDC MoHFW, GOI	2,25,32,982.00
3	Development of plasmonic biosensors using nanosphere lithography and surface enhanced raman spectroscopy (SERS) for rapid diagnosis of viral encephalitis	Dept of Biotechnology, Govt of India	6,45,000.00
4	“Aetiology of Acute Encephalitis Syndrome	ICMR-DHR,	

	(AES) in India and Establishment of ICMR sample banks of AES cases”	MoHFW, GOI	1,00,17,383.00
5	Evaluation and Development of Antiviral Products from Herbal Source	ICMR-DHR, MoHFW, GOI	40,98,796.00
6	Molecular epidemiology of rotavirus diarrhea in children under five in Southwest India- A hospital and laboratory based study	ICMR-DHR, MoHFW, GOI	27,85,038.00
7	Inspire Fellowship programme (Ms. Aswathy Raj S)	(DST), Government of India	2,31,000.00
8	Aetiology of Acute Encephalitis Syndrome outbreak in Gorakhpur, UP 2014	ICMR-DHR, MoHFW, GOI	29,46,250.00
9	Anti-Viral Herbal Product Development, Coordination of Anti-Rabies Invivo Testing, Safety Studies and Technology Transfer	ICMR-DHR, MoHFW, GOI	41,52,841.00
10	Distribution of Non-Polio Enterovirus serotypes in children with Hand Foot and Mouth Disease (HFMD) in Kerala, Karnataka and Goa States	ICMR-DHR, MoHFW, GOI	7,33,360.00
11	NVBDCP Apex Referral laboratory for Arboviral diseases (Dengue, JE and Chikungunya)- Non financial assets (Kits)	NVBDCP, MoHFW, Govt of India	28,64,440.00
	TOTAL (RS)		11,04,13,817.00

20. Research facility/centre with

- **State recognition**
- **National recognition**
 - i. Viral Research and Diagnostic laboratory (VRDL)
 - ii. Regional Reference Laboratory for Influenza viruses, IDSP, Govt of India
 - iii. Apex referral Laboratory for Arbo viruses- MoHFW, Govt of India
- **International recognition**
 - i. Cooperative agreement with Centre for Disease Control (CDC), Atlanta, USA.
 - ii. UKIERI UK-US-India Trilateral Research in Partnership with Public Health England (PHE) and School of Public Health, University of Alabama at Birmingham, USA.
 - iii. Influenza center-Australia (WHO Collaborating Centre for Reference and Research on Influenza at the Victorian Infectious Diseases Reference Laboratory (VIDRL) in Melbourne)

21. Special research laboratories sponsored by / created by industry or corporate bodies

: Nil

22. Publications:

Number of papers published in peer reviewed journals (national / international) : **Eleven**

- Prabhu G, Suresha, Chameettachal Akhil, Anjali Aithal, Dsouza R. Gisella, Bhaskar Revti and Arunkumar. G; Human Coronaviruses in severe Acute Respiratory infection (SARI) cases in southwest India; Journal of Medical Virology, 2015. (in press)
 - Sabeena. S, Bhat. P, Kamath. V, Aswathyray. S, Arunkumar. G, Knowledge, Attitude and Practice about Human Papilloma Virus Infection and its health effect among rural women, Karnataka, South India; Asia Pacific Journal of Cancer Prevention, 2015 (in press)
 - Revathi R, Venkatesha Perumal R, Pai KSR, Arunkumar G, Sriram D, Kini SG; Design, development, drug- likeness, and molecular docking studies of novel Piperidin-4-imine derivatives as antitubercular agents; Drug Design, Development and Therapy, 2015 (in press)
 - Ganjhu, R.K., Mudgal, P.P., Arunkumar, G, 2014. Pharmacological and Phytoconstituent Profile of *Desmodium gangeticum*-An Update. International Journal of Pharmacognosy and Phytochemical Research, 6(3): 643-657. Impact Factor: 1.095
 - Acute flaccid paralysis due to West Nile virus infection in adults: A paradigm shift entity Bobby Varkey Maramattom, Geetha Philips¹, Nittur Sudheesh², Govindakarnavar Arunkumar²: Ann Indian Acad Neurol 2014;17:85-8
 - Vandana KE, Arunkumar G, I Bairy. Role of laboratory in rapid diagnosis of atypical mumps. Braz J Infect Dis. 2010; 14:201-2.
 - Wairagkar N, Chowdhury D, Vaidya S, Sikchi S, Shaikh N, Hungund L, Tomar RS, Biswas D, Yadav K, Mahanta J, Das VN, Yergolkar P, Gunasekaran P, Raja D, Jadhav R, Ramamurthy N, Mishra AC; MeaslesNetIndia (Arunkumar G) collaborators. Molecular epidemiology of measles in India, 2005-2010. J Infect Dis. 2011; 204:S403-13.
 - Riyaz N, Sarita S, Arunkumar G, Sabeena S, Manikoth N, Sivakumar CP. Drug-induced hypersensitivity syndrome with human herpesvirus-6 reactivation. Indian J Dermatol Venereol Leprol. 2012; 78:175-7.
 - Arunkumar G, Vandana KE, Sathiakumar N. Prevalence of measles, mumps, rubella, and Varicella susceptibility among health science students in a University in India. Am J Ind Med. 2012 Mar 29. doi: 10.1002/ajim.22046.
 - Bhat HV, Kamath R, Arunkumar G, Delzell E, Tipre M, Upadhyay DK, Sathiakumar N. MPH programme at Manipal University, India-experiences, challenges, and lessons learned. Am J Ind Med. 2012 Mar 29. doi:10.1002/ajim.22045.
- * **Monographs:** Nil
- * **Chapters in books:** Nil

- * **Edited books :** Nil
- * **Books with ISBN with details of publishers:** Nil
- * **Number listed in International Database (For e.g., Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.):** 5
- * **Citation Index – range / average :** 30
- * **SNIP:** --
- * **SJR:** --
- * **Impact Factor – range / average:** 0.98 – 1.63 (1.41)
- * **h-index-3**

23. Details of patents and income generated: Nil

24. Areas of consultancy and income generated: Nil

25. Faculty selected nationally/ internationally to visit other laboratories in India and abroad

- i. Dr G Arunkumar visited CDC Atlanta 2012
- ii. Dr. G Arunkumar visited Arboviral disease branch, Fort Collins, Colorado, USA from 29 April to 3 May 2013.
- iii. Dr. G Arunkumar visited Foundation Merieux , Veyrier du Lac, Les Pensieres, France during 3-9 Nov 2013.

26. Faculty serving in

- a) National committees
- b) International committees
- c) Editorial Boards
- d) any other
 - ICMR Project review committee (Virology)
- d. Dr G Arunkumar
- Chairman BOS Medical Microbiology, University of Kannur-
- e. Dr G Arunkumar

27. Faculty recharging strategies:

Targeted training:

- i. Selected project staffs were attended training on '**Epidemiology and outbreak Investigation**' held at National Institute of Epidemiology (NIE), Chennai on 20-25 February 2011.
- ii. **Workshop on literature search** A workshop on '**effective literature search**' by DrVasumathiSreeganesh, CEO, QMed Knowledge Foundation, Mumbai, on 28 July 2011 for the entire project scientific staff and students at Manipal Centre for virus research, Manipal.
- iii. Dr. Sabeena S, Research Scientist-II (Medical), Mr. Anirban Sanyal & Sreeraj Surendran, Research Assistant, attended the "**National Workshop on Statistical Epidemiology**" at Department of Statistics, Manipal University from 1-4 August 2011
- iv. **Training at NIV Pune:** Dr Jiji George and Dr Ashok G (Research Scientist I&II) attended workshop on '**advances in Electron Microscopy in Virology research and 3D imaging**' on 20-21 October 2011. They also interacted with NIV staff on various issues related to Virology.
- v. **National Workshop on Statistical Analysis Using 'R':** Dr Sabeena S (Research scientist-Med-II), MrSreeraj Surendran (Research Assistant) and Mrs Anitha J (Senior Research Fellow) attended the 'national workshop on Statistical epidemiology' on 26-27 May 2012 at Department of Statistics, Manipal University, Manipal.
- vi. **Quality Management System and Internal Audit Training as per ISO-15189-2007 and NABL 112 Requirement:** Dr Ashok G (Research Scientist I), Ms Ashwathy Raj (Research Assistant), Mrs Laveena Kotian (Laboratory Technician) and Mr. Sandeep (Data Entry Operator) attended the Training workshop on Quality Management System and Internal Audit Training as per ISO-15189-2007 and NABL 112 Requirement held at Kasturba Medical College, Mangalore from 1-4 Aug 2012.
- vii. **Workshop on VIRUS 2012:** Mr. Sreeraj Surendran, Research Assistant is attending '**Workshop on VIRUS 2012**' at PGIMER, Chandigarh, from 3-5 September 2012.
- viii. DVR organized -**WHO Hands on training Workshop on Influenza Surveillance, Diagnosis and Control** from 17-21 September 2012.
- ix. **Workshop on "Recent Advances in Rabies Diagnosis and Prophylaxis"** as a part of World rabies day activities on 1 October 2012.
- x. **Dr. Arunkumar** selected was as a fellow participant in the "FOURTH Advanced

course in Diagnostics. The course was held in Veyrier du Lac, Les Pensières (France) from 3 to 9 November 2013. Organized by Fondation Mérieux. He also visited the Diagnostic Virology Laboratory of School of Medicine, University Lille-2, France.

- xi. Dr. Arunkumar was invited to participate in Arbovirus Diagnostics and Surveillance Training Course at Arboviral Disease Branch, Fort Collins, Colorado, USA from 29th April to 3rd May 2013.
- xii. Ms. Anitha J, Research scientist-I and Mr. Santhosh (Research Assistant) attended short course on “industrial training in Bioinformatics” at RASA life science informatics, pune from 15 June 2013 to 15 July 2013. Research staff also attended training on Molecular Biotechnology at GeneOmbio Technologies, Pune from 15 July 2013 to 20 July 2103
- xiii. Aswathy Raj, Research Assistant and Suresh G Prabhu, Research Assistant of Department of Virus Research attended training and acquaintance with special emphasis on zoonotic disease detection in animals including Brucellosis in DRDD laboratory Jalandhar from 21 to 24th December 2013.
- xiv. Ms. Anitha Jagdesh, Research Scientist-I and Mr. Santhosha Devadiga, Research Assistant of MCVR attended “Training program on Ebola Laboratory diagnosis” held at National Institute of Virology(NIV), Pune from 10th to 14th November 2014 as a part of Ebola preparedness plan in the country
- xv. Dr. Sabeena S, Research scientist II(Medical) and Ms. Anitha J, Research scientist-I of MCVR were selected to attend the conference of International Union of Microbiological Societies held at Montreal, Canada during 27 July-1August 2014. They presented a poster on “A population based study of Human Papilloma Virus (HPV) infection among women in rural village in South India” and “Characterisation of Influenza virus Neuraminidase Gene” respectively.
- xvi. Dr. Kiran Chandra B, Research scientist I(Medical), Mr. Anup Jayaram, Research Assistant and Mr. Santhosha D, Research Assistant of MCVR were selected to attend the 38th National Conference of the Indian Association of Medical Microbiologists, MICROCON 2014 held at Birla Auditorium Jaipur, Rajasthan, India from 15th - 19th October 2014. They presented paper titled “Epidemiological characteristics of laboratory confirmed Measles in south west India – a retrospective study”, “Aetiology of Acute Encephalitis Syndrome (AES) in South-West India- 2013” and “Molecular epidemiology of Rotavirus diarrhea in children under five years in Southwest India” respectively.
- xvii. Ms. Revti Bhaskar, Ms. Giselle Raisa D’souza and Ms. Anjali Aithal (Research

- Assistants) were attended the presented the paper at the VIROCON 2014-XXIII National conference held at Tamilnadu Agricultural Coimbatore during December 18-20 2014.
- xviii. Mr.Suresha Prabhu and Mr. Akhil C (Research staffs) were attended “Basic training on Epidemiology for Veterinaries with special emphasis on brucellosis surveillance” at NIVEDI Bangalore from 1-5 December 2015.
 - xix. Ms. Revti Bhaskar and Ms. Giselle Raisa D’souza (Research Assistants) were attended Basic Epidemiology workshop at NIVEDI Bangalore from 2-6 Feb 2015.
 - xx. Ms. Anitha J, Leturer attended and presented the poster at the Indo-French CEFIPRA Seminar on women in science held at Indian Institute of science , Bangalore during 3-5 Feb 2015.
 - xxi. Dr. G Arunkumar and Mr. Santhosha Devadiga attended and presented on 31st annual Clinical Virology symposium in Daytona Beach, Florida from 25-29 April 2015.
 - xxii. Ms. Revti Bhaskar and Ms. Giselle Raisa D’souza (Research Assistants) were attended training on Basic Epidemiology at NIVEDI Bangalore from 2-6 Feb 2015.
 - xxiii. Mr. Anup Jayaram and Ms. Anjali Aithal (Research Assistants) were attended training on Basic Epidemiology at NIVEDI Bangalore from 2-6 Feb 2015.
 - xxiv. Dr. Sabeena S, Assistant professor, Dr. Kiran Chandra HB & Mr. Santhosha Devadiga were attended training on Outbreak investigation at NIVEDI Bangalore from 16-19 June 2015.

28. Student projects

i. Percentage of students who have done in-house projects including inter-departmental projects:100%

A. Name of the Completed projects in 2014:

- a) Viral Etiologies of lower Respiratory Tract infection in Children below 2 years of age submitted by Ms. Polakshee Gogoi
- b) Prevalence of Acyclovir resistance among clinical isolates of Herpes Simplex virus – A Retrospective study submitted by Mr. Sudheesh Nair
- c) Influenza virus activity in north Kerala; during a period of January 2010-December 2011- A Retrospective study submitted by Aswathy Raj S
- d) Chikungunya encephalitis in South West India submitted by Mr. Santhosha

- e) Distribution of Respiratory Syncytial Virus (RSV) among elderly adults with Influenza – Like Illness (ILI) submitted by Anjali Aithal
- f) Distribution of DEN-3 Genotypes in Karnataka state, India 2012 submitted by Revti Bhaskar
- g) Molecular epidemiology of Adenovirus infections reported at Manipal Centre for Virus Research during 2011 – 2013 submitted by Akhil C K
- h) Distribution of Non-Polio Enteroviruses among children presenting with Acute Febrile Illness (AFI) in South-West India submitted by Giselle Raisa D'souza
- i) Application of Google Maps & GIS mapping technologies in a Dengue Surveillance System for Karnataka State, India to generate Dengue Risk Map (DRM) based on environmental factors submitted by Hindol Maity
- j) Distribution of Corona viruses in Severe Acute Respiratory tract Infections (SARI) in South-West India: A retrospective study submitted by Suresh Prabhu

B. Ongoing projects:

1. Exploration of in vitro antiviral and immunomodulatory effects (in vitro and in vivo) of a few selected phenolic phytoconstituents by Rithu Paul Stansilaus
2. Prevalence of Genital Chlamydia and Gonococcal infection among women in the age group of 18-65 years from Udupi district, Karnataka by Anjana K.
3. Molecular epidemiology of Noroviruses GII among children with Acute Diarrhoeal diseases in Southwest India by Riya
4. Detection and analysis of all cell culture induced substitutions in Influenza A(H3N2) virus Neuraminidase gene by Vahid Rajabali Zadeh Kashani

ii. **Percentage of students doing projects in collaboration with other universities/industry/ institute : 0**

29. Awards/recognitions received at the national and international level by

- **Faculty:** Nil
- **Doctoral / post-doctoral fellows :**
 - Aswathy Raj. S , Research Assistant DVR has received Award of INSPIRE Fellowship to the Research Students [0373-2013] under Department of Science & Technology (DST), GOI
 - Mr. Akhil C, Research Assistant DVR has received Award of INSPIRE Fellowship to the Research Students [0373-2013] under Department of Science & Technology (DST), GOI
- **Students:**

Ms. Polakshee Gogoi has received scholarship under the scheme of Post-Graduate

Indira Gandhi scholarship for single girl child under UGC, GOI

30. Seminars/Conferences/Workshops organized and the source of funding (national/International) with details of outstanding participants, if any.

- i. A two day national hands-on workshop on **Molecular Viral Diagnostics** was conducted at the department on 23rd and 24th of October 2010. The Workshop was sponsored by Fast Track Diagnostics, Luxemburg
- ii. **Workshop on literature search** A workshop on ‘**effective literature search**’ by Dr. Vasumathi Sreeganesh, CEO, QMed Knowledge Foundation, Mumbai, on 28 July 2011 for the entire project scientific staff and students at Manipal Centre for virus research, Manipal
- iii. **ANNUAL NOBEL UPDATE** was jointly organized by the Department of Pharmacy Practice, Manipal College of Pharmaceutical Sciences (MCOPS) and the Manipal Centre for Virus Research (MCVR) on 27th November 2010, 5th November 2011, March 2 2013
- iv. ‘**WHO Hands on training Workshop on Influenza Surveillance, Diagnosis and Control**’ on 17-21 September 2012 at MCVR, Manipal, funded by WHO-India office under WHO’s Direct Finance Cooperation mechanism
- v. ‘**Workshop on basic Virological Techniques**’ exclusively for **Microbiology Post Graduate students** (MSc and MD) of Manipal University at MCVR, Manipal.
- vi. **Workshop on “Recent Advances in Rabies Diagnosis and Prophylaxis”** as a part of World rabies day activities on 1 October 2012.
- vii. DVR conducted training workshop on Basic course in PCR techniques from 2nd -4th Sept 2013 and also 3-5 February 2014 on payment basis to MSc (Micro/Biochem); MD (Micro), DCP, BSc/MSc(MLT), Jr. faculties of Various institutes.
- viii. DVR conducted training workshop on **Basic course in Virological techniques** from 16-21 September 2013 to MSc (Micro) & MD (Micro) students of KMC, MU.
- ix. DVR conducted training workshop on **Basic course in Virological techniques** from 23-28th September 2013 to MSc (Micro) & MD (Micro) students of KMC, MU.
- x. DVR conducted training workshop on **Advanced course in PCR Techniques** from 2nd -4th Sept 2013, 10-14 March 2014, 27-31 Oct 2014 and also 8-13 June 2015 on payment basis to MSc

(Micro/Biochem); MD (Micro), DCP, BSc/MSc(MLT), Jr. faculties of Various institutes.

- xi. DVR conducted training workshop on **Basic course in Virological techniques** from 18-23 November 2013, 20-25 January 2014 , 9-14 June 2014 and 9-14 Feb 2015 on payment basis to MSc (Micro) & MD (Micro) students of Medical Colleges, Jr. Faculty, Research fellows, etc of various institutes.
- xii. DVR conducted training workshop on **Basic course in Virological techniques** from 3-8 November 2014 to MSc (Micro) & MD (Micro) students of KMC, MU.
- xiii. DVR conducted training workshop on **advanced course in Diagnostic Virology** from 16-21 December 2013, 18-23 Aug 2014 and also 13-18 April 2015 on payment basis to Microbiology Faculty, Research Scientists (ICMR labs etc), of various institutes.

31. Code of ethics for research followed by the departments

Follows Manipal University Research Ethics guidelines, Research policy and Policy on research misconduct.

32. Student profile course-wise:

Name of the Course (refer to question no. 4)	Applications received	Selected		Pass percentage		
		Male	Female	Male	Female	
MSc Clinical Virology	2010-2011	16 (specific applications)	2	2	100%	100%
	2011-2012	360 (general application for MSc programmes)	4	4	100%	100%
	2012-2013	45 (specific applications)	2	4	100%	100%
	2013-14	51 (specific applications)	1	4	100%	100%
	2014-15	132 (specific applications)	0	4	100%	100%
	2015-16	177 (specific applications)	Admission process is going on			

33. Diversity of students

Name of the Course (refer to question no. 4)	% of students from the same University	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
MSc Clinical Virology	32	8	52	8

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.–

One

35. Student progression

Student progression	Percentage against enrolled
UG to PG	-
PG to MPhil	-
PG to PhD	2
PhD to Post-Doctoral	-
Employed	-
• Campus selection	8
• Other than campus recruitment	5
Entrepreneurs	-

36. Diversity of staff:

Percentage of faculty who are graduates	
of the same University	75%
from other universities within the State	---
from universities from other States	25%
from universities outside the country	---

37. Number of faculty who were awarded PhD, DSc and DLitt during the assessment period: Nil.

38. Present details of infrastructural facilities with regard to

- Library: Yes
- Internet facilities for staff and students: Yes
- Total number of class rooms: Two

d) Class rooms with ICT facility: Yes

e) Students' laboratories: Yes

f) Research laboratories: Yes

39. List of doctoral, post-doctoral students and Research Associates (Research fellows)

a) from the host University :

- i. Mr. Santhosha
- ii. Mr. Sudheesh N
- iii. Ms. Aswathy Raj
- iv. Mr Suresh Prabhu
- v. Mr Akhil C
- vi. Ms. Giselle D'Souza
- vii. Ms. Revti Bhasker
- viii. Ms. Anjali Aithal
- ix. Mr. Hindol Maity
- x. Mr. Jazeel AbdulMajeed

b) from other universities :

- i. Mr. Anup Jayaram - Research Assistant - University of Madras,
- ii. Mr. Deepu Dowhra - Research Assistant - University of Pune

40. Number of postgraduate students getting financial assistance from the University:

Two candidates availed scholarships under scheme scholarship for Konkani speaking students.

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

Yes. Qualitative assessment based on the potential need for trained virologist in the light of Department of Health Research (DHR), ICMR, establishing 30 grade-1 and 200 Grade-II viral diagnostic laboratories across the country in the 12th five year plan. National Institute of Virology is the only other Institution in the country offering the same course.

42. Does the department obtain feedback from

a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

We regularly obtain feedback on staff/teaching learning/curriculum from students and incorporate progressive suggestions during the programme curriculum review held annually.

b. Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

We regularly obtain feedback feedback on staff/teaching learning/curriculum from students and incorporate progressive suggestions during the programme curriculum review held annually.

c. Alumni and employers on the programmes offered and how does the department utilize the feedback?

Feedback collection is in the process

43. List the distinguished alumni of the department (maximum 10). NA

44. Give details of student enrichment programmes (special lectures/workshops/seminar) involving external experts.

- i. DVR conducted workshop on **effective literature** search by Mrs. Vasumathi Sriganesh, CEO, QMed Knowledge Foundation on 28th July 2011
- ii. DVR organizing ‘**Workshop on basic Virological Techniques**’ exclusively for **Microbiology Postgraduate students** (MSc and MD) of Manipal University for every year in MCVR, Manipal
- iii. DVR in association with Department of Pharmacy Practice, Manipal College of Pharmaceutical Sciences (MCOPS) host an annual signature event called ‘**Annual Nobel update**’ since 2010. The update will present an overview of current year’s Nobel Prize in Physiology and Medicine, Physics and Chemistry.
- iv. ‘Workshop on basic Virological Techniques’ exclusively for Microbiology Post Graduate students MSc (Micro), (Virology) & MD (Micro) of Manipal University at MCVR, Manipal during sept 2012.
- v. **Workshop on “Recent Advances in Rabies Diagnosis and Prophylaxis”** as a part of World rabies day activities on 1 October 2012.
- vi. ‘**Workshop on basic Virological Techniques**’ exclusively for Microbiology

Post Graduate students (MSc (Micro), (Virology) & MD (Micro) at MCVR, Manipal during sept 2013.

- vii. DVR conducted training workshop on **Basic course in Virological techniques** from 3-8 November 2014 to MSc (Micro), (Virology) & MD (Micro) students of KMC, MU.
- viii. DVR Conducted guest lecture by Roger Hewson from WHO collaborating centre for Viral Hemorrhagic Fevers, Public Health England. Porton Down, UK on “Risk assessment of Crimean Congo Hemorrhagic Fever (CCHF) in Mongolia” on 10 July 2014.
- ix. DVR Conducted guest lecture by Roger Hewson from WHO collaborating centre for Viral Hemorrhagic Fevers, Public Health England. Porton Down, UK on “Viral Hemorrhagic Fever (VHF)s and logistics in dealing with a human disease ” on 10 July 2014).
- x. DVR conducted Guest Lecture on “Contact tracing the method to stop EBOLA Transmission” by Dr. Ashley L Greiner, Epidemic Intelligence Service officer, Division of global Health protection, Centre for Global health, CDC) on 30 May 2015.

45. List the teaching methods adopted by the faculty for different programmes.

- Didactic lecture
- Student presentation
- Discussion
- Group Discussion
- Case studies
- Laboratory work
- Projects

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

At the end of the third semester a thorough assessment is done during the comprehensive examination with external experts and it is addressed during the fourth semester.

47. Highlight the participation of students and faculty in extension activities.

- Organized ‘Nobel Updates’ in November, 2010, 2011, 2013 and 2014
- Organized and participated in World Rabies Day Walkathon in September 2012, 2013,

2014

48. Give details of “beyond syllabus scholarly activities” of the department.

Department is a reference laboratory for Influenza viruses and an ICMR Grade-I virology laboratory. Students are trained using a ‘do and learn’ approach. Students are involved in various training, research and diagnostic activities undertaken by the department from time to time.

**49. State whether the programme/department is accredited/graded by other agencies?
If yes, give details.**

No

**50. Briefly highlight the contributions of the department in generating new knowledge,
basic or applied.**

Being a regional reference laboratory for Influenza viruses and an ICMR grade-I virology laboratory, our centre has significantly involved in generating new information regarding the etiology of Acute Respiratory Infections (ARI) and Acute Encephalitis Syndrome (AES). We also support the national, state and district public health services by providing laboratory support to viral outbreak investigations and viral disease surveillance.

51. Future plans of the department

We intent to transform the centre into an Institution of excellence in the area of virus research with special reference to human viruses and to become a WHO collaborative centre for Respiratory viruses.

• Infrastructure

The department is planning to add a Biosafety Level-3 (BSL-3) laboratory and an Electron Microscopy facility in the near future.

• Accreditation

The process of NABL accreditation of the laboratory has started and the target date is 31 March 2016.

• International Collaborations

- Cooperative agreement with Centre for Disease Control (CDC), Atlanta, USA.
- UKIERI UK-US-India Trilateral Research in Partnership with Public Health England (PHE) and School of Public Health, University of Alabama at Birmingham, USA.

- Influenza centre-Australia (WHO Collaborating Centre for Reference and Research on Influenza at the Victorian Infectious Diseases Reference Laboratory (VIDRL) in Melbourne)
- World Health Organization- India office, New Delhi.

● **PhD Programme in Virology**

Four PhD students registered for PhD

● **Development of strategic research groups within the centre**

We absorbed the 3 temporary faculty members as permanent staff and propose to nurture others in the near future to form strategic research groups in basic virology, development of diagnostics, vaccine development, antiviral drug development, public health virology and training in virology.

52. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

<p>Strengths</p> <ol style="list-style-type: none"> 1. Infrastructure and research funding 2. Committed faculty and staff 3. Confidence of National and State Public health systems 4. International collaborations 5. Public Private Partnership (PPP)
<p>Weakness</p> <ol style="list-style-type: none"> 1. Inadequate visibility of the postgraduate programme 2. Over dependence on external funding than sustenance by revenue generation 3. Predominantly the research focus is limited to diagnostic virology
<p>Opportunities</p> <ol style="list-style-type: none"> 1. Ability to provide evidence for national policy/decision making hence influencing the same 2. International collaborations with world's leading institutions/organization in virus research 3. Becoming a leader in diagnostic virology, virus research and virus discovery 4. Faculty exchange programmes 5. Achieving the status of WHO collaborating centre for emerging viral diseases
<p>Challenges</p> <ol style="list-style-type: none"> 1. Increasing the utilization of services by the State and regional public health system 2. Increasing the national and international visibility of the centre and its PG programme 3. Retaining trained man power 4. Attracting world class faculty/researchers to the department

1. **Name of the Department:** Department of Library and Information Science
2. **Year of establishment:** August, 2011
3. **Is the Department part of a School/Faculty of the university?**
Yes, KMC, Manipal
4. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**
 - a. Certificate Course in Library and Information Science (C.L.I.Sc.)
 - b. M.Sc. Library and Information Science
 - c. Ph.D.
5. **Interdisciplinary courses and departments involved:**
Nil
6. **Courses in collaboration with other universities, industries, foreign institutions, etc.:**
Nil
7. **Details of programmes / courses discontinued, if any, with reasons:**
Nil
8. **Annual/ Semester/Choice Based Credit System:**
Semester Scheme
9. **Participation of the department in the courses offered by other departments:**
Nil
10. **Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)**

	Sanctioned	Filled
Professor	0	0
Associate Professors	3	3
Asst. Professors	0	0

11. **Faculty profile with name, qualification, designation and specialization (D.Sc./D.Litt./ Ph.D./M.Phil., etc.)**

Sl.	Name	Qualificatio	Designation	Specialization	No. of Years of	No. of
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#		n			Experience	Ph.D. students guided for the last 4 years
1	Dr. Shivananda Bhat K.	BSc.,MLISc., Ph.D.	Assoc. Prof.	Library Organization, Cataloguing, literature Search	Experience in teaching: 04 Years. Experience in librarianship: 25 years	-
2	Dr. Mahabaleshwara Rao	MA.,MLISc., Ph.D.	Assoc. Prof.	Information Sources, Information Technology, Library Management, Electronic Information Sources, Information Literacy	Experience in teaching: 04 Years Experience in librarianship: 15 years	-
3	Dr. Rekha D.Pai	BSc.,MLISc., Ph.D.	Assoc. Prof.	Library Classification, information Retrieval, Information Systems, Literature Search	Experience in teaching: 04 Years Experience in librarianship: 21 years	-

12. List of senior Visiting Fellows, faculty, adjunct faculty, emeritus professors:

Nil

13. Percentage of classes taken by temporary faculty – programme-wise information:

Nil

14. Programme-wise Student Teacher Ratio:

- M.Sc.Library & Information Science - 10:3
- Certificate Course in Library and Information Science (C.L.I.Sc.): 16:3

15. Number of academic support staff (technical) and administrative staff: sanctioned and filled: Nil

16. Research thrust areas recognized by funding agencies: Nil

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies and grants received project-wise: Nil

18. Inter-institutional collaborative projects and grants received:

a) All India collaboration: Nil b) International: Nil

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, etc.; total grants received: Nil**20. Research facility / centre with:**

- state recognition: Nil
- national recognition: Nil
- international recognition: Nil

21. Special research laboratories sponsored by / created by industry or corporate bodies:

Nil

22. Publications:

- * Number of papers published in peer reviewed journals (national / international) :
Total: 8 (National; ~~International~~)
- * Monographs: Nil
- * Chapters in Books: Nil
- * Edited Books: 1
- * Books with ISBN with details of publishers: Nil
- * Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.): 2
- * Citation Index – range / average: Nil
- * SNIP: 0.332
- * SJR: 0.203
- * Impact Factor – range / average: Nil
- * h-index: 1

23. Details of patents and income generated: Nil**24. Areas of consultancy and income generated: Nil****25. Faculty selected nationally/ internationally to visit other laboratories in India and**

abroad: Nil

26. Faculty serving in

a) National committees b) International committees c) Editorial Boards d) any other (please specify): Nil

27. Faculty recharging strategies: Participating in conferences, Seminars, Workshops etc.

28. Student projects:

- percentage of students who have done in-house projects including inter-departmental projects - Nil
- percentage of students doing projects in collaboration with other universities / industry / institute - Nil

29. Awards / recognitions received at the national and international level by:

- Faculty - Nil
- Doctoral / post doctoral fellows - Nil
- Students - Nil

30. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any. :

No. of Conference organized - 1

Source of funding - Self generated fund

31. Code of ethics for research followed by the departments:

As set by university ethics committee

32. Student profile course-wise:

Name of the Course (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
C.L.I.Sc.	16	Male: 1	Female: 15	100%	
M.Sc.Library & Information Science	10	Male:5	Female: 5	100%	

33. Diversity of students

Name of the Course (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from other universities outside the State	% of students from other countries
C.L.I.Sc.	-	100	100	-
M.Sc.Lib&Inf.Sc.	80	-	20	-

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

Nil.

35. Student progression

Student progression	Percentage against enrolled
UG to PG	-
PG to M.Phil.	-
PG to Ph.D.	20%
Ph.D. to Post-Doctoral	-
Employed <ul style="list-style-type: none"> • Campus selection • Other than campus recruitment 	100%
Entrepreneurs	-

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	--
from other universities within the State	100
from universities from other States	--
from universities outside the country	--

37. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period:

Nil

38. Present details of infrastructural facilities with regard to

- a) Library: Available
- b) Internet facilities for staff and students: Available
- c) Total number of class rooms: 4 (3 class rooms and 1 seminar room)
- d) Class rooms with ICT facility: 3
- e) Students' laboratories: 1 (computer lab for practical)

f) Research laboratories: Nil

39. List of doctoral, post-doctoral students and Research Associates

a) from the host university: Nil

b) from other universities: Nil

40. Number of post graduate students getting financial assistance from the university:

2

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

Before commencement of the programme, syllabus has been sent to the academicians of other Universities for their feedback. The programme structure, syllabus, mode of delivery etc. have been discussed in the dept. and then presented to the Board of Studies. Some of the external academicians (from other Universities) regularly involved in this exercise are:

- a. Dr. Mahesh V. Mudhol, Associate Professor and Chairman, Dept. of Library and Information Science Mangalore University, Konaje, Mangalore – 574 199
- a. Dr. Chandrashekara M., Associate Professor, Dept. of Studies in Library and Information Science, University of Mysore, Manasagangotri, Mysore – 570 006
- b. Prof. K. Padmini, Professor, Dept. of Library & Information Science, Sri Venkateswara University, Tirupati
- a. Dr. Humanyoon Kabir S., Reader, Dept. of LIS, University of Kerala, Trivandrum

42. Does the department obtain feedback from

- a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

Yes; feedback is obtained regarding syllabus, method of teaching, delivery & evaluation, etc

- b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Department obtaining feedback from students on staff

- c. alumni and employers on the programmes offered and how does the department utilize the feedback? : --

43. List the distinguished alumni of the department (maximum 10) : --

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts. :-

Information Literacy Programs Conducted

Sl. #	Topic	Date of Information Literacy Program	Resource Person/Trainer
1.	On site Demonstration on Access Medicine	25.4.2014	Mr. Sivamay Bhattacharya McGraw-Hill
2.	Session on Web of Science	23.6.2014	Mr. Basha Kodidela Thomson Reuters, Bangalore
3.	Session on CINHAL Plus with Full Text	23.9.2014	Mr. D.T. Edwin Training Manager EBSCO Information Services Pvt. Ltd., Bangalore
4.	Literature Search Using Online Databases	14.11.2014	Mr. Ankit Kapoor Training Manager Wolters Kluwer, New Delhi
5.	Searching Medical Literature for the Best Clinical Evidence	24.12.2014	Mr. Faizan Ahmed UpToDate, New Delhi

Workshops Conducted

Sl. #	Topic	Date of Workshop	Resource Person/Trainer
1.	Half Day Author Workshop on “How to Get Published”	10.12.2014	Dr. Anitha Jain, India Editor BMJ And Mr. Rajiv Kumar, Training Manger, BMJ

45. List the teaching methods adopted by the faculty for different programmes. :

- Group discussions
- Seminars
- Practicals
- Power Point presentations, etc.

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

Performance and quality of students regarding their knowledge are measured by evaluators during assignments, sessional examinations, seminar presentations, practical and university examination.

47. Highlight the participation of students and faculty in extension activities.

Students are involved in providing the library services (reference, literature search using electronic information resources) to the users

48. Give details of “beyond syllabus scholarly activities” of the department.

Conference/seminar presentation, attending workshops, publishing articles in journals, online database demonstration, library orientation to the users, information literacy programs etc.

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

Part of University certification for ISO 9001:2008 and ISO 14001:2004

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

PhD program, publications, students projects, field work reports, paper presentations in conferences/seminars.

51. Future plans of the department.

- Conducting atleast 5 information literacy programs in a year
- Organising one conference/seminar once in two years
- Organising 1 workshop in a year

52. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

- Strength:
 - All faculty members with Ph.D. degree
 - World class library and resources
 - Practice lead teaching & practice supported learning
 - Hands on training using online and offline resources
 - Computing, Internet, Library software training facilities
- Weakness:
 - Difficulty in getting good quality students
 - Difficulty in placement for the students

- Opportunities:
 - Scope for developing information literacy skills among the users in accessing the various electronic resources
- Challenges:
 - Getting quality students.

1. **Name of the Department:** Manipal College of Dental Sciences, Manipal

2. **Year of establishment:** 1965

3. **Is the Department part of a school/faculty of the university?**

YES (Manipal University)

4. **Names of programs offered (UG, PG, Pharm D, Integrated Masters; M.Phil., Ph.D., Integrated Ph.D., Certificate, Diploma, PG Diploma, D.M./M.Ch., Super specialty fellowship, etc.)**

a. Undergraduate programs: B.D.S

b. Postgraduate programs: M.D.S/PG Diploma programs

- Oral medicine and radiology
- Conservative dentistry and endodontics
- Periodontology
- Oral and maxillofacial surgery
- Prosthodontics and crown and bridge
- Pedodontics and preventive dentistry
- Orthodontics and dentofacial orthopedics
- Public health dentistry
- Oral pathology and microbiology
- PG Diploma program in Dental Materials

c. Post graduate certificate Course:

- Implantology
- Laser dentistry
- Esthetic dentistry

d. Diploma program

- Diploma in Dental Mechanics
- Diploma in Dental Hygienist

e. Ph.D. Program

5. **Interdisciplinary programs and departments/institutions involved**

a. MDS program in different specialties involves clinical posting in various medical specialties

S.No	Program	Departments involved (other than core specialty)
1	MDS Oral medicine and radiology	Dermatology, radiodiagnosis and radiotherapy clinics
2	MDS Conservative dentistry and	-

	endodontics	
3	MDS Periodontology	Implantology
4	MDS Oral and maxillofacial surgery	General medicine, surgical oncology, Ophthalmology, Neurosurgery, ENT, anaesthesia and orthopaedics
5	MDS Prosthodontics and crown and bridge	Implantology
6	MDS Pedodontics and preventive dentistry	Pediatrics Department
7	MDS Orthodontics	-
8	MDS Public health dentistry	-
9	MDS Oral pathology and microbiology	Oral medicine and radiology, Oral and maxillofacial surgery, dermatology, microbiology and clinical haematology

- b. PG Diploma in Dental Materials is an interdisciplinary program which involves various departments from engineering specialties.

S.No	Program	Departments involved (other than core specialty)
1	PG Diploma in Dental Materials	<ul style="list-style-type: none"> ▪ Department of Physics ▪ Department of Chemistry ▪ Department of Civil engineering Manipal Institute of Technology, Manipal University, Manipal

6. Courses in collaboration with other universities, industries, foreign institutions, etc.

- Certificate course in Implantology with IGNOU (Indira Gandhi National Open University), India.

7. Details of programs discontinued, if any, with reasons

NIL

8. Examination System: Annual/Semester/Trimester/Choice Based Credit System

- The examinations for all the courses offered by the institute are conducted annually. However, the examination system for the Final year BDS program is semester based (Part I and Part II)
- Evaluation of Certificate programs is conducted at the end of contact sessions

(Module system)

- No annual examination system is followed for PhD program
- a. Participation of the institution in the courses offered by other institutions
 - College is actively involved in conducting the training and assessment of IQE examination

9. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

	Sanctioned	Filled
Professor	06 + 12	19
Associate Professor/Reader	13 + 24	23
Assistant Professor	-	15
Selection grade lecturer	-	02
Lecturer	40 + 12	01
Tutor / Clinical Instructor	-	13
Senior Resident	-	-

10. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance (Details as on 31st December 2014)

S.No	Name	Qualification	Designation	Specialization	No. of Years of Experience
Department of Oral Medicine and Radiology					
1	Dr. Keerthilatha M Pai	MDS	Professor and Head	Oral Medicine and Radiology	22
2	Dr. Vineetha R	MDS	Assoc. Prof.	Oral Medicine and Radiology	06
3	Dr. Yogesh Chhapparwal	MDS	Reader	Oral Medicine and Radiology	05
4	Dr. Shruti Acharya	MDS	Asst. Prof.	Oral Medicine and Radiology	03
5	Dr. Nanditha Sujir	MDS	Asst. Prof.	Oral Medicine and Radiology	02
6	Dr. Cyril Puliyan Varghese	BDS	Lecturer	-	02
7	Dr. Nitish Mathur	BDS	Lecturer	-	<01
Department of Conservative Dentistry and Endodontics					
8	Dr. Shashi Rashmi Acharya	MDS	Professor	Conservative Dentistry and Endodontics	17

S.No	Name	Qualification	Designation	Specialization	No. of Years of Experience
9	Dr. Vidya Saraswathi	MDS & Certificate course in Oral Implantology	Professor and Head	Conservative Dentistry and Endodontics	15
10	Dr. Vasudev Ballal	MDS, PhD	Addl. Prof.	Conservative Dentistry and Endodontics	10
11	Dr. Sandyakini K	MDS	Assoc. Prof.	Conservative Dentistry and Endodontics	08
12	Dr. Pradeep	MDS	Assoc. Prof.	Conservative Dentistry and Endodontics	08
13	Dr. Tina P.P	MDS	Assoc. Prof.	Conservative Dentistry and Endodontics	07
14	Dr. Krishnaraj Somayaji S.	MDS	Reader	Conservative Dentistry and Endodontics	04
15	Dr. Swathi Pai	MDS	Asst. Prof.	Conservative Dentistry and Endodontics	01
16	Dr. Abhishek	BDS	Lecturer	-	01
17	Dr. Swathi	BDS	Lecturer	-	01
18	Dr. Akriti	BDS	Lecturer	-	<01
19	Dr. Surabhi	BDS	Lecturer	-	02
Department of Periodontology					
20	Dr. Betsy S Thomas	MDS, MBA, Cert. Oral Implantology	Professor & Head	Periodontology	22
21	Dr. K Mahalinga Bhat	BSc, MDS, Cert. Oral Implantology	Professor	Periodontology	33
22	Dr. Pratibha PK	MDS, Cert. Epidem, Biostat and	Professor	Periodontology	17

S.No	Name	Qualification	Designation	Specialization	No. of Years of Experience
		Res Method, Cert. Aesthetic Dent			
23	Dr. Jothi MV	MDS, Cert. Laser Dent	Reader	Periodontology	09
24	Dr. Meena Anand	MDS, Cert. Laser Dent	Reader	Periodontology	09
25	Dr. Rupali	MDS	Reader	Periodontology	05
26	Dr. Santhosh	MDS	Reader	Periodontology	05
27	Dr. Kanishk Gupta	MDS	Asst. Prof.	Periodontology	03
28	Dr. Pradeep Singh	BDS	Lecturer	-	<01
29	Dr. Shalini Sharma	BDS	Lecturer	-	<01
Department of Oral and Maxillofacial surgery					
30	Dr. Abhay T. Kamath	MDS	Professor and Head	Oral and Maxillofacial surgery	13
31	Dr. K. M. Cariappa	MDS	Professor	Oral and Maxillofacial surgery	31
32	Dr. Manish Bhagania	MDS	Assoc. Prof.	Oral and Maxillofacial surgery	07
33	Dr. Srikanth G	MDS	Reader	Oral and Maxillofacial surgery	05
34	Dr. Chithra A	MDS	Asst. Prof.	Oral and Maxillofacial surgery	03
35	Dr. Anand Deep Shukla	MDS	Asst. Prof.	Oral and Maxillofacial surgery	02
36	Dr. Adarsh Kudva M	MDS	Asst. Prof.	Oral and Maxillofacial surgery	01
37	Dr. Swapnil Sharma	BDS	Lecturer	-	<01

S.No	Name	Qualification	Designation	Specialization	No. of Years of Experience
38	Dr. Meenakshi Prasad	BDS	Lecturer	-	<01
Department of Prosthodontics and Crown and Bridge					
40	Dr. Dhanasekar B	MDS	Professor and Head	Prosthodontics and Crown and Bridge	12
41	Dr. Aparna IN	MDS	Professor	Prosthodontics and Crown and Bridge	16
42	Dr. Veena Hegde	MDS	Professor	Prosthodontics and Crown and Bridge	18
43	Dr. Pradeep S	MDS	Addl. Prof.	Prosthodontics and Crown and Bridge	11
44	Dr. Nayana Prabhu	MDS	Assoc. Prof.	Prosthodontics and Crown and Bridge	08
45	Dr. Vinu Thomas George	MDS	Assoc. Prof.	Prosthodontics and Crown and Bridge	08
46	Dr. Lokendra K Gupta	MDS	Asst. Prof.	Prosthodontics and Crown and Bridge	03
47	Dr. Jyoti Hassija	MDS	Asst. Prof.	Prosthodontics and Crown and Bridge	03
48	Dr. Uday Shankar	BDS	Lecturer	-	01
49	Dr. Apurv Jhawar	BDS	Lecturer	-	01
50	Dr. Eshan Verma	BDS	Lecturer	-	01
51	Dr. Vasudha	BDS	Lecturer	-	<01
52	Dr. Vani Verma	BDS	Lecturer	-	01
Department of Pedodontics and Preventive Dentistry					
53	Dr. Rashmi Nayak	MDS	Professor and Head	Pedodontics and Preventive Dentistry	14
54	Dr. Sridhar. N	MDS	Assoc. Prof.	Pedodontics and	07

S.No	Name	Qualification	Designation	Specialization	No. of Years of Experience
				Preventive Dentistry	
55	Dr. Deepika Pai	MDS	Assoc. Prof.	Pedodontics and Preventive Dentistry	07
56	Dr. Sumit Gaur	MDS	Assoc. Prof.	Pedodontics and Preventive Dentistry	05
57	Dr. Saurabh Kumar	MDS	Reader	Pedodontics and Preventive Dentistry	04
58	Dr. Mirza Aumir Beg	MDS	Lecturer	Pedodontics and Preventive Dentistry	<01
59	Dr. Mariam Sophia	BDS	Lecturer	-	01
Department of Orthodontics and Dentofacial Orthopedics					
60	Dr. Arun S Urala	MDS	Professor & HOD	Orthodontics and Dentofacial orthopedics	08
61	Dr. Madhumitha	MDS	Reader	Orthodontics and Dentofacial orthopedics	04
62	Dr. Ritesh Singla	MDS	Asst. Prof.	Orthodontics and Dentofacial orthopedics	03
63	Dr. Siddharth Mehta	MDS	Asst. Prof.	Orthodontics and Dentofacial orthopedics	02
64	Dr. Divya S	MDS	Asst. Prof.	Orthodontics and Dentofacial orthopedics	<01
Department of Public Health Dentistry					
65	Dr. Shashidhar Acharya	MDS	Professor & Head	Public Health Dentistry	12
66	Dr. Ram Prasad VP	MDS	Assoc. Prof.	Public Health Dentistry	06
67	Dr. P Kalyana	MDS	Reader	Public Health	04

S.No	Name	Qualification	Designation	Specialization	No. of Years of Experience
	Chakravarthy			Dentistry	
68	Dr. Deepak Kumar Singhal	MDS	Asst. Prof.	Public Health Dentistry	03
69	Dr. Nishu Singla	MDS	Asst. Prof.	Public Health Dentistry	01
70	Dr. Bhawani Chandra	BDS	Lecturer	-	01
71	Dr. Kalavathi	BDS	Lecturer	-	01
72	Dr. Sonali C	BDS	Lecturer	-	01
Department of Oral Pathology and Microbiology					
73	Dr. Monica Charlotte Solomon	MDS	Professor and Head	Oral Pathology and Microbiology	18
74	Dr. Nirmala N Rao	MDS	Professor	Oral Pathology and Microbiology	24
75	Dr. Raghu A.R	MDS, PhD	Professor	Oral Pathology and Microbiology	17
76	Dr. Sunitha Carnelio	MDS	Addl. Prof.	Oral Pathology and Microbiology	16
77	Dr. Chetana Chandrashekar	MDS	Assoc. Prof.	Oral Pathology and Microbiology	07
78	Dr. Ankur Kaur Shergill	MDS	Asst. Prof.	Oral Pathology and Microbiology	03
Department of Dental Materials					
79	Dr. Nagaraja Upadhya P	MSc, PhD	Selection Grade Lecturer	Dental Materials	23
80	Dr. Kishore Ginjupalli	MSc, PhD	Selection Grade Lecturer	Dental Materials	14
81	Dr. Abhishek Bhagat	BDS, MSc	Lecturer	Dental Materials	03

S.No	Name	Qualification	Designation	Specialization	No. of Years of Experience
Medical Faculty					
82	Dr. Sneha Guruprasad Kalthur	MS	Assoc. Prof.	Anatomy	10
83	Dr. Vrinda Hari Ankolekar	MD	Asst. Prof.	Anatomy	03
84	Mrs. Vanishri S Nayak	MSc	Senior Grade Lecturer	Anatomy	08
85	Mrs. Suhani Sumalatha M D'Silva	MSc	Senior Grade Lecturer	Anatomy	08
86	Mr. Lydia Quadros	MSc	Lecturer	Anatomy	06
87	Dr. Raghvendra Rao	MD	Professor & Head	Physiology	16
88	Dr. Manjula S D	MSc, PhD	Assoc. Prof.	Physiology	17
89	Dr. Dhiren D Punja	MD	Asst. Prof.	Physiology	04
90	Dr. B Shivananda Baliga	MSc, PhD	Assoc. Prof.	Biochemistry	23
91	Dr. Padmanabha E G Udupa	MSc, PhD	Assoc. Prof.	Biochemistry	24
92	Dr. Ravindra Maradi	MD	Assoc. Prof.	Biochemistry	10
93	Dr. Bharati Chogtu Magazine	MD	Assoc. Prof.	Pharmacology	11
94	Dr. Laxminarayana Bairy	MD, PhD	Professor & Head	Pharmacology	29
95	Dr. Veena Nayak	MD	Assoc. Prof.	Pharmacology	08
96	Dr. Mohan Babu Amberkar	MD	Assoc. Prof.	Pharmacology	08
97	Dr. Meena Kumari	MD	Assoc. Prof.	Pharmacology	07
98	Dr. Manna valiathan	MD	Professor & Head	Pathology	19
99	Dr. Swati Sharma	MD	Assoc. Prof.	Pathology	08
100	Dr. Deepak Nayak M	MD	Asst. Prof.	Pathology	04
101	Dr. Vishnu Prasad S	MSc, PhD	Assoc. Prof.	Microbiology	18

S.No	Name	Qualification	Designation	Specialization	No. of Years of Experience
102	Mrs. Seema Shetty	MSc	Lecturer	Microbiology	05
103	Dr. Muralidhar Verma	MD	Assoc. Prof.	Medicine	12
104	Dr. Weena Stanely	MD	Asst. Prof.	Medicine	05
105	Dr. Ananth Shenoy	MD	Asst. Prof.	Medicine	<01
106	Dr. Yajnesh Kidiyoor	MD	Asst. Prof.	Medicine	02
107	Dr. Chethan K	MS	Assoc. Prof.	Surgery	08
108	Dr. Anand H	MS	Asst. Prof.	Surgery	04
109	Dr. Badareesh L	MS	Asst. Prof.	Surgery	03
110	Dr. Sharath S Honnani	MS	Asst. Prof.	Surgery	<01
111	Dr. U Kailasnath Shenoy	MD, DA	Professor	Anaesthesiology	28
112	Dr. Laxmi Shenoy	MD, DA	Asst. Prof.	Anaesthesiology	03

11. List of senior Visiting Fellows, adjunct faculty, emeritus professors

S.No	Name	Qualification	Designation	Specialization	No. of Years of Experience
1	Dr. Suhas Lele	BDS	Adjunct Visiting Professor	Endodontics	25
2	Dr. S. R. Prabhu	MDS	Visiting professor	Oral Pathology and Microbiology	44

12. Percentage of classes taken by temporary faculty - program-wise information

Nil

13. Program-wise Student Teacher Ratio

Department	Courses			
	BDS	MDS	Diploma	Certificate
Oral Medicine and Radiology	5:1	1:1	-	-
Conservative Dentistry and Endodontics	6:1	1:1	1:2.6	-
Periodontology	6:1	1:1	-	-

Oral and Maxillofacial Surgery	7:1	1:1	-	-
Prosthodontics and Crown and Bridge	6:1	1:1		-
Pedodontics and Preventive Dentistry	8:1	1:1	-	-
Orthodontics and Dentofacial Orthopedics	5:1	1:1	1:1.6	-
Public Health Dentistry	5:1	1:1	-	-
Oral Pathology and Microbiology	8:1	1:1	1:2	-
Dental Materials	17:1	-	1:1	1:1
Advanced Courses	-	-	-	3.1:1

14. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

Department	Support Staff		
	Sanctioned	Filled	Actual
Administrative staff	1	1	1
Receptionist/Clerk	14	18	18
Dental Surgery assistant/nurse	29	42	42
Assistant engineer	01	02	02
Dental Technician	10	11	11
X-ray technician	03	02	02
Laboratory technician	5	01	01
Laboratory assistant	-	01	01
General duty worker	25	06	06
Housekeeping staff	17	33	33

15. Research thrust areas as recognized by major funding agencies

- Clinical trials and evaluation of dental drugs and materials
- Cytotoxicity of Root canal irrigating solvents
- Studying the physical properties of MTA
- Prognostic markers in Oral Cancer
- To study the clinical efficacy of a desensitizing toothpaste

16. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

- Dr. Vasudel Ballal is conducting a study on “Development and testing of bioactive molecules encapsulated biopolymeric nanoparticles to promote healing of dental pulp” in association with ISTA Dental products, USA [Grant amount \$690].

- Dr. A Hari Shanker is conducting a study on “An immunohistochemical study on assessment of Fascin-1 expression in ameloblastoma” in association with Colgate-Pamolive (India) Ltd. [Grant amount Rs. 10,000/-]
- Dr. Vani Taneja is conducting a study on “Remineralization potential of theobromine on artificial carious lesions-an in vitro study” funded by ICMR, New Delhi [Grant amount Rs. 25,000/-]
- Dr. Jasleen Groover is conducting a study on “To study the expression of fibronectin in severe dysplasia early invasive carcinoma and oral squamous cell carcinoma-an immunohistochemical appraisal” funded by ICMR, New Delhi [Grant amount Rs 25,000/-]

17. Inter-institutional collaborative projects and associated grants received

a) National collaboration

- Evaluation of the cytotoxicity of precipitates formed during the canal irrigation.(Dr.Vasudev Ballal & Dr. Sudheer Moorkoth, Department of Pharmacology, Manipal College of Pharmaceutical Sciences, Manipal University, Manipal, Karnataka, India)
- Evaluation of the antifungal effect of a novel antiplaque agent on fungi cultured from root canals. (Dr. Vasudev Ballal & Dr. Prakash PY, Department of Microbiology, Kasturba Medical College, Manipal University, Manipal, Karnataka, India).

b) International collaboration

- Effects of different irrigating solutions on the microstructure and physical properties of mineral trioxide aggregate. (Dr. Vasudev Ballal and Dr. Franklin Tay, Georgia Health Sciences University, Augusta, GA, USA & Dentsply, Tulsa, OK, USA)- Grant INR 1, 10,000/-
- Evaluation of the antimicrobial property of a novel antiplaque agent on Enterococcus faecalis. (Dr. Vasudev Ballal and Dr. Anil Kihsen, University of Toronto, Faculty of Dentistry & Epien Medical Inc., Minneapolis, MN, USA)-Grant INR 90,000/-
- Evaluation of physical properties of newer version of mineral trioxide aggregate.(Dr. Vasudev Ballal & Dr. James F Walcott, Diplomate, American Board of Endodontics, University of Colorado School of Dentistry, New Mexico, USA)-Grant INR 1, 15,000/-

18. Institutional projects funded by ICMR; DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.

S.No	Title	Investigator	Department	Year	Fund sanctioned	Financial support External Agency
1	Evaluation of Physical and chemical properties of Bio MTA when treated with different irrigating agents	Dr. Vasudev Ballal Addl. Professor	Department of Conservative Dentistry & Endodontics	2013	USD\$738	BioMTA
2	Evaluation of Physical and chemical properties of Bio MTA when treated with different irrigating agents	Dr. Vasudev Ballal Addl. Professor	Department of Conservative Dentistry & Endodontics	2014	US\$567	BioMTA
3	An Immunohistochemical study on assessment of Fascin- 1 expression in ameloblastoma	Dr. A Hari Shanker	Department of Oral Pathology & Microbiology	2014	Rs. 10,000	Colgate – Palmolive (India) Limited
4	To Study the Expression of Fibronectin In Severe Dysplasia, Early Invasive Carcinoma and Oral Squamous Cell Carcinoma: An Immuno-Histochemical	Dr. Jasleen Grover	Department of Oral Pathology	2014	Rs. 25,000	ICMR

S.No	Title	Investigator	Department	Year	Fund sanctioned	Financial support External Agency
	Appraisal					
5	A single-center and monadic-design study conducted in Manipal to evaluate the clinical efficacy of a desensitizing toothpaste: A dentinal hypersensitivity study conducted in MCODS, Manipal	Dr. Nirmala N Rao Dr. Betsy Thomas Dr. Shashidhar Acharya Dr. Rashmi Nayak	MCODS	2014	Rs. 5,00,000	Colgate – Palmolive (India) Limited
6	Remineralising effect of Theobromine on artificial carious lesions	Dr. Vani Taneja	PG student Pedodontics	2014	Rs. 25,000	ICMR
7	FHNO Travel Fellowship- 2014-15	Dr. Adarsh Kudva	Oral Surgery	2014	Rs. 20,000	Foundation for Head & Neck Oncology All Indian Institute of Medical Sciences, Ansari Nagar, New

S.No	Title	Investigator	Department	Year	Fund sanctioned	Financial support External Agency
						Delhi

19. Research facility / centre with

- state recognition
- national recognition
- international recognition

Nil

20. Special research laboratories sponsored by / created by industry or corporate bodies

Nil

21. Publications last three years

S.No	Description	2012	2013	2014
1	Number of papers published in peer reviewed journals (national / international)	126	105	136
2	Monographs	-	-	-
3	Chapters in Books	2	5	6
4	Books edited	-	-	-
5	Books with ISBN with details of publishers			
6	Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, Medline, etc.)	47	42	47
7	Citation Index – range / average	12-0 (1.87)	3-0 (0.42)	3-0 (0.29)
8	SNIP	0.74	0.79	NA
9	SJR	0.39	0.45	NA
10	Impact Factor – range / average	3.58 – 0.0 0.18	2.84-0.0 0.21	2.18- 0.0 0.14
11	h-index	5	3	2

22. Details of patents and income generated

S. No	Title	Reference No	Filing date	Income
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				generated
1	Method, system and apparatus for curing light activated resin materials	5416/CHE/2013	25/11/2013	-
2	Method, system and apparatus for dispensation of the cryogen	349/CHE/2014	28/01/2014	-
3	Portable device for dental therapy	3555/CHE/2014	19/07/2014	-
4	Mobile dental unit	3554/CHE/2014	19/07/2014	-
5	Surgical glove for educating patients with special needs	3468/CHE/2014	19/08/2014	-

23. Areas of consultancy and income generated

S.No	Areas of consultancy	Income generated		
		2012	2013	2014
1	Mechanical testing of materials	61, 894.00	1, 06, 656.00	1,75,362.00

24. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad

S.No	Name of the faculty	Selected by	Year	Visiting Place	Duration of the visit
1	Dr. A R Raghu	EU funded Marie curie fellowship	2013-15	University of Sheffield, UK	2 Years

25. Faculty serving in

- National committees
- International committees
- Editorial Boards
- any other (specify)

S. No	Name of the Faculty	Designation	Department	Editorial advisory body member
1	Dr. Vasudev Ballal	Additional	Conservative	Scientific Advisory

		Professor	Dentistry & Endodontics	Board member of Journal of Endodontics Section Editor (Endodontics – Journal of Interdisciplinary Dentistry Scientific Advisory Board member of Saudi Endodontic Journal- Saudi Endodontic Society. Scientific Advisory Board member of World Journal of Stomatology Editorial Board member of “European Journal of General Dentistry” Editorial Board member of “The Journal of Dentistry”
2	Dr. Manish Bhagania	Associate Professor	Oral & Maxillofacial Surgery	Associate Editor in Manipal Odontoscope, The official journal of IDA Manipal
3	Dr. Pradeep S	Additional Professor	Prosthodontics & Crown and Bridge	Editorial board member for the Journal of Orofacial Research
4	Dr. Shashidhar Acharya	Professor & Head	Public Health Dentistry	Editorial board member of Journal of Indian Association of Public Health Dentistry

5	Dr. Ramprasad Vasthare	Associate Professor	Public Health Dentistry	Editor- ManipalOdontoscope, Journal of Indian Dental Association, Manipal branch
6	Dr. Raghu A.R	Professor	Oral Pathology & Microbiology	<ol style="list-style-type: none"> 1. International Journal of Oral and Maxillofacial Pathology 2. Signpost Open Access Journal of Pathobiology and Toxicology 3. Journal of Orofacial and Health Sciences 4. World Journal of Dentistry 5. International Journal of General Dentists

26. Faculty recharging strategies (Refresher / orientation programs, workshops, training programs and similar programs).

All the newly joined faculty are oriented initially by the Centre for Professional and Personal Development through teaching-learning workshop. Subsequently, all the faculty are encouraged to participate in regular training programs conducted by this centre. All the faculty are encouraged to attend national and International Conferences, seminars/CPDs/CDEs/ Workshops/ Hands on training, etc. every year in their specialty. The university provides a financial assistance of Rs 50,000 per year to each faculty. Research Incentives are also given for the articles published in journals, for innovative ideas and patents. In addition, the University provides grants for research to faculty and students. College also encourages the departments to conduct CDE / CPD/ Workshops /

Conferences, wherein subject expertise are invited to share their knowledge and skills with the students and faculty.

Number of faculty participated/Attended in the academic activities:

S. No	Description	2012	2013	2014
1	Conferences/Workshops/CDE	78	88	94

27. Student projects

- percentage of students who have taken up in-house projects including inter-departmental projects [**Number of UG students involved in research projects at the college**]
2012 – 02
2013 – 12
2014 – 05
- percentage of students doing projects in collaboration with other universities / industry / institute

28. Awards / recognitions received at the national and international level by

• Faculty

S. No	Description	2012	2013	2014
1	Best oral/Poster presentation	-	01	04

• Doctoral / post-doctoral fellows

S. No	Description	2012	2013	2014
1	Best oral/poster presentation	-	-	-

• Students

S. No	Description	2012	2013	2014
1	Best oral/poster presentation	05	07	25
2	Best Innovation	01	02	03
3	Pierre Fauchard Academy UG student award	-	01	01
4	Student Plaque award by International college of dentists	-	01	01
5	International Pierre Fauchard Academy UG student Scholarship award	-	-	01

29. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

S. No	Description	2012	2013	2014
1	No. of Conference/ workshop/ CDE organised	22	27	24
2	Total number of participants	325	415	469
3	Source of funding	-	-	-

30. Code of ethics for research followed by the departments

The code of ethics for research as put forward by the Manipal University, Manipal is followed. MU has an ethical Committee each dept. has to submit the research protocol to the ethical committee following the approval, the research project is undertaken in the respective departments. This committee comply with the standards laid down by ICMR and ICH-GCP Guidelines.

31. Student profile program-wise:

Name of the Program (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
BDS	2012-13170	23	76	76	97
	2013-16232	24	76	84	96
	2014-18449	25	75	79	94
MDS	2012-3086	10	21	100	100
	2013-2059	14	21	100	100
	2014-1607	11	23	100	100

32. Diversity of students [for the year 2014-15]

Name of the Program (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
BDS	-	4	86	10
MDS	9	9	16	-
Certificate courses	14	8	26	-
PGD DM	-	-	1	-
Dip. Dental Mechanics	-	1	2	-

33. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE, USMLE, PLAB, GPAT, NCLEX, CGFNS, IELTS and other competitive examinations? Give details category-wise.

The graduate students generally opt for private practice or higher studies.

Following table indicates the percentage of students who have secured post graduate admission after passing out from this college

S. No	Description	2012	2013	2014
1	Total Number of students passed	90	101	83
2	Students who secured PG seat	45	37	31
3	Students with private practice	21	21	02
4	Students working at hospitals	-	07	05
5	Percentage of students placed	73.33	64.35	45.78

34. Student progression

Student progression	Percentage against enrolled		
	2012	2013	2014
UG to PG	45	37	31
PG to M.Phil, DM / M Ch / DNB	NA	NA	NA
PG to Ph.D.	NA	NA	NA
Ph.D. to Post-Doctoral	NA	01	NA
Employed			
• Campus selection			
• Other than campus recruitment	21	28	07
Entrepreneurs	NA	03	03

35. Diversity of staff

Percentage of faculty who are graduates	
of the same university	65.75
from other universities within the State	21.91
from universities from other States	12.32
from universities outside the country	Nil

36. Number of faculty who were awarded M.Phil., DM, M Ch, Ph.D., D.Sc. and D.Litt. during the assessment period

S. No	Year	No. of Ph.D. awarded
1	2012	Nil

2	2013	Nil
3	2014	Nil

37. Present details of institutional infrastructural facilities with regard to

a) Library

S. No	Description	2012	2013	2014
1	Books	57291	61853	64994
2	Journals subscribed	571	574	526
3	Online journals	3240	3263	4553
4	Back volumes of journals	34628	34629	35037
5	Online databases	09	09	12
6	CDs	674	692	769
7	WHO publications	1995	2013	2050
8	Dissertations	5095	6000	6034
9	Video cassettes	375	375	375
10	Computers	129	140	103
11	Scanners	06	06	16
12	Printers	15	15	16
13	Color laser printer	01	01	01

The library is also equipped with facilities such as e-learning, access to internet and web resources including online journals and e-books. It also has audio-visual room, computer lab, group study area, private study area and photocopying facilities. Resources such as the Proquest Medical Library, MD Consult Science Direct, CINAHL Plus, IDIS/Web, Net Anatomy Educational Website, SciFinder Scholar, Cochrane Library Online and Lowa Drug Information Services are available. The library is also a member of DELNET Online, British Council and the American Information Resource Centre.

b) Internet facilities for staff and students

All the students and faculty are provided with laptops. There is access to intranet and internet through Wi-Fi or broad band connection. Students are encouraged to present their seminars, case presentations and journal clubs through power point presentations. Each student is given an e mail id and password which enables them to access the various feedback forms.

The college encourages the faculty to be familiar with the use of computers, internet, audio-visual aids and computer aided packages. The faculty members of the institution are provided with personal laptop and internet connection following their recruitment. Faculty is encouraged to use these facilities for the academic and research purposes. Faculty is oriented about the new applications or software's by the information systems department of Manipal University as and when required.

c) Total number of class rooms

The college has a total of 5 air conditioned state of the art lecture halls with LCD projectors. In addition, the college also has 12 seminar halls, also equipped with LCD Projectors, Slide projectors, black board. In addition, departments have teaching and learning models for student education.

d) Class rooms with ICT facility and ‘smart’ class rooms

Students are allotted topics for seminar/ research in recent advances in the respective specialties which necessitates the use of ICT. To facilitate the same, students are provided with laptops and have an access to internet. Knowledge is communicated to students using didactic lectures, small group discussions, demonstration, chair-side discussion, spotters, working on models and live demo on patients. Some of the clinical and non-clinical procedures are taught using recorded videos by the faculty. In addition to these, students are also given small seminar topics to discuss in the classroom which are either problem or project based.

e) Students’ laboratories

The institution is equipped with a state of the art laboratories for student learning. The labs are also provided with basic and advanced amenities. Following is the list of laboratories at the college with the facilities available and the number of student strength that can be accommodated in each lab.

S.No	Laboratory	Facilities Available	No. of students accommodated	Area
1	Preclinical Conservative Dentistry Laboratory	Phantom head units, Micro motor, Three way syringes, Operating stools, Amalgamator.	50	1248 Sq Ft
2	New Phantom Head laboratory	Phantom heads, Micromotors, Three way syringes, Airtor, Suction, Computer screens in each working station, Operating stools, Amalgamator	27	1098 Sq Ft
3	Central Laboratory	Casting machines, Ceramic firing machine, Duplicating machine, Processing machines for RPD and CD, Die fabricating system (Pindex), Die cutting	10	1186 Sq Ft

S.No	Laboratory	Facilities Available	No. of students accommodated	Area
		machine, Sand blaster, Trimming and polishing Lathes, Sprue cutting machine, Burnout furnace, Vibrators, Stone and plaster dispensers, Cast Drier and hardener, Ultrasonic cleaning machine, Electrolyte polishing Unit, Soldering Unit, Surveyor Vacuum mix unit, Hydraulic bench press, Flexible Denture Unit		
4	Postgraduate Laboratory in Clinical Section of Conservative Dentistry	Dental stone dispenser, Plaster dispenser, Model trimmer, Vibrator, Dental lathe for acrylic, Dental lathe for Metal, Casting machine, Vacuum Mixer, Heavy duty micro motors, Sand blasting unit, Ceramic furnace(Combo for both PFM and All ceramic restorations), Pneumatic Chisel, Ultra sonic cleaner, Alloy grinder Pindex Machine, Die Cutting machine, Burn out furnace, Pickling units.	20	545 Sq Ft
5	Prosthodontic Postgraduate students' laboratory	Casting machines, Ceramic firing machine, Processing machines for RPD and CD, Die fabricating system(Pindex), Die cutting machine, Sand blaster, Trimming Lathes, Sprue cutting machine, Arc welder, Autoclave unit, Hot air oven,	15	862 Sq Ft

S.No	Laboratory	Facilities Available	No. of students accommodated	Area
		Articulators, Hydraulic bench press, Deflasking units, Deinvesting units, Ultrasonic cleaning machine, Ultrasonic crown removers, Simulators, Burnout furnace, Polishing lathe Surveyors, Trimming hand pieces, Light Curing units for complete dentures and composite, Vibrators, Airtor, Micro motors, Biostar vacuum formed splint Machine, Stone and plaster dispensers, Vacuum mix unit, Dental flasks and clamps		
6	Prosthodontic Undergraduate students' Laboratory	Vibrators, Hydraulic bench press, Dental flasks and clamps, Burners Acrylizer, Polishing lathe, Trimming lathe, Plaster dispenser, Heavy duty Micromotors	25	1031 Sq Ft
7	Casting Room/Plaster Room	Centrifugal Casting Machines, Flexible Denture Units, Plaster dispensers, Polishing Units		675 Sq Ft
8	Preclinical Prosthodontic laboratory	Burners, Tables and chairs, Heavy duty Micromotors, Plaster dispenser, Acrylizer, Polishing lathe, Trimming lathe, Vibrator, Hydro solder	100	2357 Sq Ft
9	Orthodontics Laboratory	Plaster dispensers, Model trimmers, Polishing lathe, Acrylizer, Vibrator, Heavy duty foot control, Biostar,	10	234 Sq Ft

S.No	Laboratory	Facilities Available	No. of students accommodated	Area
		Wall mounted hand engines for acrylic trimming, Curing Pressure Pot,		
10	Pedodontics laboratory	Plaster and stone dispensing machines, Cast trimming machines, Acrylic trimmers, Hydro solder unit, Acrylizer, Vibrator, Dental Lathe	09	217 Sq Ft
11	Dental Materials Undergraduate students' laboratory	Granite top demonstration table Bunsen Burners, Materials for conducting experiments	100	2352 Sq Ft
12	Chemical analysis laboratory	Equipment and accessories for gravimetric and volumetric analysis, Boiler and Drier, pH Meter	10	530 sq Ft
13	Undergraduate Students' Laboratory in Oral Pathology	Granite top demonstration table Microscopes, Glass door cupboard for storage	50	1467 Sq Ft
14	Histopathology Laboratory	Chemicals and reagents, Automatic processor, Knife sharpener, Water bath, Microtome 2000, Slide warmer, Digital camera	10	326 Sq Ft

f) Research laboratories

S.No	Laboratory	Facilities Available	No. of students accommodated	Area
1	Dental Materials testing Laboratory	INSTRON- Universal testing machine, Material weighing machine, Microscope	05	216 Sq Ft
2	Research Laboratory	Cryostat, Deep freezer, incubator	05	250 Sq Ft

S.No	Laboratory	Facilities Available	No. of students accommodated	Area
	(Oral Pathology)	Micropipettes, Three headed Microscope, Micro centrifuge, Vortex, Laboratory ware, Television, pH meter, Magnetic stirrer		

38. List of doctoral, post-doctoral students and Research Associates

- from the host institution/university
- from other institutions/universities

At present, two faculty members are pursuing their doctoral program from the host institute. In addition, a total of four faculty members from the host institute have pursued their doctoral program and successfully completed during 2010-2011.

S.No	Name	Department	Year of Completion of PhD	From
Ongoing				
1	Dr. Monica Solomon	Oral Pathology and Microbiology	Pursuing	Host institution
2	Dr. Aparna I N	Prosthodontics and Crown and Bridge	Pursuing	Host institution
Completed				
1	Dr. Raghu A R	Oral Pathology and Microbiology	2010	Host institution
2	Dr. Vasudev Ballal	Conservative Dentistry and Endodontics	2011	Host university
3	Dr. Nagaraja Upadhya P	Dental Materials	2011	Other university
4	Dr. Kishore	Dental Materials	2011	Host institution

	Ginjupalli			
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39. Number of post graduate students getting financial assistance from the university.

The college provides financial assistance to the post graduate students for their research project based on the quality of the project. A selection committee comprising of senior faculty members of the institute scrutinizes and selects the projects for financial assistance. Selected projects are awarded with a financial assistance of Rs. 10,000 each, and this is disbursed to best 10 research projects in an academic year.

40. Was any need assessment exercise undertaken before the development of new program(s)? If so, highlight the methodology.

Yes. The assessment exercise is conducted as per the Manipal University Norms.

41. Does the institution obtain feedback from

- faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the institution utilize the feedback?
- students on staff, curriculum and teaching-learning-evaluation and how does the institution utilize the feedback?
- alumni and employers on the programs offered and how does the institution utilize the feedback?

The college has an established practice of obtaining feedback from all the stakeholders. The feedback is collected regularly from students, patients, teaching and non-teaching staff which will be suitably analysed and appropriate preventive and corrective actions are taken up which helps in improving the quality of the services offered.

The curriculum design is based on the DCI norms. Revisions, if any, are made after discussion in the Board of Studies meeting. The implementation is ensured through the academic calendar and time table. Periodic monitoring of the progress is done during departmental audits and meetings.

- Students : Yearly basis with feedback questionnaires
- Alumni : Informally during visit of alumni
- Parents : Informally during their visits
- Patients : Yes
- Academic peers : During BOS meetings
- Employers / industries : No
- Community : No

The feedback is analysed by sending the data collected to the Statistical bureau of the University. The scores and remarks are discussed in the core committee/HOD meetings and suitable corrective and preventive actions are taken. The report of the

same is sent to the University.

42. List the distinguished alumni of the institution (maximum 10)

Alumni of MCOADS have made a mark in different fields both nationally and internationally. Alumni meets are organized every year in the month of December when the alumni visit their alma mater, share their experiences with faculty and students.

S.No	Name and details	Batch	Position
1	Dr. Muniratnam Naidu E.	MDS :1974	Former Vice chancellor, Meenakshi Ammal Deemed University, Maduravoyal, Chennai 602102.
2	Dr. Jacob T. Kaimenyi	MDS :1980	Deputy Vice Chancellor (Academic affairs) University of Nairobi, P.O. Box 555, 00515, Nairobi
3	Dr. Surendra Shetty V	BDS :1965 MDS :1972	Pro Vice Chancellor, Manipal University
4	Dr. S Ramanand Shetty	MDS :1982	Vice Chancellor, Nitte University, Mangalore
5	Dr. Nirmala N Rao	BDS :1972	Dean, Manipal College of Dental Sciences, Manipal
6	Dr. Sripathi Rao B.H	BDS :1972 MDS :1978	Dean, Yenepoya Dental College, Mangalore
7	Dr. U.S. Krishna Nayak	BDS :1978 MDS :1983	Dean, EC member of DCI A.B.S.M Dental College, Mangalore
8	Dr. Dilip G Naik	MDS :1985	Dean, Manipal College of Dental Sciences, Mangalore
9	Dr. Paul C.Salins	BDS :1975 MDS :1981	Former Senior Consultant, Maxillofacial and Skull Base Surgery, Hamad Medical Corporation (M.o.H.), P.O. Box 3050, Doha, Qatar. Presently: Director of Cranio-Facial Services, Mazumdar-Shaw Cancer Center, Bangalore
10	Dr. Moni Abraham Kuriakose	BDS :1983	Senior Consultant Head and Neck Surgery, Chief of Head and Neck Oncology Service Director, Department of Surgical Oncology, Mazumdar-Shaw Cancer Center, Bangalore

43. Give details of student enrichment programs (special lectures / workshops / seminar) involving external experts.

The college regularly conducts Continuing dental education program or workshops. Experts from different arenas in dentistry will be invited to deliver lectures and hands on training. The following table indicates the number of enrichment programs conducted at the college for our students and faculty.

Description	2012	2013	2014
Seminars/Workshop/Training/Guest Lectures/CDE programs held	22	27	24

44. List the teaching methods adopted by the faculty for different programs including clinical teaching.

Theory:

The teaching learning methods used are didactic lectures, tutorials, seminars, small group discussions; problem based learning, clinical case discussion, hands on working on mannequins in a simulated clinical setup, field visits, practical demonstrations and clinical case demonstrations.

Practical training:

Practical classes train the students to treat patients when they are posted in clinical set up. First and second BDS students are exposed to preclinical teaching on the phantom head lab, clinical situations are simulated in pre-clinical practical classes. Here the students gain proficiency in cavity preparation on typodont teeth, handling of instruments, familiarized to work in a simulated oral environment. This allows the student to get a feel of working on patients. There are nearly 77 workstations for the undergraduates in the pre-clinical operative dentistry laboratory and 100 work stations in Pre-clinical prosthodontics laboratory to ensure that student acquires knowledge in handling patients during their clinical postings in third year.

Clinical training:

In third year of BDS course, students are exposed to patients with medical problems in the hospital wards during clinical sessions. This enable them to gain knowledge about the systematic examination of patients, oral manifestations of various diseases requiring surgical expertise and to manage medical emergencies in dental Practice. Students in third and fourth year of the course have hands on learning experience by treating patients with different kinds of dental and oral problems in both college set up and rural settings at dental camps. During internship students gain knowledge in comprehensive dental management.

45. How does the institution ensure that program objectives are constantly met and

learning outcomes are monitored?

At beginning of each academic year, a detail plan of action to achieve each program objectives are planned. The academic calendar containing the details and time frame for all the academic activities will be issued to the departments along with time table. At the department level, monthly/weekly plan will be prepared as per the time table. The extent of course content, coverage and student performance will be discussed on monthly basis during departmental meetings.

Annually, three internal assessment examinations will be held and at the end of each assessment examination, the performance of the students will be analyzed. The internal assessment includes both formative and summative assessment which ensures that the objectives of the learning process are assessed during the evaluation process. Students are well informed about the means and methods of evaluation ensuring that the process of evaluation is objective. Periodic assessment of the student's outcome after each internal assessment ensures that students are aware of the examination process. Students are continuously assessed based on the seminars, class room discussions with feedback on their performance. The poor performers will be counselled and suitable supportive help will be rendered as and when needed. A feedback on the syllabus content coverage will be obtained from the students annually. The inputs from the feedback will be assessed and necessary corrective or preventive action will be put forward to the Board of Studies for discussion and approval. In addition, the Board of studies meets twice in a year to discuss the curriculum and changes, if any, process of evaluation and outcome of the examinations. BOS meetings also discuss the availability of question banks and panel of examiners for smooth conduct of university examinations. Besides, two internal audits will be conducted during which audit of the academic processes will be assessed in all the departments.

46. Highlight the participation of students and faculty in extension activities.

The students and faculty are involved in various outreach programs and social activities to promote a strong institution-local neighborhood network, which not only helps students to acquire attitude for service training but also indirectly benefits the local community and contributes towards overall community development. For this purpose, the institution conducts dental health camps in the local and the adjoining regional areas throughout the year wherein the main focus is on screening, diagnosis and providing the primary preventive care. These help in creating awareness about oral health and have helped the local community to have better oral health.

The students' council of the institution conducts various co-curricular activities with the help of its benevolent body named voluntary service organization, to extend a helping hand in the direction of the oppressed and lesser privileged of our society through various events like free dental check-up camps, awareness programs, drug collection and re-distribution campaigns, clothes collection drive and lots more. The organization's main motive is to provide the general public an insight into the field of

dental health and social vigilance.

47. Give details of “beyond syllabus scholarly activities” of the institution.

The students are involved in various scholarly activities organized by the college and are also encouraged to participate in such events organized elsewhere. The students are encouraged to participate in conferences, workshops and continuing dental education programs. The college provides a financial assistance of Rs 5000 for undergraduates and Rs 10,000 for post-graduate students to attend and present their research at national and international forums.

The students council of the college also conducts annual scientific meet (Ignite) where students of all the years and students from other dental colleges will be participating in the program. The program involves organizing guest lectures, presentation of research work by undergraduate students, poster presentations, dental debate, and dental quiz.

In addition to these, the students are also encouraged to participate in innovation programs wherein the faculty of the college mentors and guides the innovative ideas from students and help in presenting their innovation at various forums, competitions. Further the students are encouraged to participate in the business competition held by the university wherein the selected innovations will be incubated and are supported with financial assistance to scale up the innovation.

48. State whether the program/ institution is accredited/ graded by other agencies? If yes, give details.

- All the programs conducted at Manipal College of Dental Sciences, Manipal are recognized by the statutory bodies. Following are the list of courses which are recognized by Dental Council of India, which is the statutory body for dental education in the country
 1. B.D.S
 2. M.D.S in all specialties
 3. PG diploma in Dental Materials
 4. Diploma course in Dental Mechanics
 5. Diploma course in Dental Hygienist
- In addition, the undergraduate program (BDS) is also recognized by
 1. Malaysian Dental Council since 2003
 2. Nepal Accreditation Board since 2004
 3. The college has been recognized as a center for International Qualifying Examination (IQE), UK from 2004
 4. The college has been recognized as a center for Diploma of the Membership of the Faculty of Dental Surgery from the Royal College of Physicians and Surgeons of Glasgow since 1999 and extended for all specialties from 2005
 5. Accredited by NAAC in 2002 with “B” grade (75%).

49. Briefly highlight the contributions of the institution in generating new knowledge, basic or applied.

- Manipal College of Dental Sciences, Manipal is the first private dental college in the country. Ever since its inception, the college has strived to excel in academics, patient care and research. The college has best infrastructural facilities, at par with international standards, and adopted best practices for teaching, learning and research. The college has been ranked as the best college in the country in the private sector since 2008 in a survey conducted by Outlook. Recently, Manipal College of Dental Sciences, Manipal has been ranked as the best college in the country by The week-Hansa survey too.
- The college has the distinction of having maximum number of research publications in the country among all the dental colleges in country.
- The college was instrumental in developing the syllabus and curriculum for the PG diploma in dental materials which is now recognized by the Dental Council of India
- One of the first colleges to start certificate courses in Implantology, aesthetics and laser dentistry
- The college strives to innovate in research and this has led to first patent filings over the years.
- The college was able to lend support to budding entrepreneurs and this has resulted in successful establishment of a company (Dental Innovations Pvt Ltd).

50. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the institution.

Strengths:

- First self-financing Dental College in the Country.
- MCODES, Manipal has been consistently judged as the best Dental College in the Country in the survey conducted by Outlook and recently by Week for 8 consecutive years.
- The brand name of university attracts good number students seeking admission to professional courses
- An institute with great number of alumni who have made an impact around the globe.
- State of the art infrastructure for imparting clinical training for students.
- Dedicated and enthusiastic full time Faculty and non-teaching staff.

Weaknesses:

- Lack of dedicated working hours for research component in UG curriculum.
- Lack of a mechanism to record feedback about students by faculty
- Lack of mechanism to assess the personal traits of the students

Opportunities:

- The theoretical quality of dental study course in MCOADS, is highly comparable to the quality of dental course in Dental Schools in US, this can attract students from US /UK and other countries.
- The knowledge and clinical skills imparted during the course of study can attract students from International University for short practical experiences, ‘externship’ at our institute.
- Research Activity among the faculty can attract universities abroad to have partnership in research projects.
- Externship for our students during vacation, students can rotate through premier research laboratories or research institutes

Challenges:

- Introduce a change in current curriculum i.e., self-directed learning through PBL.
- Mushrooming up of Dental Colleges may affect the availability of clinical material for UG & PG program.
- Degree awarded by MU is not recognized by universities in UK/US.
- The admission of foreign / NRI students to BDS degree program is weakening because of lack of recognition of degrees by their respective countries.

51. Future plans of the institution:

- To increase collaborations with international universities mainly to improve faculty and students exchange.
- To obtain recognition from the international universities for the courses offered by the institute.
- To modify the existing curriculum to incorporate self-directed and problem based learning.

ORAL MEDICINE AND RADIOLOGY

1. Faculty profile - adequacy and competency of faculty:

The teaching faculty meets the stipulated requirements of the statutory body (i.e. Dental Council of India) with respect to undergraduate and postgraduate training. The entire faculty therefore have competency as laid down by DCI. The faculty maintains and upholds the standards and competency by keeping abreast of latest developments in the field and regularly attends workshops and conferences to meet higher standards.

S. No.	Name	Qualification	Designation	Experience in years (As of 31 st December 2014)
1	Dr. Keerthilatha M Pai	MDS	Professor and Head	22
2	Dr. Vineetha R	MDS	Assoc. Prof.	07
3	Dr. Yogesh Chhapparwal	MDS	Reader	05
4	Dr. Shruti Acharya	MDS	Asst. Prof.	03
5	Dr. Nanditha Sujir	MDS	Asst. Prof.	02
6	Dr. Cyril Puliyan Varghese	BDS	Lecturer	02
7	Dr. Suman Anand	BDS	Lecturer	<01

Category	Sanctioned (as per DCI)	Filled
Teaching staff	05	05
Lecturer	-	02

2. Student profile – entry level competencies, socioeconomic status, language proficiency etc.,

Refer Annexure 01. Student Profile for details

3. Changes made in the courses or programmes during the past two years and the contribution of the faculty to those changes

The course is regulated by DCI and the department strictly complies with the syllabus and the guidelines of the DCI and the same is endorsed by the Board of Studies, Manipal University. The examinations conducted reflect the synergy between the clinic-pathologic field and are designed in as Objective a manner

- Change in examination pattern with inclusion of MCQs and short answers
- 5 year BDS course prescribed by DCI – implemented for August 2008 batch of I BDS
- OSCE
- Problem based learning for clinical students with assignments
- Curriculum changed as per amendment to DCI regulations of 2007

4. Trends in the success and drop-out rates of students during the past two years

BDS

Year of examination	Total no. of students appeared	Total no. of students passed	Percentage of pass	Dropout rate
Jan 2012	92	92	100%	0
Jan 2013	83	83	100%	0
Jan 2014	90	88	97.77%	0
Average pass percentage from 2012-2014= 99.25%				

MDS

Month and year	Number of students appeared	Number of students passed	Percentage of pass	Dropout rate
April 2012	02	02	100%	0
April 2013	02	02	100%	0
April 2014	03	03	100%	0
Average pass percentage from 2012-2014 = 100%				

5. Learning resources of the departments-library, computers, laboratories and other resources

Description of resource	Quantity
Text books related to the specialty	89
Dissertations	60
Library dissertations	40
Computers with internet connection	04
Computers without internet connection	02
ADA colour slide collection for teaching	1830

Seminar Room with LCD projector	01
Digital and Conventional dental x ray machines	01 each
Digital and Conventional panoramic x ray machines	01 each
60 mA portable GE X-ray machine	01
Dark room for manual x ray film processing	01
Daylight manual processor	01
Laptop with each MDS faculty member	05
Radiographic viewers	08
Intraoral camera	02
Sialography set	02
Biopsy tools	02

6. Modern teaching methods practiced and use of ICT in teaching-learning

The department extensively uses audio-visual aids like PowerPoint and multi-media for teaching. In addition the facilities of the laboratories are made use of as and when needed.

While the predominant mode of undergraduate teaching is through didactic lectures, students are also required to submit assignments, participate in clinically-oriented procedures and present posters.

Post-graduate training is accomplished through a blend of presentation of seminars, clinical case discussions, journal reviews, clinical society meetings, library dissertation, thesis dissertation and short studies. Presentations (oral and poster-based) are made at National conferences and PG conventions.

- Introduced problem oriented learning- have developed material for same in the department
- Lectures are routinely taken using power point presentations
- Seminars for Undergraduate students

7. Participation of teachers in academic and personal counselling of students

MCODS provides mentoring to all students, with keen focus on the new students. The unique Teacher-Guardian scheme essentially allots one member of the teaching staff to oversee the welfare and progress of a group of 10 students. The attendance and performance in examinations is also monitored and students are counseled.

Records of these activities are maintained by the concerned teacher-guardian; a quarterly report of Student progress is prepared and sent to Director Student affairs, Manipal University by the College Office

- Dr. Vineetha R and Dr. Yogesh Chhparwal are Teacher guardians for First BDS students of 2014 – 2015 students
- Dr. Keerthilatha M Pai - Chairperson of Student Affairs of the College
- Dr. Vineetha R is member of the Image Enhancement Committee and website Committee of the institution

8. Details of faculty development programmes and teachers who have been benefited during the past two years

2012

S. No	Title of Program and details	Attended by
1.	44th Kerala State Dental Conference Jan.6th -8th 2012	Dr. Vineetha R Dr. Smita Rani
2.	CDE program master class in oral pathology, medicine and microbiology at Bangalore 10th Aug 2012	Dr. Sunil Mutalik Dr. Shruti Acharya
3.	CDE program on Publish or perish, Bangalore, 11th Aug 2012	Dr. Sunil Mutalik
4.	International Conference-UICC World Cancer Congress, at Montreal, Canada, Aug 27-30, 2012	Dr. Keerthilatha M Pai
5.	International Conference-FDI Annual World Dental Congress, Hong Kong, China, Aug 29-1st Sept. 2012.	Dr. Sunil Mutalik Dr. Yogesh Chhparwal
6.	CDE Programme on Periodontal Medicine, MCOODS, Manipal, 1st Sept.2012	Dr. Keerthilatha M Pai Dr. Vineetha R Dr. Smita Rani Dr. Shruti Acharya
7.	International Conference Green Health, Mumbai, 6th to 8th Sept 2012	Dr. Vineetha R Dr. Shruti Acharya
8.	CDE Programme on Management of Biofilms in periodontal disease, MCOODS, Manipal, 15th Sept. 2012	Dr. Keerthilatha M Pai Dr. Yogesh Chhparwal Dr. Shruti Acharya
9.	CDE Programme on Bone Grafting, MCOODS, Manipal,	Dr. Keerthilatha M

	29th Sep. 2012	Pai
10.	“Basics 2 diagnosis” Cone Beam Computed Tomography – Principles & Interpretation MCOADS, Mangalore, 2nd Nov. 2012	Dr. Sunil Mutalik Dr. Yogesh Chhapparwal Dr. Smitha Rani
11.	Workshop on “Teacher as Communication” –MCPD, Manipal 15th Nov. 2012	Dr. Vineetha R
12.	UPDACON-2012 held at Lucknow on 17th and 18th November 2012	Dr. Keerthilatha M Pai
13.	CDE Programme on “Composites-Color Sciences & clinical considerations”. MCOADS Manipal 22nd Nov. 2012	Dr. Keerthilatha M Pai
14.	40th Karnataka State IDA conference B.C Road, Bantwal on 30th November -2nd December 2012	Dr. Keerthilatha M Pai Dr. Sunil Mutalik Dr. Vineetha R Dr. Smitha Rani
15.	CDE Programme on Sign-Outs Every Report Counts at MCOADS Manipal on 15th Dec. 2012	Dr. Keerthilatha M Pai Dr. Sunil Mutalik Dr. Yogesh Chhapparwal

2013

S. No	Title of Program and details	Attended by
1.	45th Kerala State Dental Conference Jan.11th -13th 2013	Dr. Vineetha R
2.	UAE International Dental Conference & Arab Dental Exhibition AEEDC Dubai 5th to 7th February 2013	Dr. Shruthi Acharya
3.	Hands on workshop on CBCT: VISUALIZATION of 3rd Dimension at MCOADS, Mangalore on 22nd Feb. 2013.	Dr. Yogesh
4.	35th Asia Pacific Dental Congress 2013, Kuala Lumpur, 8-12 May 2013	Dr. Yogesh Chhapparwal
5.	Workshop on BMJ case reports on 25th June 2013	Dr. Vineetha R

6.	CPD program 'Towards success in Research Need for best Practices' on 6th July 2013, MCOODS Manipal	Dr. Vineetha R, Dr. Yogesh
7.	CDE Programme "Current Concepts in the Management of Aphthous Ulcers "on 27th July 2013, at MCOODS, Mangalore	Dr. Keerthilatha M Pai
8.	International Workshop on Immuno bullous Diseases" on 3rd& 4th August 2013 at department of Dermatology, Manipal	Dr. Keerthilatha M Pai, Dr. Vineetha R,
9.	IAOMR UG convention at Bangalore 31st August 2013	Dr. Keerthilatha M Pai
10.	41st Karnataka State Dental Conference at Madikeri 22nd to 24th Nov. 2013	Dr. Yogesh Chhapparwal, Dr. Vineetha

2014

S. No	Title of Program and details	Attended by
1.	International Conference on Physical Education and Sports Science organized by Manipal University, Manipal and NAPCESS 8 th to 11 th January 2014	Dr. Yogesh Chhapparwal
2.	Workshop on "Effective Electronic Communication" on 4 th Jan. 2014. Manipal Centre for Professional and Personal Development	Dr. Shruthi Acharya
3.	Workshop on Basic Life support on 27 th Jan. 2014 Manipal Simulation Centre Manipal (MU Certified)	Dr. Shruthi Acharya
4.	Workshop on 'Parenteral Drug Administration' on 20 th March 2014 at Manipal Simulation Centre, Manipal	Dr. Vineetha ;Dr. Shruthi Acharya
5.	CPD Program -"Systematic Review and meta-Analysis on 22-23 August 2014 by department of Periodontology, MCOODS, Manipal.	Dr. Vineetha ;Dr. Shruthi Acharya
6.	Workshop on Parental Drug Administration- Hands on course 30 th August 2014 at Manipal Stimulation Centre	Dr. Yogesh Chhapparwal
7.	Colgate- IDA Future Dental Professional Program at Manipal on 27 th September 2014	Dr. Keerthilatha M Pai, Dr. Vineetha, Dr.

		Shruthi Acharya
8.	CDE on “Current concepts and challenges in Maxillofacial Infections” organized by Dept. of Oral and Maxillofacial Surgery, MCOODS, Mangalore on 31 st . Oct. 2014	Dr. Vineetha ;Dr. Shruthi Acharya
9.	36 th Annual Conference of Indian Society of Pedodontics & Preventive Dentistry at Lucknow 14 th -16 th October 2014	Dr. Keerthilatha M Pai
10.	CDE on “ Head and neck Cancer : A multidisciplinary update” on 30 th October 2014 at MCOODS, Mangalore	Dr. Keerthilatha M Pai
11.	26th National Conference of Indian Academy of Oral Medicine & Radiology held at Mangalore on 21st to 23rd Nov. 2014	Dr. Keerthilatha M Pai Dr. Vineetha Dr. Yogesh Dr. Shruthi Acharya
12.	World Aids Day Symposium organized by Dept. of Microbiology, Kasturba Medical College on 29 th Nov. 2014	Dr. Vineetha Dr. Shruthi Acharya
13.	World Cancer Congress from 3 rd to 6 th December 2014 at Melbourne, Australia:	Dr. Keerthilatha M Pai

9. Participation/contribution of teachers to the academic activities including teaching, consultancy and research

Teaching:

- Entire faculty is involved in teaching undergraduate and postgraduate students
- Setting question papers of Manipal university and other universities
- Writing articles for national as well as international journals.
- Contributing chapters in books.
- Presenting scientific papers in national and international annual conferences.
- Guest speakers for national conferences.
- Examiners for undergraduate and post-graduate examinations of other universities.

Consultancy:

- Faculty members are actively involved in patient care
- Diagnosis of oral and orofacial diseases and disorders

- Board of studies: Chairperson and members
- Writing oral health related articles in Newspapers and magazines for the general public

Research:

- Readers/ Assoc. Professors/ Professors are actively involved in guiding research conducted by postgraduate students

10. Collaboration with other departments/institutions, at the State, National and International levels, and their outcome during the past two years

- Collaboration with the Department of Laser Spectroscopy in developing a tool for early diagnosis of oral cancer
- Collaboration with Departments of Microbiology, Radiodiagnosis, Oral and Maxillofacial Surgery, Clinical Biochemistry, Radiodiagnosis in carrying out postgraduate projects

Details of Collaboration

S. No	Project name	Collaboration with
1.	Determination of usefulness of Ultrasonography in diagnosis of superficial facial fractures- prospective cross-sectional study	Dept. of Oral and Maxillofacial Surgery & Radiodiagnosis, MCOODS, Manipal
2.	Evaluation of usefulness of saliva in the diagnosis and monitoring of diabetes mellitus – a cross sectional study	Dept. of Clinical Biochemistry, KMC, Manipal
3.	Visualization of the superior and inferior borders of the mandibular canal: a comparative study using digital panoramic radiography reformatted panoramic radiography and cross sectional cone beam computed tomography-an in vitro study	Department of OMR, MCOODS, Mangalore
4.	Efficacy of Rebamipide gargle in the prevention and treatment of radiation induced oral mucositis	Department of radiotherapy, Kasturba Hospital Manipal
5.	Evaluation of oral hygiene and dental status in patients	Haemophilia Society,

	with hemophilia- Case control study	Kasturba Hospital, Manipal
6.	Effect of duration of mobile phone usage on total antioxidant capacity of saliva and salivary IgA- A cross sectional study	Dept. of Clinical Biochemistry, KMC, Manipal
7.	Evaluation of correlation between lip prints and ethnicity, gender and blood group- a comparative cross sectional study using manual and computerized methods	Department of Computer Science, MIT, Manipal

11. Priority areas for Research and details of the ongoing projects, important and noteworthy publications of the faculty, during past two year

Priority areas of research:

- Early detection of oral cancer
- Chronic orofacial pain and TMD
- Maxillofacial imaging

Ongoing:

Category	Number
Funded research projects	00
Non-funded research projects	06
PhD research projects	00
PG research projects	06
UG research projects	02

Last 3 years (2012-2014):

		2012	2013	2014
Completed funded research projects		-	1	-
Completed non-funded research projects		02	03	03
Completed PhD research projects		-	-	-
Completed PG research projects		02	03	03
Completed UG research projects		-	-	-
Publications	International	10	05	13
	National	03	03	00
Books		-	01	-
Chapters in books		01	01	-

Conference presentations	International	03	02	01
	National	07	05	06

Ongoing PG projects

S. No	Title of Project	Name of researcher	Guide
1	Visualization of the superior and inferior borders of the mandibular canal: a comparative study using digital panoramic radiography reformatted panoramic radiography and cross sectional cone beam computed tomography-an in vitro study	Dr. Sakshi Kamra	Dr. Keerthilatha M Pai
2	Efficacy of Rebamipide gargle in the prevention and treatment of radiation induced oral mucositis	Dr. Chaitanya	Dr. Keerthilatha M Pai
3	Evaluation and comparison of oral symptoms and signs in diabetic and non-diabetic patients with chronic renal failure and undergoing hemodialysis	Dr. Swati Kumar	Dr. Vineetha R
4	Evaluation of correlation between lip prints and ethnicity, gender and blood group- a comparative cross sectional study using manual and computerized methods	Dr. Aditi Chadha	Dr. Vineetha R
5	Evaluation of oral hygiene and dental status in patients with haemophilia- Case control study	Dr. Mathangi	Dr. Keerthilatha M Pai
6	Effect of duration of mobile phone usage on total antioxidant capacity of saliva and salivary IgA- A cross sectional study	Dr. Divyansh Bansal	Dr. Yogesh Chhapparwal

Completed PG research Projects:

2012

S. No	Title	Name of the student	Name of Guide
1.	Precision of linear cephalometric measurement of dry human skull on lateral cephalometric images obtained	Dr. Nidhi Pathak	Dr. Keerthilatha M Pai

	from digital lateral cephalograms and cone – beam computed tomography – a comparative study		
2.	Antifungal agent as an adjuvant in the treatment of oral lichen planus- a RCT	Dr. Nandita Sujir	Dr. Keerthilatha M Pai

2013

S. No	Title	Name of the student	Name of Guide
1.	Accuracy of Linear Measurements on Conventional IOPA Radiographs, Direct Digital and Indirectly Digitized Periapical Radiographs – A Comparative Study	Dr. Hitesh Shoor	Dr. Keerthilatha M Pai
2.	Comparison of Cephalometric Measurements Obtained With Conventional and Indirectly Digitized Methods and Their Reproducibility	Dr. Pramod Majumdar	Dr. Keerthilatha M Pai
3.	Palatal Rugae pattern in different ethnics – a cross sectional study	Dr. Vishal Kabre	Dr. Keerthilatha M Pai

2014

S. No	Title	Name of the student	Name of Guide
1.	Ability of two radiographic methods to identify the closeness between the mandibular third molar root and the inferior alveolar canal: a comparative in vitro study	Dr. Vathsala	Dr. Keerthilatha M Pai
2.	Determination of usefulness of ultrasonography in diagnosis of superficial facial fractures- a prospective cross-sectional study	Dr. Akshaya Rajeev	Dr. Keerthilatha M Pai
3.	Evaluation of usefulness of saliva in the diagnosis and monitoring of diabetes mellitus – a cross sectional study	Dr. Komal Smriti	Dr. Keerthilatha M Pai

Details of Publications:**2012**

1. Anshul Mehra, Keerthilatha M. Pai, Evaluation of Dimensional Accuracy of Panoramic Cross-Sectional Tomography, Its Ability to Identify the Inferior Alveolar Canal, and Its Impact on Estimation of Appropriate Implant Dimensions in the Mandibular Posterior Region Clinical Implant Dentistry and Related Research, Volume 14, Number 1, 2012
2. Reddy Sudhakar reddy, Anuradha Pai, T.N. Uma Maheshwari, Shubha Gurudath and M. Keerthilatha Fibrosis in oral submucous fibrosis - an in vivo study to correlate it with reparative fibrosis due to trauma -Biomedicine: 2012; 32(1): 91 – 95
3. Sunil Mutalik, Anindita Saha, Keerthilatha M. Pai, Evaluation of anatomy of impacted third molars: is 3-dimensional imaging always a necessity? OOOO Vol. 113 No. 2 February 2012
4. Nanditha Sujir, Keerthilatha M. Pai, MRI evaluation of movement of the mandibular condyle and articular disk on application of an occlusal splint, OOOO Vol. 113 No. 6 June 2012
5. Aditya Patney, Amar Sholapurkar, Keerthilatha M Pai, Monica Solomon, Recurrent Exophytic Growth on Maxillary Posterior Edentulous Alveolar Ridge – A Diagnostic Challenge ; Dental Update, May 2012;286-90
6. Hitesh Shoor, Sunil Mutalik, Keerthilatha M. Pai, Should pain be used as predictor of prognosis in oral squamous cell carcinomas? OOOO Vol. 113 No. 3
7. Smitha Rani Thada, Vineetha R, Keerthilatha M Pai :Unusual Clinical Presentation of Generalized Gingival Enlargement – A Report of 3 Cases International Journal of Collaborative Research on Internal Medicine & Public Health Vol. 4 No. 4 April 2012
8. Pramod Krishna Majumdar, Sunil Mutalik, Keerthilatha M. Pai, The therapeutic effects of anticonvulsants in the treatment of orofacial pain OOOO Vol. 113 No. 4 April 2012
9. Chhapparwal Y, Pai K, Vineetha R Chemoprevention of Oral Cancer. J Ind Aca Oral Med Radiol 2012;24(1):39-44
10. Nidhi P. Chauhan, Keerthilatha M. Pai, Sunil Mutalik, R. Balakrishnan, Manna Valiathan, Nanditha Sujir A progressively enlarging swelling of the palate Oral Surg Oral Med Oral Pathol Oral Radiol 2012
11. Gaurav Sharma, Manoj Vengal, Keerthilatha M Pai, Archana Nagpal, Hypoglossia Type 1A: report of a case and review of literature with focus on clinical investigations. Indian Journal of Dental research, 23(2),2012

12. N Sujir, KM Pai and N Pathak Letter to editor: Effectiveness of bone scans in the diagnosis of osteoarthritis of the temporomandibular joint. *Dentomaxillofacial Radiology* (2012) 41,708.
13. Yogesh Chhapparwal Keerthilatha M. Pai, Rohit B. Gadda, Vineetha Ravindranath Invasive cervical resorption: a diagnostic enigma **Hong Kong Dent J* 2012;9:91-4

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1. R. Vineetha, *Pai K. M*, Chhapparwal Y, Thada S.R, Acharya S. Prevalence of abnormal panoramic radiographic findings in edentulous patients- A Pilot study *Manipal Odontoscope* 2013,4: 29-32
2. Honey Arora, Vibha Jain, *Keerthilatha M Pai*, Raman Kambhoj Precision of dimensional measurements of mandible in different positions on OPG:, *Indian Journal of Dental Research*, 24(1) 2013
3. Ajeet kumar, Patil Khoobram S. Choudhari Vayakkara Kolaprath Unnikrishnan Nandita Shenoy Ravikiran Ongole *Keerthilatha M. Pai* Vasudevan Bhaskaran Kartha Santhosh Chidangil Salivary protein markers: a noninvasive protein profile-based method for the early diagnosis of oral premalignancy and malignancy *Journal of Biomedical Optics* 18(10), 101317 (October 2013)
4. V Patil and *K Pai* Orofacial granulomatosis – a diagnostic enigma ; *Oral Diseases* (2013) 19, 217--218 doi:10.1111/odi.12008
5. Monica C Solomon, Ankur Kaur Shergill, *Keerthilatha M Pai*, Chetana Chandrashekar, Vimi S Mutalik, Sunitha Carnelio : Intra-osseous Neurofibroma in the maxilla of a young girl- a report of a rare case *Innovative Journal of Medical and Health Science* 3 : 5 September – October (2013) 235 - 237.
6. Ankur Kaur Shergill , Gurshinder Pal Singh , *Hitesh Shoor*, Monica Charlotte Solomon , Sunitha Carnelio Cellular Pleomorphic Adenoma with Mucoepidermoid Metaplasia – An Unusual Presentation; *Indian Journal of Research* Volume : 2 | Issue : 10 | Oct 2013
7. Smitha Rani Thada, Rohit Gadda, *Keerthilatha Pai* Nerve afflictions of maxillofacial region: a report of two cases *BMJ Case Rep* 2013
8. Sampath Chandra Prasad, Nikhil Dinaker Thada, Pallavi Rao, Smitha Rani Thada, and Kishore Chandra Prasad; Grievous Temporal and Occipital Injury Caused by a Bear Attack Case reports in *Otolaryngology* Volume 2013, Article ID 957251

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1. Smitha Rani Thada, Keerthilatha Pai, Prevalence of habit associated oral mucosal lesions among the outpatients -A prospective cross sectional study *International*

- Journal of Research in Health Sciences. Jan–Mar 2014 Volume-2, Issue-1
2. Aditya Patney, Keerthilatha M. Pai-Occulo-dento-glosso-mandibular syndrome
Journal of Cranio-Maxillary Diseases / Vol 3 / Issue 1 / January 2014
 3. Ravindranath Vineetha, Keerthilatha-M. Pai, Manoj Vengal, Kodyalamoole Gopalakrishna, Dinesh Narayanakurup; Usefulness of salivary alpha amylase as a biomarker of chronic stress and stress related oral mucosal changes – a pilot study; J Clin Exp Dent. 2014;6(2):e132-7.
 4. S Pandey, KM Pai, A Dhakal; Common positioning and technical errors in panoramic radiography ; Journal of Chitwan Medical College 2014; 4(7): 26-29
 5. Hitesh Shoor, Keerthilatha M Pai: Letter to Editor: Single application of topical doxycycline hyclate in the management of recurrent aphthous stomatitis: remarks OOOO April 2014
 6. Smitha Rani Thada, Keerthilatha Pai Papillon-Lefevre Syndrome Causing Social Stigma – A Case Report and Review International Journal of Collaborative Research on Internal Medicine & Public Health Vol. 6 No. 6 (2014)
 7. Smitha Rani Thada, Keerthilatha Pai, Pankaj Agarwal A huge oral pyogenic granuloma with extensive alveolar bone loss and ‘sun-ray’ appearance mimicking a malignant tumour BMJ Case Rep 2014. doi:10.1136/bcr-2013-202367
 8. Nidhi P. Chauhan, Keerthilatha M. Pai, Sunil Mutalik, R. Balakrishnan, Manna Valiathan, Nanditha Sujir, A progressively enlarging swelling of the palate(Oral Surg Oral Med Oral Pathol Oral Radiol Vol 117, No 2 , Feb 2014; 132-137)
 9. Sunil Mutalik, Vimi S. Mutalik, Keerthilatha M, Pai, Venkatesh G. Naikmasur, Khoo Suan Phaik Oral Leukoplakia – Is Biopsy at the Initial Appointment a Must? Journal of Clinical and Diagnostic Research. 2014 Aug, Vol-8(8): ZC04-ZC07
 10. Vathsala Patil, BDS Keerthilatha M. Pai, MDS Letter to editor: Keratocystic odontogenic tumor: a commentary OOOO February 2014, 258
 11. Sakshi Kamra, Keerthilatha M Pai Letter to editor: Lactobacillus salivarius WB21 tablets for the treatment of oral malodor: a commentary OOOO Vol. 118(4), 2014
 12. Hitesh Shoor, Nanditha Sujir, Sunil Mutalik, Keerthilatha M Pai: Hypercementosis: a rare finding in a patient with systemic lupus erythematosus BMJ Case Rep 2014doi:10.1136/bcr-2013- 202370
 13. Vishal Kabre, Keerthilatha M Pai, Komal Smriti, Sakshi Kamra: Primary Intraosseous Carcinoma of Mandible: A Case Report; IJSS Case Reports & Reviews, 2014, 1(5), 15-19.

Details of Books/ chapters in books published by faculty:

2014

S. No	Name of Book/chapter	Title of Book	Name of faculty	Publisher
1	Pedodontic Radiology	Textbook of Pedodontics	Keerthilatha M Pai	Paras Publishers

Details of Conference presentations:

2012

1. Dr. Keerthilatha M Pai: E-poster presentation on the “Effect of Tetrahydrocurcuminoids in the treatment of oral Leukoplakia”. Also chaired a Scientific Session at UICC World Cancer Congress, at Montreal, Canada, Aug 27-30, 2012.
2. Dr. Keerthilatha M Pai: Guest lecture on Periodontitis-sixth complication of Diabetes mellitus at UPDACON-2012 held at Lucknow on 17th and 18th November 2012
3. Dr. Keerthilatha M Pai: Dr. S Ramachandra Memorial Oration on Potentially malignant oral disorders at 40th Karnataka State IDA conference B.C Road, Bantwal on 30th November -2nd December 2012
4. Dr. Sunil Mutalik: Paper – Pathological findings in oral Leukoplakia cases following biopsy at initial appointment at International Conference-FDI Annual World Dental Congress, Hong Kong, China ,Aug 29-1st Sept. 2012
5. Dr. Sunil Mutalik Poster- Palatal Masses-a diagnostic dilemma at International Conference-FDI Annual World Dental Congress, Hong Kong, China ,Aug 29-1st Sept. 2012
6. Dr. Vineetha Paper titled ‘Diseases in disguise- A diagnostic dilemma for dental practitioners’ in the 44th Kerala State Dental Conference held at Trivandrum on 6th 7th and 8th January 2012
7. Dr. Vineetha R presented Poster-Gutka-silent killer in small packets International Conference Green Health, Mumbai, 6th 8th Sept 2012
8. Dr. Vineetha R Paper Presentation-Gingival Tuberculosis -A Diagnostic Tight spot at the 40th Karnataka State IDA conference B.C Road, Bantwal on 30th November -2nd December 2012
9. Dr. Yogesh Chhapparwal: Paper presentation: A study to assess the efficacy and safety of Tetrahydrocurcuminoids in the treatment of oral Leukoplakia: open prospective clinical trial at International Conference-FDI Annual World Dental Congress, Hong Kong, China, Aug 29-1st Sept. 2012

10. Dr. Shruthi Acharya presented Poster Implementing the ALARA principle in academic dentistry-an Indian perspective at International Conference Green Health, Mumbai, 6th 8th Sept 2012.

2013

1. Dr. Keerthilatha M Pai Guest lecture on “Etiology and Diagnosis of Recurrent Aphthous Ulcers “at CDE Programme on 27th July 2013, at MCOODS, Mangalore
2. Dr. Keerthilatha M Pai Guest lecture on “Management of Recurrent Aphthous Ulcers “at CDE Programme on 27th July 2013, at MCOODS, Mangalore
3. Dr. Keerthilatha M Pai Guest lecture on “Approach to diagnosis of oral mucosal lesions” at IAOMR UG convention at Bangalore 31st August 2013
4. Dr. Shruthi Acharya presented a poster on Prevalence of Osteoradionecrosis in a cohort of patients treated with radiotherapy for head and neck cancer at Kasturba Medical College, Manipal at UAE International Dental Conference & Arab Dental Exhibition AEEDC Dubai 5th to 7th February 2013
5. Dr. Yogesh Chhapparwal presented a paper on Invasive Cervical Resorption – A Diagnostic Enigma at 35th Asia Pacific Dental Congress 2013, Kuala Lumpur, 8-12 May 2013
6. Dr. Yogesh Presented a Scientific paper titled ‘3D Revolution in Oral and Craniofacial Imaging’ 41st Karnataka State Dental Conference at Madikeri 22nd to 24th Nov. 2013
7. Dr. Vineetha presented a scientific paper titled “ Clinicopathologic pattern and outcome of oral cancer in young patients- a pilot study at 41st Karnataka State Dental Conference at Madikeri 22nd to 24th Nov. 2013

2014

1. Dr. Keerthilatha M Pai Lecture on “ Understanding the science behind mouthwashes and their multifaceted usage in Dental clinics” at Colgate- IDA Future Dental Professional Program at Manipal on 27th September 2014
2. Dr. Keerthilatha M Pai Guest Lecture- “ Approach to Diagnosis of oral mucosal lesions in children” at 36th Annual Conference of Indian Society of Pedodontics and Preventive Dentistry at Lucknow 14th to 16th October 2014
3. Dr. Keerthilatha M Pai Guest Lecture on “Potentially malignant oral disorders” and Panel discussion at CDE on “ Head and neck Cancer : A multidisciplinary update” on 30th October 2014 at MCOODS, Mangalore

4. Dr. Keerthilatha M Pai E poster on” Laser spectroscopy tool in the early diagnosis of tongue malignancy” at World Cancer Congress from 3rd to 6th December 2014 at Melbourne, Australia:
5. Dr. Yogesh Paper Presented- “Cleidocranial Dysplasia : A case report at 26th National Conference of Indian Academy of Oral Medicine & Radiology held at Mangalore on 21st to 23rd Nov. 2014
6. Dr. Vineetha Paper presented - “Intra lesional corticosteroid” at 26th National Conference of Indian Academy of Oral Medicine & Radiology held at Mangalore on 21st to 23rd Nov. 2014
7. Dr. Shruti Acharya Paper presented – “Leiomyosarcoma of the left posterior maxillary gingiva- deception unraveled” at 26th National Conference of Indian Academy of Oral Medicine & Radiology held at Mangalore on 21st to 23rd Nov. 2014

12. Placement record of the past students and the contribution of the department to aid student placements

S. No	Year of completion of postgraduate course	Name of the Postgraduate	Institution where employed
1.	April 2012	Dr. Aditi Lele Dr. Anindita Saha	Private Practice at Mumbai Dental College, Calcutta
2.	April 2013	Dr. Nandita Sujir Dr. Nidhi Pathak	MCOODS, Manipal Dental College, Gwalior
3.	April 2014	Dr. Vishal Kabre Dr. Hitesh Shoor Dr. Pramod Majumdar	Vasanta Cancer Memorial Trust hospital, Mumbai Guru Nanak Mission Hospital, Hoshiarpur, Punjab Sai Dental Clinic, Hyderabad

13. Plan of action of the department for the next five years

- Organize a conference/ PG convention in the specialty
- Establish a clinic for TMJ and chronic facial Pain and potentially malignant oral disorders
- Improve the Imaging section of the department by having more advanced equipments such as CBCT/ Ultrasound machine

1. Faculty profile - adequacy and competency of faculty:

The teaching faculty meets the stipulated requirements of the statutory body (i.e. Dental Council of India) with respect to undergraduate and postgraduate training. The entire faculty therefore have competency as laid down by DCI. The faculty maintains and upholds the standards and competency by keeping abreast of latest developments in the field and regularly attends workshops and conferences to meet higher standards.

S. No.	Name	Qualification	Designation	Experience in years (As of 31 st December 2014)
1	Dr. Shashi Rashmi Acharya	MDS	Professor	17
2	Dr. Vidya Saraswathi	MDS & Certificate course in Oral Implantology	Professor and Head	15
3	Dr. Vasudev Ballal	MDS, PhD	Addl. Prof.	10
4	Dr. Sandya kini K	MDS	Assoc. Prof.	08
5	Dr. Pradeep	MDS	Assoc. Prof.	08
6	Dr. Tina P.P	MDS	Assoc. Prof.	07
7	Dr. Krishnaraj Somayaji S.	MDS	Reader	04
8	Dr. Swathi Pai	MDS	Asst. Prof.	01
9	Dr. Abhishek	BDS	Lecturer	01
10	Dr. Swathi	BDS	Lecturer	01
11	Dr. Akriti	BDS	Lecturer	<01
12	Dr. Surabhi	BDS	Lecturer	02

Category	Sanctioned (as per DCI)	Filled
Teaching staff	08	08
Lecturer	-	04

2. Student profile – entry level competencies, socioeconomic status, language proficiency etc.

Refer Annexure 01. Student Profile for details

3. Changes made in the courses or programs during the past three years and the contribution of the faculty to those changes

The course is regulated by DCI and the department strictly complies with the syllabus and the guidelines of the DCI and the same is endorsed by the Board of Studies, Manipal University. The examinations conducted reflect the synergy between the clinic-pathologic field and are designed in as Objective a manner.

Undergraduates

- OSPE introduced for the II years
- Multiple choice questions are taken from specified text books for final year students
- Cancellation of negative marking for multiple choice questions for undergraduates
- New practical exercises have been introduced for II BDS and IV BDS and the entire faculty has been involved in the design and execution of these practicals
- Changes include planning and execution of revised practical record book for II BDS students

Postgraduates

- Practical examination pattern as per DCI for postgraduates was implemented from 2012 onwards.
- Increase in the number of seminars
- Journal club presentations divided into research articles, case report and reviews.
- Daily log book has been implemented for assessment of clinical work
- A new dental laboratory is made and lab work conducted as per DCI requirements
- Faculty have been assigned for guidance and daily evaluation of clinical work

4. Trends in the success and drop-out rates of students during the past three years:

Course	Pass Percentage (%)			Dropout Rate		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
III BDS	100	100	98	0	0	0

IV BDS	94	98	97	0	0	0
PG Diploma in Dental Materials	-	100	100	-	-	0
MDS	100	100	100	0	0	0
Certificate course in Aesthetic Dentistry	100	100	100	0	0	0

5. Learning resources of the departments - library, computers, laboratories and other resources:

Description of resource	Numbers
Text books	63
Journals	24
Dissertations	40
Library Dissertations	20
Computer with internet connection	02
Microscope	01
Apex locators	05
RVG and radiographic unit	02
Thermo plasticized gutta-percha unit	04
Automatic radiographic processor	01
Pressurized anesthesia	03
Library room	01
PG seminar room	01
Well-equipped PG laboratory	01
LCD	01
X-Smart and Anthogyr rotary hand piece	4+2
Endosonic hand pieces	09
Pressurized local anesthesia	06
Pickling kits	04
Surgical endo kits	04
Low speed high torque motors	30
Hufreidy hand instruments	36
Conventional VLC unit	22
Overhead projector	01
High speed hand pieces	40

Induction casting machine	01
Equipments for ceramics	01
Plaster dispenser	02

6. Modern teaching methods practiced and use of ICT in teaching – learning:

II B.D.S

- Different types of modified cavity preparation designs introduced
- Use of Airotor on extracted teeth
- Use of high speed hand piece during caries excavation for tooth preparation deep caries management
- Introduction of practical exam exercises during regular postings for II BDS

III BDS

- Model work using airotor handpiece introduced from 2011 onwards
- Deep caries management introduced for model work
- Newer topics have been included for discussion
- Demonstration of class V cavity and glass ionomer restoration on patient
- Demonstration of deep caries management on patient
- Demonstration of class I cavity preparation, base placement ,and restoration using silver amalgam on patient
- Demonstration of class IV cavity and restoration using composite on patient

IV BDS

- Preparation &restoration of teeth with different types of direct restorative materials.
- Discussions and viva voce conducted
- Demonstration of modern equipments in the department
- Demonstration of root canal treatment on extracted tooth
- A total of 3 practical exam has been included for internal assessment
- Practical exam which includes root canal treatment on extracted tooth
- OSCE has been included in the clinical internal assessment
- Three oral examinations has been included for internal assessment

MDS

- Case discussions conducted once a week
- Attend and participate in various conferences, workshops, seminars and CDE programs

- 3 didactic lectures to undergraduate students has to be taken up by each PG
- Increase in the seminars and journal club presentations
- Modification of preclinical exercises
- Post graduates are guided to publish articles in reputed journals
- Final year postgraduates are guided to present innovative cases for clinical club
- Theory exams conducted at the end of first year as per dental council of India requirements
- Two practical mock exams are conducted before university exams
- Process for regular theory exams on selected topics for postgraduate students has been initiated

7. Participation of teachers in academic and personal counseling of students

- All the MDS faculty are involved in counseling for academic performance
- Teacher guardian involvement
- Members of Board of studies
- Panel of internal and external examiners
- As members in various college committee
- Periodic monitoring of attendance and assessment of assigned work
- Academic counseling at the end of each sessional exam for under graduate students
- Chairperson and judge for various events conducted for undergraduates
- Guide students for short projects, Paper and poster presentations
- To help students file patents
- To guide students pursuing Doctor in philosophy
- To monitor and judge Academic and cultural events.

8. Details of faculty development programs and teachers who have been benefited during the past three years

2012

S. No	Title of the programme and Details	Attended by
1	Continuing Dental Education on “Full mouth Rehabilitation” on 2 nd February 2012 at MCOADS, Mangalore	Dr. Vasudev Ballal, Dr. Amber
2	Continuing Professional Development Programme on “Predictable Esthetic Restorations” on 1 st March 2012 at	Dr. Vasudev Ballal, Dr. Sandya, Dr. Tina,

	MCOADS, Mangalore	Dr. Amber, Dr. Sandya, Dr. Krishna, Dr. Sunil, Dr. Shashi Rashmi, Dr. Vidya Saraswathi
3	Continuing Dental Education on “Management of Biofilm in periodontal disease” on 15 th September at MCOADS Manipal 2012	Dr. Vasudev Ballal, Dr. Pradeep, Dr. Amber, Dr. Vidya Saraswathi
4	Symposium on “Nanoscience & Technology” on 9 th March 2012 at Centre for atomic and molecular physics, Manipal	Dr. Vasudev Ballal
5	Workshop on “Possibility of Research and Innovation Cooperation with Europe” on 25 th September, 2012 at Manipal University	Dr. Vasudev Ballal
6	Workshop on “Opportunities and approach for research grants, publishing papers, IPR & Patents, Research and Ethics” on 5 th November 2012 at MCOPS, Manipal	Dr. Vasudev Ballal
7	Workshop on “Colgate and IDA for Future Dental Professionals” on 17 th November 2012 at Manipal University	Dr. Vasudev Ballal, Dr., Dr. Sandya, Dr. Tina, Dr. Amber, Dr. Sunil, Dr. Krishnaraj, Dr. Pradeep
8	Continuing Dental Education on “Composites- Color Sciences & Clinical Considerations” on 22 nd November 2012 at MCOADS, Manipal	Dr. Vasudev Ballal, Dr. Tina, Dr. Sunil, Dr. Amber, Dr. Krishna, Dr. Sandya, Dr. Pradeep
9	Workshop on “Excellence in writing research proposals, funding, research methodology and scientific writing” on 18 th December 2012 at MCOPS Manipal.	Ballal
10	CDE on Bone grafting by dept. of Periodontics on 29 th September at MCOADS Manipal 2012	Dr. Shashi Rashmi, Dr. Sunil
11	Oral systemic link 2012	Dr. Shashi Rashmi
12	Restorative Conclave: Yenepoya dental college and hospital on 27 th Sept 2012	Dr. Pradeep K
13	Update on periodontal medicine, September 1 st MCOADS, Manipal 2012.	Dr. Amber, Dr. Sunil

2013

S. No	Title of the programme and Details	Attended by
1	Hands on workshop on CBCT: Visualization of third dimension, 22 nd February 2013, MCOADS Mangalore	Dr. Shashi Rashmi
2	“Recent Advances in Photonics” 23 rd February 2013 Manipal Centre for atomic and molecular physics	Dr. Vasudev
3	Workshop on pedagogic and personal effectiveness, 21 st -26 th February 2013, MCPD Manipal.	Dr. Swathi Pai
4	Lecture in CDE at Endocon-2013, 9 th March 2013. Nadagouda dental college, Bagalkot.	Dr. Shashi Rashmi
5	Yendocon 21 st March 2013, Yenepoya dental college and hospital, Mangalore	Dr. Vasudev, Dr. Pradeep
6	Lecture in CDE at Yendocon 21 st March 2013, Yenepoya dental college and hospital, Mangalore	Dr. Shashi Rashmi
7	Workshop on how to write and publish a scientific article, 17 th and 18 th May 2013, KMC Manipal	Dr. Pradeep
8	Restorative Conclave: 3 rd July 2013, Yenepoya dental college and hospital, Mangalore	Dr. Pradeep
9	Towards success in research- needful best practices, 6 th July 2013, MCOADS, Manipal.	Dr. Pradeep
10	Workshop on curriculum design, 9 th July 2013, MCPD Manipal	Dr. Pradeep
11	Workshop on writing, editing and publishing research papers and checking for plagiarism with turnitin software, 21 st August, 2013, Manipal	Dr. Vasudev
12	Emerging trends in dental education, 17 th September 2013, TMA Pai conference hall, Manipal	Dr. Tina, Dr. Sandya, Dr. Pradeep, Dr. Shashi Rashmi
13	All ceramic veneers, 20 th September 2013, MCOADS, Mangalore	Dr. Tina, Dr. Swathi Pai
14	Spectrum-13, 24 th October 2013 MCOADS, Manipal	Dr. Sandya, Dr. Tina, Dr. Krishna, Dr. Pradeep, Dr. Swathi Pai, Dr. Shashi Rashmi

15	Excellence in dental research, 16 th November 2013, MCOODS, Manipal	Dr. Swathi Pai
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2014

S. No	Title of the programme and Details	Attended by
1	Mini workshop on teaching effectiveness, 25 th Jan 2014	Dr. Sandya
2	IGNITE -2014, 6th March 2014, Manipal.	Dr. Tina
3	Mini workshop for post graduate dissertation guides, 14 th June, 2014, KMC Manipal	Dr. Tina, Dr. Shashi Rashmi
4	Intraoral photography, 17 th June 2014, MCOODS, Mangalore	Dr. Tina
5	Mini workshop for post graduate dissertation guides, 27 th June, 2014, KMC Manipal	Dr. Sandya, Dr. Shashi Rashmi
6	Spectrum-14, 24 th October 2014 MCOODS, Manipal	Dr. Shashi Rashmi, Dr. Sandya, Dr. Tina, Dr. Krishna, Dr. Pradeep

9. Participation/contribution of teachers to the academic activities including teaching, consultancy and research

Teaching

- The entire faculty is actively involved in teaching UG and PG students.
- Students are guided to take up short studies and publish work done in reputed journals
- Students are guided to present papers and posters at the national and international level
- Students are guided to participate in MUTBI

Consultancy

- All faculty members are involved in performing treatment for clinical cases

Research by faculty:**2012**

S. No.	Title	Faculty Involved
1	An in vitro evaluation of the antibacterial effect of calcium hydroxide and chlorhexidine on Enterococcus faecalis	Dr. Tina P P

2013

S. No.	Title	Faculty Involved
1	Factors affecting the right and left discrimination ability among dental students	Dr. Sandya kini
2	Mineral drug against Enterococcus faecalis biofilm-An in vitro SEM study	Dr. Swathi Pai

2014

S. No.	Title	Faculty Involved
1	Comparative evaluation of the compressive strength of blood contaminated biodentine-An in vitro study	Dr. Sandya kini
2	Antimicrobial efficacy of chlorine dioxide against candida albicans in stationary and starvation phases in human root canals-An in vitro study	Dr. Krishna
3	Comparison of Antimicrobial efficacy of triphala, with aniasomnifera and sodium hypochlorite against enterococcus faecalis biofilm	Dr. Krishna
4	Evaluation of bond strength of splinting materials to the teeth using three adhesive systems-An in vitro study	Dr. Tina

10. Collaboration with other departments/ institutions, at the State, National and international levels and their outcome during the past three years

1. Effect of maleic acid and ethylenediaminetetraacetic acid on the shear bond strength of RealSeal SE sealer to root canal dentin- with Prof. Baumgartner, Oregon Health and Science University, Portland, Oregon, USA 2012.
2. Wettability of root canal sealers on intra-radicular dentin treated with different irrigating solutions- with Prof. Franklin Tay, Georgia Health Sciences University, Augusta, GA, USA & Dentsply, Tulsa, OK. USA 2012.
3. Effects of different irrigating solutions on the microstructure and physical properties of mineral trioxide aggregate- with Prof. Franklin Tay, Georgia Health Sciences University, Augusta, GA, USA & Dentsply, Tulsa, OK. USA-ongoing
4. Effect of newer irrigating agents on the physical properties of root canal dentin- with Prof. Fedrico Foschi, Kings College, London Dental Institute, Guy's Hospital,

London, UK- ongoing

5. Evaluation of the antimicrobial property of a novel antiplaque agent on *Enterococcus faecalis*- with Dr. Anil Kishen, The University of Toronto, Faculty of Dentistry-ongoing

11. Priority areas for Research and details of the ongoing projects, important and noteworthy publications of the faculty, during past three years:

Priority areas of research

- Microbiology in Endodontics
- Adhesion
- Root canal irrigants
- Lasers in operative dentistry and endodontics

Ongoing:

Category	Number
Funded research projects	-
Non-funded research projects	02
PhD research projects	-
PG research projects	12
UG research projects	-

Last 3 years (2012-2014)

		2012	2013	2014
Completed funded research projects		04	04	04
Completed non-funded research projects		02	02	04
Completed PhD research projects		-	-	-
Completed PG research projects		04	04	04
Completed UG research projects		-	-	-
Publications	International	14	09	05
	National	11	06	03
Books		-	-	-
Chapters in books		01	-	-
Conference presentations	International	02	03	01
	National	06	11	08

Ongoing PG projects:**2013**

S. No	Title	Name of the student	Guide
1.	Comparative evaluation of the effect of different root canal irrigants activated by Endoactivator on the bacterial load in single rooted teeth with a radiographic periapical radiolucency- An in vivo study	Dr. Reaba	Dr. Shashi Rashmi Acharya
2.	Efficacy of smear layer removal at the apical third of root canal using different irrigation techniques- An in vitro SEM analysis	Dr. Vidya Narayana moorthy	Dr. Vidya Saraswathi
3.	Evaluation and comparison of the shear bond strength of three resin based core build up materials bonded to Er-YAG irradiated dentin- An in vitro study	Dr. Lisha	Dr. Shashi Rashmi Acharya
4.	Evaluation of the depth of cure of bulk fill composite materials using different light curing methods- An in vitro study.	Dr. Archit kedia	Dr. Vidya Saraswathi
5.	A comparative evaluation of shear bond strength between zirconomer, bonded amalgam & composite and fluoride release between zirconomer and fluoride releasing composite – An in vitro study	Dr. Isha Jain	Dr. Vasudev Ballal
6.	Comparison of Guttaflow with thermoplasticized guttapercha in filling internal resorptive cavities using CT scan : An in vitro study	Dr. Himanshu	Dr. Vasudev Ballal

2014

S. No	Title	Name of the student	Guide
1	Comparative evaluation of calcium and hydroxyl ion release through coronal dentin after pulp	Dr. Aakriti Saini	Dr. Vidya Saraswathi

	capping using different pulp capping agents- an vitro study		
2	Comparison of the efficacy of maleic acid & ethylenediaminetetraacetic acid in the removal of smear layer from curved root canals: A SEM study	Dr. Sheetal Rao	Dr. Vasudev Ballal
3	Evaluation of push out bond strength of gutta flow 2 to root canal dentin treated with different smear layer removal agents-An in vitro study	Dr. U. Shree Teja	Dr. Tina
4	Comparative evaluation of micro leakage of blood contaminated mineral trioxide aggregate & Endosequence root repair material fast set putty by sucrose filtration method- an vitro study	Dr. Payaswi Mohata	Dr. Sandya Kini
5	Comparative evaluation of 2 different concentrations of bleaching agents on the surface hardness of 2 commercially available nano composites- an vitro study	Dr. Butala Roshni Veena	Dr. Pradeep
6	Effect of different concentrations of Hydrogen peroxide and remineralizing agent on surface characteristics of enamel: an in vitro AFM analysis	Dr. Ananya Maity	Dr. Shashi Rashmi Acharya

Completed PG projects:

2012

S. No.	Title	Name of the student	Guide
1.	Smear layer removal Efficacy of maleic acid Using three different irrigation techniques– continuous rinse, Manual dynamic Activation and passive Ultrasonic irrigation	Dr. Sanket Sheth	Dr. Shashi Rashmi Acharya
2.	Comparative effect of laser etching and silica coating as a surface conditioning methods on the shear bond strengths of composite repair- an in vitro study	Dr. Chakravarthy	Acharya
3.	Ultramorphological changes of the root canal	Dr. Indhya	Dr. Vidya

	dentin by a 940nm diode laser along with 2.5% NaOCl and 17%EDTA irrigation –an SEM study		Saraswathi
4.	Effect of EDTA & maleic acid on the shear bond strength of Real Seal self-etch sealer to root canal dentin: an in vitro study	Dr. Adlyn	Dr. Vasudev

2013

S. No	Title	Name of the student	Guide
1.	Effect of Er Cr: YSGG irradiation of root canal dentin on shear bond strength of AH Plus sealer: an in vitro study	Dr. Sonal	Dr. Vidya Saraswathi
2.	Comparative evaluation of microleakage in Class V composite restorations following the application of smear layer modifier – 4% titanium tetrafluoride with three different adhesive bonding systems: an in vitro study.	Dr. Mrunal	Dr. Shashi Rashmi Acharya
3.	Comparative evaluation of accuracy of two electronic apex locator and radiograph: an in vivo study	Dr. Deepika	Dr. Vasudev Ballal
4.	Evaluation of microleakage of root end cavity prepared with ultrasonic retrotip and Er Cr: YSGG laser: an in vitro study.	Dr. Jatinder	Dr. Vidya Saraswathi

2014

S. No	Title	Name of the student	Guide
1.	Evaluation of the biocompatibility of a novel tricalcium-silicate cement on an explant culture of periodontal ligament fibroblasts-An in vitro study	Dr. Shrey	Dr. Vidya Saraswathi
2.	Comparative evaluation of the shear bond strength of the resin modified calcium silicate liner to resin composite using different protocols	Dr. Vrushalee	Dr. Vidya Saraswathi
3.	Comparative evaluation of maleic acid and ethylenediaminetetraacetic acid on sealing ability	Dr. Shubha	Dr. Vasudev Ballal

	of tricalcium silicate cement and mineral trioxide aggregate- An in vitro study		
4.	Effect of various post surface treatment techniques of glass fiber posts on the push out bond strength cemented by self-adhesive resin cement	Dr. Phalguni	Dr. Shashi Rashmi Acharya

Details of Publications:

2012

1. Vasudev Ballal. Sealing ability of Root canal Sealers. Saudi Endodontic Journal 2012;2(1):50-51.
2. Muliya Vidya Saraswathi, George Jacob, Nidambur Vasudev Ballal. Evaluation of Influence of Flowable Liner and Two Different Adhesive Systems on the Microleakage of Packable Composite Resin, Journal of Interdisciplinary Dentistry, Vol. 2(2), 2012, pp 98-103
3. Vasudev Ballal. Aspire to prevention. British Dental Journal 2012;213(3):97.
4. Ankit Arora, Shashi Rashmi, Vidya Saraswathi, Padmaja Sharma. Multiple Idiopathic Cervical Resorption - A diagnostic Dilemma. Quintessence International 2012; 43:187-140
5. Ankit Arora, Shashi Rashmi, Vidya Saraswathi, Padmaja Sharma. A comparative evaluation of dentinal hypersensitivity and microleakage associated with composite restorations in cavities preconditioned with air abrasion – An ex vivo study. Contemporary Clinical Dentistry 2012; 3(4):306-313
6. Padmaja, Ankit Arora, Ashima Valiathan, Arun Urala, Shashi Rashmi. Gradual grinding of a Talon Cusp during Orthodontic treatment. J of Clinical Orthodontics 2012;12:111-114
7. Neeraj Malhotra, Shashi Rashmi. Conservative approach for esthetic repair of fractured ceramic facing in ceramic fused to metal crowns: A case series. Compendium 2012;33(12)
8. Krishna Somayaji, Shashi Rashmi, Mohandas, Venkatramana. Anatomy and clinical applications of the mandibular nerve. Bratisl Lek Listy 2012(113)7;431-440
9. K. Pradeep, K.M. Charlie, M. A. Kuttappa, Prasana Kumar Rao. Conservative Management of Type III Dens in Dente Using Cone Beam Computed Tomography. Journal of Clinical Imaging Science 2012;2 (3):1-5

10. Tina P.P, Ravi verma, Beena Antony. In vitro evaluation of the antibacterial effect of Calcium hydroxide and Chlorhexidine on Enterococcus faecalis. Guident national-2012;5(4);55-59.
11. Krishnaraj Somayaji S, Mohandas Rao KG. Relevance of Maxillofacial Anatomy in Endodontics: A Review. Acta Stomatologica Naissi, 2012;28:1128-1143
12. Krishnaraj Somayaji S, Mohandas Rao KG-Anatomy and clinical applications of the maxillary nerve in Dentistry: A Literature Review. Dental Update-2012;39:727-735
13. Ather A, Ather H, Sheth SM, Muliya VS. Unique case of a geminated supernumerary tooth with trifid crown. Imaging Sci Dent. 2012; 42(3):197-200.
14. Muliya Vidya Saraswathi, Nidambur Vasudev Ballal, Indhya Padinjara, G. Subrya Bhat. Ultra-morphological changes of root canal dentin induced by 940 nm diode laser- an in-vitro study. Saudi Endodontic Journal 2012;2(3):131-135.
15. NV Ballal, SR Kumar, HK Laxmikanth, MV Saraswathi. Comparative Evaluation of Different Chelators in Removal of Calcium Hydroxide Preparations from Root Canals, Australian Dental Journal, Vol. 57, 2012, pp 344-348
16. Muralidhar Tummala, Veeramachaneni Chandrasekhar, A Shashi Rashmi, M Kundabala, Vasudev Ballal. Assessment of the wetting behavior of three different root canal sealers on root canal dentin. Journal of Conservative Dentistry 2012;15(2):109-112.
17. Ankit Arora, Shashi Rashmi Acharya, Vasudev Ballal, Padmaja Sharma. A self-designed instrument to evaluate cavosurface angle for class I amalgam cavity preparation: A learning aid. Journal of Conservative Dentistry 2012;15(3):253-256.
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Details of Conference presentations, guest lectures and invited talks

2012

1. Dr. Shashi Rashmi chaired a scientific session at 5th National ISPRP Conference, Mangalore, 24-25th August, 2012.
2. Dr. Vidya Saraswathi chaired a scientific session as panel expert at 5th National ISPRP Conference, Mangalore, 24-25th August 2012.
3. Dr. Vasudev Ballal presented a poster on Esthetic rehabilitation of a disfigured tooth at 5th National ISPRP Conference, Mangalore, 24-25th August 2012.
4. Dr. Vasudev Ballal delivered a guest lecturer on Innovative Materials & Techniques in Endodontics at Dentistry in the light of Innovation at Ribeirão Preto, Brazil, 29th-31st August 2012.
5. Dr. Sandya Kini presented a poster on Gingival Veneers at 5th National ISPRP Conference, Mangalore, 24-25th 2012.
6. Dr. Pradeep K chaired a Scientific session as panel expert at 5th National ISPRP Conference, Mangalore, 24-25th August2012.
7. Dr. Tina presented a poster on Caress and cajole but never violate at 5th National ISPRP Conference, Mangalore, 24-25th August 2012.
8. Dr. Amber Ather presented a poster on Open to close, Seal and Heal at 27th IACDE & 20th IES National Conference, Dubai, 6th-9th December 2012.

2013

1. Dr. Pradeep presented a paper on management of adolescent caries: Multidisciplinary approach at the 66th Indian Dental Conference, Kolkata on 22nd-25th February 2013
2. Dr. Sandya presented a paper on management of endo- perio lesion : multidisciplinary approach at the 66th Indian Dental Conference, Kolkata on 22nd-25th February 2013
3. Dr. Tina presented a paper on single step towards success at the 66th Indian Dental Conference, Kolkata on 22nd-25th February 2013
4. Dr. Swathi Pai has presented a paper on comparative evaluation of calcium hydroxide and triple antibiotic paste as intracanal medicaments on incidence of mid-treatment flare ups in endodontics at international conference on trends, challenges and opportunities in multidisciplinary health care on 14th and 15th March 2013 at Kuala Lumpur, Malaysia.
5. Dr. Pradeep presented a poster on chairside disinfection of guttapercha cones, an in vitro comparative study at the 14th IACDE/IES PG convention on 7th-9th June 2013 at Dharwad
6. Dr. Shashi Rashmi attended and chaired a keynote lecture at 14th IACDE/IES PG convention on 7th-9th June 2013 at Dharwad.
7. Dr. Shashi Rashmi attended and was a panelist at ICD Midyear Convention on 3rd August 2013.
8. Dr. Krishnaraj attended and presented a paper on comparative evaluation of with aniasomnifera ,triphala and sodium hypochlorite against e-faecalis biofilms in human root canals-in vitro study at the 2nd scientific meeting of international association of dental research south east Asian division from 21st to 23rd August held at Bangkok
9. Dr. Shashi Rashmi attended and chaired a keynote lecture at 28th IACDE and 21st IES national conference, Hyderabad on 14-17th November 2013
10. Dr. Shashi Rashmi delivered a keynote lecture at 6th ISPRP National conference from 4-6th October, 2013 at Bengaluru.
11. Dr. Tina presented a paper on Glitchecs inside outside at the 28th IACDE and 21st IES national conference, Hyderabad on 14-17th November 2013
12. Dr. Sandya presented a poster titled “Biodentine” at the Indian dental conference medikeri on 22nd-24th November 2013.
13. Dr. Vidya Saraswathi presented a poster titled “Evaluation of surface deposits on resilon cones after disinfection with 2.5% Sodium Hypochlorite&13% Chlorine di oxide a SEM-EDX Study” at Japan on 23rd-26th May 2013.

14. Dr. Vidya Saraswathi presented a guest lecture on “Take care to provide care” at the Indian dental conference medkeri on 22nd-24th November 2013.

2014

1. Dr. Krishnaraj presented a poster titled “Management of Open apex”-A case report at the 7th annual meeting of the Indian society of Prosthodontics, Restorative and Periodontics Conference at Bhopal on 22nd -24th August 2014.
2. Dr. Sandya presented a poster on “Biodentine” at the Holistic esthetics dental conference held in Bangalore on 1st October 2014.
3. Dr. Shashi Rashmi chaired a lecture session at 11th Roots Summit 2014 on 7-9th November at Mahabalipuram, Chennai.
4. Dr. Vidya Saraswathi chaired a lecture session at 11th Roots Summit 2014 on 7-9th November at Mahabalipuram, Chennai
5. Dr. Shashi Rashmi delivered a lecture on cervical restorations at 2nd Interstate and 42nd Karnataka state dental conference 28th-30th November 2014.
6. Dr. Pradeep presented a poster on platelet- rich fibrin with synthetic hydroxyapatite Granules: a novel approach for management of radicular cyst at 2nd Interstate and 42nd Karnataka state dental conference 28th-30th November 2014.
7. Dr. had presented a poster on treatment strategies for management of acute pulpoperiradicularpathosis-case series on 4-6th February 2014 at AEEDC, Dubai, UAE
8. Dr. has presented a poster on esthetic rehabilitation- a case report at 2nd Interstate and 42nd Karnataka state dental conference 28th-30th November 2014
9. Dr. Tina has presented a poster on Analysis of in vitro bond strength of splinting materials to the teeth using different adhesive systems at the annual world dental conference FDI, New Delhi on 11-14th September 2014.

12. Placement record of the past students and the contribution of the department to aid student placements

S. No	Year of passing postgraduate course	Name of the Postgraduate	Institution where employed
1	2012	Dr. Ankit Arora	Lecturer, K M shah dental college, Baroda
2	2012	Dr. Sanjana	Lecturer at dental college at Kerala

3	2012	Dr. Rahul	Consultant at Delhi
4	2012	Dr. Sivakumar	Teaching faculty in Vivekananda dental school for girls at Tiruchengode, Chennai and practice
5	2013	Dr. S Anket sheth	Private practice and consultant in Mumbai
6	2013	Dr. Adlyn	Private practice and consultant in chirala, Andhra Pradesh
7	2013	Dr. Chakravarthy	Private practitioner Senior lecturer at Ramachandra dental college Chennai
8	2013	Dr. Indhya	Pursuing DDS at USA
9	2014	Dr. Jatinder	Senior lecturer, Adesh dental college Batinda
10	2014	Dr. Sonal	Consultant at Mumbai
11	2014	Dr. Mrunal	Consultant at Mumbai
12	2014	Dr. Deepika	Senior lecturer at Geetanjali dental and research institute Udaipur

13. Plan of action of the department for the next five years

- Conducting professional development programs for the benefit of PG students and faculty.
- Conduct take up research projects
- Attend and present papers at national and international level
- Encourage and guide students to conduct studies, attend conferences and present papers at national and international level
- Publish articles in reputed journals.
- Acquiring funds for research.
- Improve the infrastructure of the department

PERIODONTOLOGY

1. Faculty profile-adequacy and competency of faculty

The teaching faculty meets the stipulated requirements of the statutory body (i.e. Dental Council of India) with respect to undergraduate and postgraduate training. The entire faculty therefore have competency as laid down by DCI. The faculty maintains and upholds the standards and competency by keeping abreast of latest developments in the field and regularly attends workshops and conferences to meet higher standards.

S. No	Name of faculty member	Qualification	Designation	Number of years of teaching experience (As of 31 st December 2014)
1.	Dr. Betsy S Thomas	MDS, MBA, Cert. Oral Implantology	Professor & Head	22
2.	Dr. K Mahalinga Bhat	BSc, MDS, Cert. Oral Implantology	Professor	33
3.	Dr. Pratibha PK	MDS, Cert. Epidem, Biostat and Res Method, Cert. Aesthetic Dent	Professor	16
4.	Dr. Jothi MV	MDS, Cert. Laser Dent	Reader	10
5.	Dr. Meena Anand	MDS, Cert. Laser Dent	Reader	10
6.	Dr. Rupali	MDS	Reader	06
7.	Dr. Santhosh kumar	MDS	Reader	06
8.	Dr. Kanishk Gupta	MDS	Asst. Prof.	04
9.	Dr. Pradeep Singh	BDS	Lecturer	<01
10.	Dr. Aditya Talwar	BDS	Lecturer	01
11.	Dr. Vaibhav Sahay	BDS	Lecturer	01

Category	Sanctioned (as per DCI)	Filled
Teaching staff	8	8
Lecturer	-	3

2. Student profile entry level competencies, socioeconomic status, language proficiency etc.

Refer Annexure 01. Student Profile for details

3. Changes made in the courses or programmes during the past two years and the contribution of the faculty to those changes

The course is regulated by DCI and the department strictly complies with the syllabus and the guidelines of the DCI and the same is endorsed by the Board of Studies, Manipal University. The examinations conducted reflect the synergy between the clinic-pathologic field and are designed in as Objective a manner.

Changes

- Introduction of OSCE as part of University Practical examination

4. Trends in the success and drop-out rates of students during the past two years

Course	Pass percentage			Drop outs		
	2012	2013	2014	2012	2013	2014
BDS	99	99	97	Nil	Nil	Nil
MDS	100	100	100	Nil	Nil	Nil

5. Learning resources of the departments – library, computers, laboratories and other resources

Description of resource	Quantity
Textbooks	86
Dissertations	133
Library dissertations	103
Computers with internet facility	02
LCD	01
Overhead Projector	01
Study model	01
Piezo surgical unit	01
Electrocautery	02
Prophyjet	01
Composite Gun	01
Fiber Splint	02
Surgical Microscope	01

6. Modern teaching methods practiced and use of ICT in teaching-learning

BDS

- Use of powerpoint presentations
- Small group teaching
- Tutorials
- Assignments / revision tests
- Problem based learning

MDS

- Seminars
- Chair-side discussion in clinics
- CDE programmes
- Inter department clinical club
- Video demonstration of live surgery
- Online learning
- e-Journals
- Critical review of journal article

7. Participation of teachers in academic and personal counseling of students

Faculty members are involved in the academic counseling (poor performance or poor attendance) of the students. Faculties are also the teacher guardian for BDS students.

8. Details of faculty development programmes and teachers who have been benefited during the past two years

2012

S. No	Details of the program	Attended by
1.	Predictable esthetic restorations, Dept. of Conservative Dentistry and Endodontics, 1st March 2012	Dr. Betsy S Thomas, Dr. Pratibha PK, Dr. Jothi MV, Meena A, Dr. Santhosh K, Dr. Rupali A
2.	Symposium on Nano Science and Technology Centre for Atomic and molecular Physics, MIT, Manipal, 09th March 2012	Dr. Jothi MV

3.	CDE - Update on Periodontal medicine, 1st September, 2012	Dr. KM Bhat, Dr. Betsy S Thomas, Pratibha PK, Dr. Jothi MV, Dr. Meena A, Dr. Santhosh K, Dr. Kanishk G
4.	CDE – Oral Biofilm, 15th September 2012	Dr. KM Bhat, Dr. Betsy S Thomas, Dr. Pratibha PK, Dr. Jothi MV, Dr. Meena A, Dr. Santhosh K, Dr. Kanishk G
5.	ISPRP Teacher training program, 22nd September, 2012	Dr. Pratibha PK
6.	CDE - Bone Grafting with live demonstration of direct sinus lift procedure, 29th September 2012	Dr. KM Bhat, Dr. Betsy S Thomas, Dr. Pratibha PK, Dr. Jothi MV, Dr. Meena A, Dr. Santhosh K, Dr. Kanishk G
7.	CDE - Sign-Outs: Every report counts, 15th December 2012	Dr. GS Bhat, Dr. Pratibha PK, Dr. Meena A
8.	National workshop Photonics in medicine and biology, Manipal University, August 20-22nd 2012	Dr. Pratibha PK

2013

S. No	Details of the program	Attended by
1.	AEEDC, 5-7 th February, Dubai 2013	Dr. Betsy Thomas Dr. Kanishk Gupta
2.	“One day symposium on Recent advances in Photonics” on Feb 23 rd 2013	Dr. Jothi M V Dr. Kanishk Gupta
3.	35 th APDC conference, Kuala Lumpur, Malaysia, from 8 th to 12 th May 2013.	Dr. Rupali Agnihotri
4.	“Workshop on how to write and publish a scientific article” 17 th May 2013 at 9:15 am.	Dr. Jothi M Varghese
5.	FDI/CDA/SLDA joint international conference&80 th anniversary annual scientific sessions of Srilanka	Dr. Jothi Varghese Dr. Meena Anand

	Dental association. June 27 th to June 30 th 2013	
6.	Oral hygiene Practice for the Anganwadi workers and training them in using the Oral hygiene aids on 24 th June 2013.	Dr. Meena Anand
7.	Periodontal medicine Talk on effect of system health on periodontium for medical students on 15 th June 2013.	Dr. Kanisk Gupta
8.	CDE programme organized by PHD Department. Towards success in research-need for best practices on 6 th July, 2013.	Dr. Pratibha P. K Dr. Meena Anand Dr. Rupali Agnihotri
9.	Oral hygiene awareness at Nittur higher secondary school, Udupi. Organized by Department of periodontology.	Dr. Betsy Thomas Dr. Kanishk G
10.	Oral hygiene practice for the Anganwadi workers organized by Department of Periodontology in physiology block.	Dr. Betsy Thomas Dr. Meena Anand
11.	Health of Teeth, gums and mouth	Dr. KM Bhat
12.	Oral hygiene awareness in pregnant and children Department of OBG, KMC Manipal. Organized by Department of periodontology. Awareness programme, on 29 th July 2013	Dr. Betsy Thomas Dr. Jothi. V Dr. Santhosh Kumar
13.	Oral hygiene day screening and awareness programme in the Department of Periodontology. Screening and awareness programme on 31 st July 2013.	Dr. Betsy Thomas, Dr. K M Bhat, Dr. Pratibha PK, Dr. Meena Anand, Dr. Jothi V, Dr. Santhosh Kumar, Dr. Rupali Agnihotri, Dr. Kanishk Gupta
14.	CPD Programme, Invited speaker, 'Implant-Solutions' held on 17 th August 2013 at Yenepoya University campus, Deralakatte, Mangalore.	Dr. K. Mahalinga Bhat
15.	'Implant-Solutions' held on 17 th August 2013 at Yenepoya University campus, Deralakatte, Mangalore.	Dr. Santhosh Kumar, Dr. Jothi MV Dr. Meena Anand Dr. Kanishk G, Pratibha

		PK, Meena K. Anand
16.	Emerging Trends in Dental Education CPD workshop organized by Department of Prosthodontics Crown and Bridge on 17-09-2013.	Dr. Meena A Dr. Santhosh K Dr. Pratibha P
17.	Filing of Indian Patents & Patent filing support camp on 21-09-2013, in innovation centre building, MIT, Manipal	Dr. Santhosh Kumar
18.	Integrated Learning by Bill Burdick on 23-09-2013 at MU, Manipal.	Dr. Meena Anand Dr. Santhosh Kumar
19.	CPD Programme "Spectrum' 13" On Thursday, 24 th October 2013.	Dr. Betsy Thomas, Dr. Pratibha P, Dr. Meena Anand, Dr. Jothi V, Dr. Rupali A, Dr. Kanishk G
20.	Indian Society of Prosthodontics-Restorative – Perodontics 6 th National Conference held on 4 th , 5 th and 6 th Oct 2013 at Bangalore, Karnataka, India	Dr. Jothi V
21.	38 th ISP National Conference, 24 th -27 th October 2013, Shree Gokulum Convention Center, Kaloor, Kochi, Kerala.	Dr. K. M Bhat Dr. Betsy Thomas,
22.	CDE on 14 th December 2013, Peizosurgery – a new definition in bone surgery	Dr. K. M Bhat, Dr. Betsy T, Dr. Pratibha P. K, Dr. Jothi MV, Dr. Santhosh, Dr. Rupali, Dr. Kanishk

2014

S. No	Details of the program	Attended by
1.	Basic life support programme organized by the medical simulation center on 5 th February 2014	Dr. Pratibha P.K
2.	Faculty development programme- "introduction to Qualitative Research" on 7 th & 8 th Feb 2014	Dr. Meena K. Anand
3.	67 th IDC 21 st to 23 rd February 2014, Hitex, Hyderabad.	Dr. Meena K. Anand Dr. Santhosh Kumar Dr. Kanishk Gupta
4.	13 th ISP PG convention NITTE university campus,	Dr. Pratibha P. K

	KSHEMA auditorium, Deralakatte, Mangalore, 7-9 th March 2014.	Dr. K. Mahalinga Bhat
5.	Oral health talk on the occasion of International women's day conducted by IDA Manipal branch in Dr. TMA Pai hospital Udupi on 10 th March 2014	Dr. Betsy Thomas, Dr. Pratibha P. K, Dr. Santhosh kumar, Dr. Meena K anand
6.	Hands-on workshop on Routes of drug administration held in medical simulation centre, Manipal University on 13 th March 2014	Dr. Betsy S. Thomas, Dr. K. Mahalinga bhat, Dr. Pratibha P. K, Dr. Jothi M V, Dr. Meena A, Dr. Santhosh Kumar, Dr. Kanishk gupta
7.	Manipal research colloquium, held at Manipal University, Manipal on April 11 th to 12 th 2014	Dr. K. Mahalinga Bhat
8.	Onsite PSG – FAIMER Regional institute program from 3-7 th April 2014	Dr. Meena Anand
9.	2nd International Scientific conference conducted by the faculty of Dentistry at the Jordon University of Science and Technology on May 7th-8th, 2014.	Dr. Jothi M Varghese
10.	Summer training 2014 30 th June – 5 th July “Interdisciplinary sciences, research methods, pharmaceutical sciences and health sciences organized by “MU students research forum” under the aegis of director of research, MU Manipal	Dr. Pratibha P.K
11.	ISO auditor training workshop (16-18 th June 2014)	Dr. K. Meena Anand
12.	5 th International CAMLOG congress 26 th – 28 th June 2014, Valencia, Spain	Dr. Betsy S. Thomas
13.	Advancing excellence in health care Thursday 19 th and Friday 20 th June 2014 at Glasgow Scottish exhibition and conference centre.	Dr. Betsy S. Thomas
14.	CPD Program on “Systematic review and meta-analysis” held on 22 nd and 23 rd August 2014	Dr. KM Bhat, Dr. Betsy S. Thomas, Dr. Pratibha, Dr. Meena K. anand, Dr. Jothi, Dr. Rupali, Dr. Santhosh, Dr. Kanishk

15.	FDI Conference, 11 th 14 th September, Delhi	Dr. Rupali
16.	ISP Colloquium series 2014, on Periosystemic interrelationship Held at GDC Bangalore on 5 th and 6 th September 2014	Dr. Meena Anand
17.	Future dental professionals program held on 27 th September 2014.	Dr. Betsy S. Thomas, Dr. Pratibha PK, Dr. Meena Anand, Dr. Jothi MV, Dr. Santhosh kumar, Dr. Kanishk gupta, Dr. Rupali agnihotri
18.	Oral Presentation Session of the 7 th Instrumental symposium sofia dental meeting, 2-5 th October 2014.	Dr. Pratibha P. K
19.	39 th ISP National Conference 10-12 th October 2014, B. M Birla Science and technology center, Jaipur	Dr. Meena Anand
20.	CPD Programme organized by the department of Conservative and endodontics, Manipal College of dental Sciences, Manipal on 24 th October 2014.	Dr. Jothi MV, Dr. Meena anand, Dr. Santhosh Kumar
21.	Chairperson – Scientific session at 2 nd interstate and 42 nd KSDC held on 28 th , 29 th and 30 th November 2014 at sahyadri institute of technology, Mangalore.	Dr. Jothi MV
22.	National grant writing workshop for health professionals held on 29 th and 30 th November 2014, Manipal University, Manipal	Dr. Kanishk gupta

9. Participation/contribution of teachers to the academic activities including teaching, consultancy and research

Teaching

All the faculty members are involved in the undergraduate and postgraduate teaching. In addition faculty members of the department are involved in the following academic activities

- Question Paper preparation
- Board of studies
- Examiners
- Members of college committees

Consultancy

- Faculty engaged in handling referral from other departments

Research by faculty

S No.	Title	Faculty Involved
1	Comparative evaluation of gingival de-pigmentation after laser, cryo and gingival abrasive technique	Dr. Betsy S Thomas, Dr. Santhosh Kumar
2	Influence of pro-oxidant and antioxidant status on diabetes mellitus	Dr. Pratibha P K
3	Evaluation of the association of radiographic vertical bone loss with food impaction, trauma from occlusion and restoration overhang in patients: an observational study	Dr. KM Bhat, Dr. Santhosh Kumar
4	Awareness of Medical emergencies among students	Dr. Kanishk Gupta Dr. Betsy S Thomas

10. Collaboration with other departments/institutions, at the state, national and international levels, and their outcome during the past two years.

2012

1. Dr. Tanya Jadhav completed a project titled “Efficacy of bioactive glass containing dentifrice in treatment of dentinal hypersensitivity – A Clinical and SEM study” under the guidance of Dr. KM Bhat in collaboration with ICON Analytics, Mumbai.
2. Dr. Gowtham Suresh P completed a project titled “Evaluation of efficacy of occlusal correction in the stress distribution in the periodontium- a finite element study” In collaboration with MIT, Manipal.
3. Dr. K Meena Anand completed a project entitled “antiplaque efficacy of Lemon grass oil mouthwash - An in vitro study in collaboration with the department of Biochemistry, KMC, Manipal.
4. Dr. Jothi MV completed a project titled, “Evaluation of Glutathione- S-Transferase and ceruloplasmin levels in GCF and gingival tissue as diagnostic markers for chronic periodontitis.” In collaboration with the dept. of Biochemistry, KMC, Manipal.

2013

1. Dr. Aditi Chopra carrying out a project titled “To evaluate the effect of green tea on the antioxidant level in GCF and blood in patients with mild to moderate periodontitis: a

- randomized control clinical trial” under the guidance of Dr. Betsy S Thomas in collaboration with Department of Biochemistry, KMC, Manipal.
2. Dr. Ryschia Naik carrying out a project titled “To assess the effects of folic acid supplementation in smokers versus non- smokers with chronic periodontitis” under the guidance of Dr. GS Bhat in collaboration with Department of Biochemistry, KMC, Manipal, and Manipal College of Pharmaceutical sciences, Manipal.
 3. Dr. Kumari Upasana carrying out a project titled “Effect of probiotic capsule administration in patients with gingivitis and mild to moderate periodontitis-a randomized control trial” under the guidance of Dr. Pratibha PK in collaboration with Department of Biochemistry, KMC, Manipal.
 4. Dr. Jothi MV completed a project titled, “Antimicrobial effect of Anacardium occidentale leaf extract against pathogens causing periodontal disease.” In collaboration with Dr. Kishore Bhat, Dept. of Microbiology, Maratha Mandal Dental college, Belgaum.

2014

1. Dr. Mihir Kulkarni carried out a project titled “Clonal diversity of *Porphyromonas gingivalis* in varying severity of periodontitis” under the guidance of Dr. Betsy s Thomas in collaboration with Department of Microbiology, Maratha Mandal college, Belgaum.
2. Dr. Hrishi TS carried out a project titled “The efficacy of ozonated water against chlorhexidine as subgingival irrigant following scaling and root planning. A clinical and microbiological study” under the guidance of Dr. Pratibha PK in collaboration with Department of Microbiology, KMC, Manipal.
3. Dr. Swati Gupta carried out a project titled “Evaluation of polymer membranes for the sustained release of simvastatin” under the guidance of Dr. Pratibha PK in collaboration with Manipal College of Pharmaceutical Sciences, Manipal.
4. Dr. Meena Anand carried out a project titled “Preparation of lemongrass oil mouth wash” in collaboration with Manipal College of Pharmaceutical Sciences, Manipal.
5. Dr. Jothi MV completed a project titled, “Evaluation of the effectiveness of a new antibacterial agent on plaque biofilm.” In collaboration with Dr. Kishore Bhat, Dept. of Microbiology, Maratha Mandal Dental college, Belgaum.

Ongoing Research

1. Dr. Kunal Gupta carrying out a project titled “Surface modification of Resin-modified GIC with crystalline Hydroxyapatite powder – an in vitro SEM / EDS topographical &

- fibroblast response study” under the guidance of Dr. Betsy S Thomas in collaboration with Manipal Life Science Centre, Manipal.
2. Dr. Jasmine Malhotra is carrying out a project entitled “Evaluation of effect of periodontal treatment on serum lipid levels” under the guidance of Dr. Pratibha PK in collaboration with Department of Biochemistry, KMC, Manipal.
 3. Dr. K H Uma is carrying out a project entitled “A comparative evaluation of growth factor release kinetics from platelet – rich fibrin clot and membrane – an in vitro study” under the guidance of Dr. Betsy S Thomas in collaboration with Manipal Life Science Centre, Manipal.
 4. Dr. Sagar Sikka is carrying out a project entitled “A comparative evaluation of gingival depigmentation using LASER, cryotherapy and electrosurgery – a 6 month clinical study” under the guidance of Dr. Pratibha PK in collaboration with MIT, Manipal.
 5. Dr. Ayon Gupta is carrying out a project entitled “Correlation of different genotypes of *Prevotella intermedia* in healthy, gingivitis and periodontitis patients in an Indian population – an in vitro study using AP - PCR” under the guidance of Dr. KM Bhat in collaboration with Maratha Mandal Dental College, Belgaum.
 6. Dr. Meera is carrying out a project entitled “Antiplatelet efficacy of pomegranate mouthwash as an adjunct to non-surgical therapy in patients with gingivitis and periodontitis – a randomized controlled clinical trial” under the guidance of Dr. KM Bhat in collaboration with Manipal College of Pharmaceutical Sciences, and Department of Biochemistry, KMC, Manipal.
 7. Dr. Rudra Mohan is carrying out a project entitled, “A comparative in vitro study investigating the dentinal changes caused by commercially available desensitizing toothpastes and lasers.” Under the guidance of Dr., Jothi MV in collaboration with the Dept. of atomic and molecular Physics, MIT, Manipal.
 8. Dr. Aishwarya Subramanian is carrying out a project entitled “Association between COPD and Periodontitis- a case control study” under the guidance of Dr. Betsy s Thomas in association with Dept. of Pulmonary Medicine, KMC, Manipal.
 9. Dr. Shruti Raizada is carrying out a project entitled “Prevalence of fimA genotype II of *Porphyromonas gingivalis* in chronic periodontitis in the Indian population” in association with Dept. of Microbiology, Maratha Mandal Dental College, Belgaum.
 10. Dr. Gina Maria is carrying out a project entitled “A clinical study to compare the bacterial flora on the dorsum of the tongue in patients with halitosis and healthy patients” under the guidance of Dr. KM Bhat in collaboration with the Dept. of Microbiology, KMC, Manipal.

11. Dr. Akshay Nigam is carrying out a project entitled “The efficacy of systemic administration of OMEGA-3 fatty acids as an adjunct in the treatment of chronic periodontitis in smokers- a clinical and biochemical study.” Under the guidance of Dr. Pratibha PK in collaboration with the Department of Biochemistry, KMC Manipal.
12. Dr. Shravani Babladi is carrying out a project entitled, “Efficacy of NSPT on GPC levels in GCF and blood in patients with chronic periodontitis and type II diabetes mellitus.” Under the guidance of Dr. Betsy S Thomas in collaboration with Dept. of biochemistry, KMC, Manipal.
13. Dr. Ranjitha N is carrying out a project entitled, “Evaluation of Cathepsin K levels in GCF among smokers and non-smokers with chronic periodontitis after non-surgical periodontal therapy.” Under the guidance of Dr. Betsy S Thomas in collaboration with the dept. of Biochemistry , KMC, Manipal
14. Dr. K Amulya is carrying out a project entitled, “clinical evaluation of diabetic status on oncostatin –m levels in gingival biopsy specimens of patients with chronic periodontitis.” Under the guidance of Dr. Pratibha PK in collaboration with dept. of Pharmaceutical sciences. MCOPS, Manipal.
15. Dr. Remya Warriar is carrying out a project entitled, “Evaluation of efficacy of Mangiferin gel as controlled release LDD in the treatment of chronic periodontitis.” Under the guidance of Dr. KM Bhat in collaboration with the dept. of Pharmaceutical sciences, MCOPS, Manipal.
16. Dr. Siladitya Sen is carrying out a project entitled, “Correlation of different genotypes of Porphyromonas gingivalis in chronic periodontitis patients with and without diabetes. An in vitro study using HP: PCR and heteroduplex PCR.” Under the guidance of Dr. K Meena Ananad in collaboration with the dept. of Microbiology, Maratha Mandal Dental College, Belgaum.
17. Dr. Siladitya Sen is carrying out a project entitled, “comparative analysis of total antioxidant levels (thiols and MDA) in saliva and tissue samples of chronic periodontitis patients with and without diabetes.” Under the guidance of Dr. K Meena Ananad in collaboration with the dept. of Biochemistry, KMC Manipal
18. Dr. Rudra Mohan is carrying out a project entitled, “the effect of initial periodontal therapy on Pentraxin -3 levels in smokers and nonsmokers with chronic periodontitis.” Under the guidance of Dr. Jothi MV in collaboration with the dept. of Biochemistry, KMC Manipal.

11. Priority areas for research and details of the ongoing projects, important and noteworthy publications of the faculty, during past two years

Priority areas of research

- Bone graft materials
- Antiplatelet agents
- Antioxidants in Periodontal disease
- Platelet-rich fibrin
- Microbiology of Periodontal disease
- Host response in Periodontal disease
- Host Modulation in Periodontal disease
- Regeneration in Periodontal therapy

Ongoing

Category	Number
Funded research projects	-
Non-funded research projects	22
PhD research projects	-
PG research projects	18
UG research projects	-

Last three years (2012-2014)

		2012	2013	2014
Completed funded research projects		-	-	-
Completed non-funded research projects		06	05	08
Completed PhD research projects		-	-	-
Completed PG research projects		04	04	06
Completed UG research projects		-	03	-
Publications	International	09	10	11
	National	17	14	04
Books		-	-	-
Chapters in books		-	-	-
Conference presentations	International	03	06	05
	National	19	01	04

Ongoing PG Projects

S. No.	Title	Name of the student	Guide
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1	Surface modification of Resin-modified GIC with crystalline Hydroxyapatite powder – an in vitro SEM / EDS topographical & fibroblast response study”	Kunal Gupta	Dr. Betsy S Thomas
2	Evaluation of effect of periodontal treatment on serum lipid levels	Jasmine Malhotra	Dr. Pratibha PK
3	A comparative evaluation of growth factor release kinetics from platelet – rich fibrin clot and membrane – an in vitro study	K H Uma	Dr. Betsy S Thomas
4	A comparative evaluation of gingival depigmentation using LASER, cryotherapy and electrosurgery – a 6 month clinical study	Sagar Sikka	Dr. Pratibha PK
5	Correlation of different genotypes of <i>Prevotella intermedia</i> in healthy, gingivitis and periodontitis patients in an Indian population – an in vitro study using AP - PCR	Ayon Gupta	Dr. KM Bhat
6	Anti plaque efficacy of pomegranate mouthwash as an adjunct to non-surgical therapy in patients with gingivitis and periodontitis – a randomized controlled clinical trial	Meera	Dr. KM Bhat
7	A comparative in vitro study investigating the dentinal changes caused by commercially available desensitizing toothpastes and lasers.	Rudra Mohan	Dr. Jothi MV
8	Association between COPD and Periodontitis- a case control study	Aishwarya Subramanian	Dr. Betsy S Thomas
9	Prevalence of fimA genotype II of <i>Porphyromonas gingivalis</i> in chronic periodontitis in the Indian population	Shruti Raizada	Dr. Betsy S Thomas
10	A clinical study to compare the bacterial flora on the dorsum of the tongue in patients with halitosis and healthy patients	Gina Maria	Dr. KM Bhat
11	The efficacy of systemic administration of OMEGA-3 fatty acids as an adjunct in the treatment of chronic periodontitis in smokers- a	Akshay Nigam	Dr. Pratibha PK

	clinical and biochemical study.		
13	Clinical evaluation of the efficacy of mucosal coronally positioned flap in the management of patients with excessive gingival display.	Rajesh	Dr. Pratibha PK
14	Efficacy of platelet rich fibrin in intrabony defects.	Dipti Singh	Dr. KM Bhat
12	Efficacy of NSPT on GPc levels in GCF and blood in patients with chronic periodontitis and type II diabetes mellitus.	Shravani Babladi	Dr. Betsy S Thomas
13	Evaluation of Cathepsin K levels in GCF among smokers and non-smokers with chronic periodontitis after non-surgical periodontal therapy.	Ranjitha N	Dr. Betsy S Thomas
14	Clinical evaluation of diabetic status on oncostatin –m levels in gingival biopsy specimens of patients with chronic periodontitis.	K Amulya	Dr. Pratibha PK
15	Evaluation of efficacy of Mangiferin gel as controlled release LDD in the treatment of chronic periodontitis	Remya Warriar	Dr. KM Bhat
16	Correlation of different genotypes of Porphyromonas gingivalis in chronic periodontitis patients with and without diabetes. An in vitro study using HP: PCR and heteroduplex PCR	Siladitya Sen	Dr. K Meena Anand
17	Comparative analysis of total antioxidant levels (thiols and MDA) in saliva and tissue samples of chronic periodontitis patients with and without diabetes.”	Siladitya Sen	Dr. K Meena Anand
18.	The effect of initial periodontal therapy on Pentraxin -3 levels in smokers and nonsmokers with chronic periodontitis.	Rudra Mohan	Dr. Jothi MV

Completed PG projects

2014

S.	Title	Name of the	Guide
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No.		student	
1	The efficacy of ozonated water against chlorhexidine as subgingival irrigant following scaling and root planning. A clinical and microbiological study	Hrishi TS	Dr. Pratibha PK
2	Clonal diversity of <i>Porphyromonas gingivalis</i> in varying severity of periodontitis	Mihir Kulkarni	Dr. Betsy s Thomas
3	Evaluation of polymer membranes for the sustained release of simvastatin	Swati Gupta	Dr. Pratibha PK
4	A comparative clinical evaluation of periososteal pedicle graft and subepithelial connective tissue graft in combination with coronally positioned flap. A Clinical trial.	Gazal Gupta	Dr. Betsy s Thomas
5	The adjunctive role of subantimicrobial dose doxycycline on glycemic control in diabetic patients following scaling and root planing.	Neha Sachdeva	Dr. KM Bhat
6	Management of gingival recession using a modified coronally advanced flap with and without a chorion membrane. A comparative clinical evaluation.	Janice Esteves	Dr. KM Bhat

2013

S. No.	Title	Name of the student	Guide
1	Green tea as an adjunct in non-surgical management of chronic periodontitis. A randomized controlled clinical trial.	Aditi Chopra	Dr. Betsy S Thomas
2	The effect of improved periodontal health on metabolic control in type II diabetes mellitus.	Ruchi	Dr. KM Bhat
3	Evaluation of the effect of folic acid supplementation and folic acid mouthwash on the antioxidant and pro-oxidant status in smokers and nonsmokers with chronic periodontitis.	Ryschia Naik	Dr. Pratibha PK
4	The effect of pro-biotic capsule administration on	Kumari Upasana	Dr.

	gingivitis and mild to moderate periodontitis- RCT		Pratibha PK
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2012

S. No.	Title	Name of the student	Guide
1	Efficacy of bioactive glass containing dentifrice in treatment of dentinal hypersensitivity – A Clinical and SEM study.	Tanya Jadhav	KM Bhat
2	Evaluation of efficacy of occlusal correction in the stress distribution in the periodontium- a finite element study	Gowtham Suresh P	Pratibha PK
3	Evaluation of the influence of multiple factors on central papilla recession	Pooja Kekare	GS Bhat
4	Comparative evaluation of the efficacy of combined autologous PRF with nano sized synthetic hydroxyapatite versus nano sized synthetic hydroxyapatite alone in the management of intrabony defects	Kanishk G	Betsy S Thomas

Details of Publications**2012**

1. Agnihotri R, Gaur S. Chemically Modified Tetracyclines: novel therapeutic agents in the management of chronic periodontitis. Indian Journal of Pharmacology 2012; 2: 161-167.
2. Bhide A, Pratibha PK, GS Bhat. Evaluation of Autogenous Cortical Bone Particulate with Bioactive Glass-Synthetic Hydroxyapatite in Treatment of Periodontal Bone Defects. International Journal of Bioscience, Biochemistry and Bioinformatics 2012; 2: 36-39.
3. Pratibha PK, Jain P, Anand KM, Bhat KM, Pentapati KC, Bhat GS. Association of Recurrent aphthous ulcers with stress among students in an Indian Dental Institution. National Journal of Integrated Research in Medicine 2012; 3: 141-147.
4. Singh V, Bhat KM, Bhat GS, Thomas BS. Modified Coronally positioned flap with Sling and Tag suturing for isolated gingival recession – a pilot study. Archives of Dental Sciences 2012; 2: 31-36.

5. David K, Bhat KM. Prevalence of tooth-wear in patients attending the department of Periodontics, Manipal College of Dental Sciences, Manipal. NJIRM 2012; 3:136-141.
6. Jothi MV. Periodontal abscess. Journal of Interdisciplinary Dentistry.2012; 2: 55-56.
7. Singh V, Bhat GS, Kumar S, Bhat KM. Comparative evaluation of Gingival Depigmentation by Diode Laser and Cryosurgery using Tetraflouroethylene (TFE) - 18 months follow up. Clinical advances in Periodontics 2012; 2: 129-134.
8. Mapara M, Betsy Sara Thomas, KM Bhat. Rabbit as an animal model for experimental research. Dental Research Journal 2012; 9:111-118.
9. Bhat GS, Singh V, Bhat KM. Recurrent periodontal abscess associated with 'teeth as a tool'. Journal of Indian Society of Periodontology 2012; 16:113-114.
10. Mathew JJ, Bhat KM. Evaluation of a porous hydroxyapatite alloplast in the management of grade II furcation defects in molars. A case series. J Clin Exp Dent. 2012; 4: e97-101.
11. Anand KM, Pratibha PK, Suresh G, Bhat GS, Yeshwanth P, Goyal R, Cornelio SM. Toothbrush contamination and disinfection of toothbrush – A Review. Journal of Indian Academy Dental Specialists2012; 4: 18-25.
12. Karim S, Pratibha PK, Kamath S, Bhat GS, Kamath U, Dutta B, Sharma N, Archana B, Bhat KM, Guddattu V. Superoxide dismutase enzyme and thiol antioxidants in gingival crevicular fluid and saliva. Dental Research Journal 2012; 9 (3): 266-72.
13. Malhotra J, Pratibha PK, Bhat GS. Enlightenment from within: Plasma rich in growth factors. Manipal Odontoscope 2012; 4: 38 – 42.
14. Pratibha PK, Sharma Y, Gopalkrishna B. Evaluation of stress contours on a maxillary molar subjected to simulated tooth loads by finite element analysis technique. Arch Orofac Sci (2012), 7(2): 43-49.
15. Kumar S, Bhat GS, Bhat KM. Development in techniques for gingival depigmentation – An update. Indian Journal of Dentistry2012; 3 (4): 213-221.
16. Jothi MV, Bhat V, Bhat GS, Rao N. Evaluation of Glutathione-S-transferase and ceruloplasmin levels in gingival crevicular fluid and gingival; tissue as diagnostic markers for chronic periodontitis. Advances in Biosciences and Biotechnology 2012; 3: 437-441.
17. Mapara M, Jagtap B, Kanagotagi S, Thomas BS, Pandva A, Parerra A. Treatment of bilateral furcation involvement with bone graft and bioabsorbable barriers. Journal of Contemporary dentistry 2012; 2: 20-24.
18. Jadhav T, Jothi V, Hassija J, Bhat GS, Bhat KM. A pre prosthetic soft tissue augmentation using a simplified technique. Journal of interdisciplinary dentistry 2012; 2: 72-74.

19. Gaur S, Agnihotri R. Phenobarbital induced Stevens Johnson syndrome in a child. *Indian Journal of Pharmacology* 2012; 44(4): 531-432.
20. Betsy Thomas. Quo vadis. Editorial. *e-journal of dentistry* July-Sept 2012; 2 (3): 21.
21. Anand KM, Bhat GS, Chakravarthy KP, Goyal R. Antiplaque Efficacy of Lemongrass Oil Mouthwash – An in-vitro Study. *Global Journal of Medical Research* 2012; 12 (7): Version 1.0: 19-23.
22. Jadhav T, Thomas BS. Platelet rich fibrin membrane for recession coverage. *e-journal of dentistry* July-Sept 2012; 2 (3): 223 – 227.
23. Mehta S, Gupta K. Bone sounding: a clinical tip for microimplant placement-. *Guident* 2012; 5: 50-51.
24. Chadha VS, KM Bhat. The evaluation of doxycycline controlled release gel versus doxycycline controlled release implant in the management of periodontitis. *Journal of Indian Society of Periodontology* April-June 2012; 16 (2): 200-206.
25. GS Bhat, Vishal Singh, KM Bhat. PAOO technique for the bimaxillary protrusion: Perio-ortho interrelationship. *Journal of Indian Society of Periodontology* October-December 2012; 16 (4): 584-587.
26. Karnik R, KM Bhat, Bhat GS. Prevalence of gingival overgrowth among elderly patients under amlodipine therapy at a large Indian teaching hospital. *Gerodontology* Sep 2012; 29(3): 209-13.

2013

1. Santhosh Kumar, G. Subraya Bhat, K Mahalinga Bhat. Evaluation of gingival depigmentation using Tetrafluoroethane cryosurgery and gingival abrasion technique – two year follow up. *Journal of Clinical and Diagnostic Research* 2013. Feb, vol – 7(2). 389 – 394.
2. Tanya Jadhav; K. M. Bhat; G Subraya Bhat, Jothi M Varghese. Chronic Inflammatory Gingival Enlargement Associated with Orthodontic Therapy – A Case Report. *Journal of dental hygiene* Feb 2013 87. 35-39
3. Ruchika Goyal, Meena K Anand. Antibacterial effect of lemongrass oil on oral microorganisms: an in-vitro study. *Journal of Pharmaceutical and Scientific innovation*. March –April 2013: 2(2). 41-43
4. Ruchika Goyal, Meena K Anand. Antibacterial effect of lemongrass oil on oral microorganisms: an in vitro study. *Journal of Pharmaceutical and Scientific innovation*. March –April 2013: 2(2). 41-43
5. G.S. Bhat, Jothi V. Natures remedies for periodontal diseases-Review. *Journal of clinical dentistry*. 6; May 2013 68-78.

6. Ballal V, Jothi V, Bhat KS. Unconventional method of amalgam restoration –case report. *Journal of Clinical Dentistry* 6; May 2013. 12-15
7. Santhosh Kumar, G. Subraya Bhat, K. Mahalinga Bhat. Full mouth re-restoration of partially edentulous dentition: A periodontic, endodontic, orthodontic and prosthodontic interrelationship-2 year follow-up. *Journal of Interdisciplinary dentistry* Sep/Dec 2012, Available online on 11 June, 2013. Vol-2, 211-214.
8. K Mahalinga Bhat, Santhosh Kumar. Wrong beliefs and misconceptions about dental treatment. *Arogyavani Kannada weekly newspaper*. August 18, 2013. Page No. 5-6.
9. K Mahalinga Bhat, Santhosh Kumar. Wrong beliefs and misconceptions about dental treatment. *Arogyavani Kannada weekly newspaper*, August 25, 2013. Page No. 5-6.
10. Meena K. anand, Kalyan C, Gowtham S, Ruchika goyal, Sonali Cornelio. Smoking re-initiation after cessation program: comparison of associated factors between young and older adults. *Journal of natural science, biology and medicine*, 2013, 4(2). 440-444.
11. Jothi MV, Vijay Ballal, G. S Bhat. Antimicrobial effect of *Anacardium occidentale* leaf extract against pathogens causing periodontal disease. *Advances in bioscience and biotechnology* 2013. 14. Page No. 15-18
12. Aditi chopra, Betsy Thomas. Amniotic membrane: A novel material for regeneration & repair. *Journal of biomimetics biomaterial & tissue engineering* 2013. 15(1): Page No. 106
13. Aditi chopra, Betsy Thomas. Calcium phosphate a novel material for ridge augmentation. *e-journal of dentistry* 2013. 3(1): Page No. 323-326.
14. Junima R, Thomas BS, Rao SK. Inter-relation between rheumatoid arthritis and Periodontitis. *Katmandu Medical Journal* 2013; 41(1): Page. 22 – 26
15. Swathi P, Betsy Thomas, Prahlad Kustagi. Periodontal disease and pregnancy hypertension. A clinical co-relation. *J. Periodontol* 2013; 84: Page. 1118 – 1125.
16. Ather A, Varghese M J, Saraswathi M V, Ballal V, Acharya S. Interdisciplinary management of a two-rooted mandibular first premolar with furcation involvement: A 2-year follow-up. *Journal of interdisciplinary dentistry* 2013. 3(1): 33-35.
17. Giri DK, Kundapur PP, Bhat GS, Bhat KM, Guddattu V. Periodontal disease and obesity in an Indian population. *Nepal Journal of Medical Sciences*. July –December 2013; 2(2): 144-148.
18. Jothi V. Treatment strategies in regeneration of endo-perio lesions. *Saudi Endodontic Journal* 2013 3: 148-150.
19. Santhosh Kumar, G. Subraya Bhat, K. Mahalinga Bhat. Effectiveness of Cryogen Tetrafluoroethane on Elimination of Gingival Epithelium and its Clinical Application

- in Gingival Depigmentation–Histological Findings and Case Series. *Journal of Clinical and Diagnostic Research* 2013. Vol 7(12): 3070 – 3072.
20. Loomba S, Jothi V. *Cocos Nucifera: Its Properties and Contributions to Dentistry. International journal of scientific study*; 1: 138-140.
 21. Jothi V. Lasers- a revolutionary beam to dentistry. *The Dentcare Health Magazine* 2013. 42-46.
 22. Giri D, Kundapur P, Singh V P. Immediate implants in dentistry: A review. *Pakistan oral and dental journal* 2013. 33; 3: 449-454.
 23. Kanishk Gupta, Santhosh Kumar, Meena Anand CBCT Part 1. *Manipal Odontoscope*, 2013; 5: 30-43.
 24. Kanishk Gupta, Jothi V, Siddharth Mehta, CBCT Part 2. *Manipal Odontoscope* 2013; 5: 44-55.

2014

1. Agnihotri R, Gaur S. Rheumatoid arthritis in the elderly and its relationship with periodontitis: A review. *Geriatr Gerontol Int* 2014. 14(1): 8-22.
2. Jothi V, Vasudev Ballal, S. Pradeep. Esthetic rehabilitation of a disfigured tooth using an interdisciplinary approach. *International journal of clinical dentistry* 2014. 6. 309-405.
3. Priyal matreja, Rajshree bhandari, Meena Anand, Seema shetty, srinivasan raj Samuel and Betsy S. Thomas. Is your tooth Cleaner, Clean...???. *Global journal of medical research dentistry and otolaryngology* (online on 2014). 13 (2). 19-22.
4. Sumit Gaur, Rupali Agnihotri. Green tea: A novel functional food for the oral health of older adults. *Geriatrics and Gerontology International* 2014; 14 (2): 238-250
5. Gazal Kaushalendra Gupta, Mihir Raghavendra Kulkarni, Betsy Sara Thomas. Post-operative morbidity following the use of the inverted periosteal graft: A case series. *Journal of Indian Society of Periodontology* 2014; Vol. 18, No. 1, January-February: 82-84.
6. Dr. Meena Anand Kukkamalla, Dr. Sonali Maria Cornelio, Dr. Khandige Mahalinga Bhat, Dr. Meera Avadhani, Dr. Ruchika Goyal. Periodontal Disease as a Risk Factor for Preterm Delivery and Low Birth Weight. *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*; Volume 13, Issue 5 (May. 2014),: 55-61
7. Rupali Agnihotri, Sumit Gaur. Implications of tobacco smoking on the oral health of older adults: *Geriatrics and Gerontology International* 2014;14 (3): 526-540.

8. Mihir K, Betsy Thomas, Jothi V, G.S Bhat. Platelet rich fibrin as an adjunct to palatal wound healing after harvesting a free gingival graft: a case series; Journal of Indian society of Periodontology: 18: 399-402.
9. Jothi V, V. Ballal. Palatoradicular groove. Saudi endodontic journal; 4: 160-161.
10. Ballal V, Jothi V. Amlexanox. British dental journal. 217: 208
11. Kalyana Chakravarthy Pentapati, Neeraja Sabnis, Bharatbhushan Shrikhande, Ramnaresh Kashyap, Meena Anand Kukkamalla. Stain Removal Efficacy of Herbal Mouth Rinses Containing Sodium Hexametaphosphate. Journal of Research in Medical Education & Ethics. Vol. 4, No. 2, July, 2014, pp-165-170.
12. Meera Avadnani, K. Mahalinga Bhat, Meena anand. Porous Titanium Granules. IOSR Journal of Dental and Medical Sciences (IOSR-JDMS); 13(9): 83-91.
13. D Giri, P Kundapur, I K Maharajan. Betel nut chewing associated with severe periodontitis. Health renaissance 2014; 12(1):57-60.
14. K. Meena Anand, Syed Suhail, Vadlamudi Murali Krishna, Satheesha BC, Rajesh M, Meera A, Anand KM. Finite Element Analysis in Dentistry. International Journal of Engineering and Technical Research (IJETR) ISSN: 2321-0869, Volume-2, Issue-8, August 2014.
15. Dr. Meena Anand Kukkamalla, Dr. Sonali Maria Cornelio, Dr. Khandige Mahalinga Bhat, Dr. Meera Avadhani, Dr. Ruchika Goyal. Halitosis – A Social Malady IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) 2014;13(5):55-61

Details of Conference Presentations

2012

1. Upasana, Pratibha P K, GS Bhat presented a paper ‘Diversity of gingival tissue use in periodontal therapy’ at the 11th National ISP PG Convention held at Lucknow from 6th -8th April.
2. Gazal G, Betsy S Thomas, GS Bhat presented a paper ‘Prevalence of gingival biotype in young adults’ at the 11th National ISP PG Convention held at Lucknow from 6th -8th April.
3. Ryschia Naik, GS Bhat presented a paper ‘Oxidative stress in smokers with periodontitis – a cross sectional study’ at the 11th National ISP PG Convention held at Lucknow from 6th -8th April.
4. Mihir K, GS Bhat presented a paper ‘Awareness about Oral health among medical professionals in India’ at the 11th National ISP PG Convention held at Lucknow from 6th -8th April.

5. Betsy S Thomas presented a Guest Lecture ‘Improvements in UG and PG Curriculum’ at Society of Periodontists and Implantologists of Kerala (Spik) – Faculty Enrichment program at the Govt. Dental College, in TRIVANDRUM on 29th January.
6. Aditi Chopra, Betsy S Thomas presented a paper ‘Building blocks of bone regeneration: a novel approach’ at the ICDRO held at Goa from 14th -16th September.
7. Ruchi Raval, KM Bhat presented a paper ‘Gold standard: Case series of autogenous bone graft’ at ICDRO held at Goa from 14th -16th September.
8. Swati Gupta, Pratibha PK presented a paper on ‘Chitosan scaffold in GTR –A novel osteopromotive approach’ at ICDRO held at Goa from 14th -16th September.
9. Janice Esteves, KM Bhat presented a paper ‘Amnion membrane: A potential technique for Guided Tissue Regeneration’ at ICDRO held at Goa from 14th -16th September.
10. Neha Sachdeva, KM Bhat presented a paper ‘Distraction Osteogenesis: Predictable ridge augmentation for implant placement’ at ICDRO held at Goa from 14th -16th September.
11. Sagar Sikka, GS Bhat presented a paper ‘Back to basics: Monocytes in bone regeneration’ at ICDRO held at Goa from 14th -16th September.
12. Hrishi TS, GS Bhat presented a paper ‘Stem cell therapy- Has the goal been achieved?’ at ICDRO held at Goa from 14th -16th September.
13. Jasmine Malhotra, Pratibha PK presented a paper ‘Enlightenment from within: PRGF’ at ICDRO held at Goa from 14th -16th September.
14. Ayon Gupta, KM Bhat presented a paper ‘Combination bone grafts’ at ICDRO held at Goa from 14th -16th September.
15. Aditi Chopra. Betsy S Thomas presented a paper ‘Aesthetics personified: a multidisciplinary approach’ at the 5th National Conference of Indian Society of Prosthodontics- Restorative- Periodontics held at Mangalore from 24th -26th August.
16. Hrishi TS, GS Bhat presented a paper ‘Vertical root fracture: a diagnostic-dilemma’ at the 5th National conference of Indian society of Prosthodontics-Restorative-Periodontics held at Mangalore from 24th -26th August.
17. Upasana K, Pratibha PK presented a paper ‘Humpty dumpty had a great fall’ at the 5th National Conference of Indian Society of Prosthodontics-Restorative-Periodontics held at Mangalore from 24th -26th August.
18. Jothi MV presented a paper ‘Aesthetic rehabilitation of a disfigured tooth using an interdisciplinary approach- a case report’ at the 5th National conference of Indian society of Prosthodontics-Restorative-Periodontics held at Mangalore from 24th -26th August.

19. Santhosh Kumar presented a paper 'A new technique of modified inverted soft tissue technique for root coverage of the buccal gingival recession of the first premolar' at ISP Conference Periowave 37th National Annual Conference, held at Shimla Hills from 12th -14th October.
20. K Meena Anand presented a paper 'Erbium laser in bone ablation' at Joint MDASZ Melaka Manipal Medical College 4TH Dental conference and trade exhibition held at Melaka from 5th -7th October.
21. K Mahalinga Bhat presented a poster 'Evaluation of Anti-plaque and anti-inflammatory effects of mangiferin extract at Sofia Dental meeting, Bulgarian Scientific Dental Association (BSDA) held at Sofia, Bulgaria from 27th-30th September.
22. Jothi MV presented a paper 'Evaluation of GST and Ceruloplasmim levels in GCF and Gingival tissue as diagnostic markers for chronic periodontitis at Conference Dentistry in the light of Innovation, held at Sao Paulo – Brazil from 29th – 30th August.

2013

1. Betsy Thomas. Platelet Rich Fibrin in infrabony defects – a clinical study (Oral Presentation). AEEDC, 5-7th February, Dubai 2013
2. Kanishk Gupta. Clinical efficacy of autologous PRF and nanohydroxyapatite in the treatment of intrabony defects. (Poster) AEEDC, 5-7th February, Dubai 2013. First prize awarded
3. Rupali Agnihotri. Poster – Idiopathic Orofacial Granulomatosis of the ginigva and labial mucosa- a case report. 3rd Annual Conference of Karnataka State Chapter of AOMSI, March 7-9th 2013
4. Rupali Agnihotri. Poster – Antioxidant suppression in smokers with chronic periodontitis. 35th APDC conference, Kuala Lumpur, Malaysia, from 8th to 12th May 2013.
5. Jothi Varghese. Antimicrobial effect of anacardium occidentale leaf extract against periodontal pathogens. Presented on 28th June FDI/CDA/SLDA joint international conference&80th anniversary annual scientific sessions of Srilanka Dental association. June 27th to June 30th 2013
6. Meena Anand. Effect of Lemon grass oil as an antiplaque agent – an in vitro study. Presented on 30th June. FDI/CDA/SLDA joint international conference&80th anniversary annual scientific sessions of Srilanka Dental association. June 27th to June 30th 2013. Poster – Commendable prize

7. Betsy S. Thomas. Poster presentation on the evaluation of the efficacy of titanium alloy implants coated by bioceramic apatite wollastonite and hydroxyapatite by pulsed laser deposition. AOS Conference, Perth, 23-26th October 2013.

2014

1. Jothi M Varghese. Poster presented Evaluation of antibacterial effect of Piper beetle (L.) mouth rinse on oral hygiene regimen 2nd International Scientific conference conducted by the faculty of Dentistry at the Jordon University of Science and Technology on May 7th-8th, 2014.
2. Rupali. Poster presentation “Impact of Smoking on periodontal health a clinic-biochemical correlation. FDI Conference 11th 14th September 2014, Delhi.
3. Meena Anand. Esthetic soft tissue ridge augmentation – a case report. 39th ISP National Conference 10-12th October 2014, B. M Birla Science and technology center, Jaipur
4. Santhosh Kumar, Dr. Kanishk Gupta Bone graft harvesting for periodontal surgery 67th IDC 21st to 23rd February 2014, Hitex, Hyderabad.
5. Kanishk Gupta, Dr. Santhosh Kumar Comparative evaluation of PRF and open flap debridement in intrabony defects
6. K. Mahalinga Bhat Guest lecture on “Host modulation” 13th ISP PG convention NITTE university campus, KSHEMA auditorium, Deralakatte, Mangalore, 9th March 2014.
7. Betsy S. Thomas The Scottish exhibition and conference centre, glasgow Advancing excellence in health care Thursday 19th and 20th June 2014
8. Betsy S. Thomas. Analysis of dental implants with Bioceramics apatite wollastonite and hydroxyapatite coated pulsed laser deposition. 5th International CAMLOG congress 26th – 28th June 2014, Valencia, Spain.
9. Pratibha. Presented “probiotic administration in periodontal therapy” Oral Presentation Session at the 7th Instrumental symposium Sofia dental meeting, Bulgaria, 2-5th October 2014.

12. Placement record of the past students and the contribution of the department to aid student placement

S. No	Year of completion	Name of the Postgraduate	Institution where employed
1.	2012	Dr. Pooja M Kekare	Private practice and consultancy

2.	2012	Dr. Tanya Jadhav	Private practice and consultancy
3.	2012	Dr. Kanishk Gupta	Manipal College of Dental Sciences, Manipal
4.	2012	Dr. Gowtham Suresh P	Consultant and faculty at PGS institute of Medical Sciences, Coimbatore
5.	2013	Dr. Aditi chopra	Consultant
6.	2013	Dr. Ruchi Raval	Working in KM Shah dental college, Vadodara, Gujarat
7.	2013	Dr. Ryschia Naik	Consultant
8.	2013	Dr. Kumari Upasana	Consultant
9.	2014	Dr. Mihir Kulkarni	Consultant
10.	2014	Dr. Gazal Gupta	Consultant
11.	2014	Dr. Neha sachdeva	Consultant
12.	2014	Dr. Hrishi	Consultant
13.	2014	Dr. Janice Esteves	Consultant
14.	2014	Dr. Swati gupta	Consultant

13. Plan of action of the department for the next five years

- Addition of new surgical equipment - Lasers
- Conduct of oral hygiene awareness programs in schools / Kasturba hospital
- To conduct workshop / CDE/ conference
- Thrust in research areas such as new regenerative materials
- Procuring dental implants for post graduates and staff

ORAL AND MAXILLOFACIAL SURGERY

1. Faculty profile - adequacy and competency of faculty:

The teaching faculty meets the stipulated requirements of the statutory body (i.e. Dental Council of India) with respect to undergraduate and postgraduate training. The entire faculty therefore have competency as laid down by DCI. The faculty maintains and upholds the standards and competency by keeping abreast of latest developments in the field and regularly attends workshops and conferences to meet higher standards.

S. No	Name	Qualification	Designation	Experience in years (As of 31 st December 2014)
1	Dr. Abhay T. Kamath	MDS	Professor and Head	14
2	Dr. K. M. Cariappa	MDS	Professor	31
3	Dr. Manish Bhagania	MDS	Assoc. Prof.	07
4	Dr. Srikanth G	MDS	Reader	05
5	Dr. Chithra A	MDS	Asst. Prof.	03
6	Dr. Anand Deep Shukla	MDS	Asst. Prof.	02
7	Dr. Adarsh Kudva M	MDS	Asst. Prof.	01
8	Dr. Swapnil Sharma	BDS	Lecturer	<01
9	Dr. Meenakshi Prasad	BDS	Lecturer	<01

Category	Sanctioned (as per DCI)	Filled
Teaching Staff	04	07
Lecturer	-	02

2. Student Profile: According to programmes of study, gender, region etc.

Refer Annexure 01. Student Profile for details

3. Changes made in the courses or programmes during the past two years and the contribution of the faculty to those changes:

The course is regulated by DCI and the department strictly complies with the syllabus and the guidelines of the DCI and the same is endorsed by the Board of Studies,

Manipal University. The examinations conducted reflect the synergy between the clinic-pathologic field and are designed in as Objective a manner

- Change in examination pattern with inclusion of MCQ's and Short Answers
- Clinical Manual for Department of Oral & Maxillofacial Surgery
- Lesson Planning for each term
- OSCE being conducted both sessional and University Examination from the batch 2008-2009 onwards
- Visits of the Final year BDS students to Operation theater to watch live surgeries

4. Trends in the success rate and drop-out rate of students during the last two years

Course	Pass Percentage			Dropout Rate		
	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
BDS (IV year)	100	100	100	0	0	0
MDS	100	100	100	0	0	0

5. Learning resources of the department like library, computers, laboratories and other such resources

Description of resource	Quantity
Textbooks in department library	54
Computer with internet connection with Scanner and printer	02
Video demonstration using computer	01
Television	01
Undergraduate section	01
Post graduate section	01
Pulse Oximeter	02

6. Modern teaching methods practiced and use of ICT in teaching-learning

- Internet connectivity
- Latest editions of text books procured from Central Library
- Clinical club for postgraduate students
- Theory Classes on Power Point with LCD Projector
- Postings in other departments for postgraduate students
- Introduced lectures using power point presentations
- Model teaching

- Hands on training for suturing and wiring

7. Participation of teachers in academic and personal counseling of students

- Setting up the question papers of Manipal University and other universities
- All faculty members involved for counseling of students with attendance shortage or poor performance
- An examiner for undergraduate and post-graduate examinations of other universities
- Member of inspection committee for Dental Council India (DCI)
- Member of research committee of the College and University
- Board of studies: Member

8. Details of faculty development programmes and teachers who benefited during the past two years:

2012

S. No	Title of the programme	Attended by
1	Workshop on “Composites-Color Sciences & Clinical considerations” held on 22 nd November 2012, at Manipal College of Dental Sciences, Manipal	Dr. K.M. Cariappa
2	CDE Programme on “Best Practices in Hospital care of Maxillofacial Patients” held on 2012 at Manipal College of Dental Sciences, Mangalore, Manipal University, Mangalore	Dr. K.M. Cariappa
3	CDE Programme on “Management of Biofilm in Periodontal Disease” held on September 15 th 2012 at Manipal College of Dental Sciences, Manipal	Dr. K.M. Cariappa Dr. Srikanth G
4	Workshop on Head and Neck Onco-Surgery & Hands on Cadaveric Dissection Course held on 1 st to 3 rd June 2012	Dr. K.M. Cariappa
5	CME on /forensic Odontology “Tooth do Tell Tales” an aid in forensic investigation held on 3 rd March 2012 at Department of Medical Education, KMC Mangalore	Dr. K.M. Cariappa
6	AOCMF Advances Seminar on “Approaches to Skull Base” held on 17 – 19 February 2012, Ahmedabad, India	Dr. K.M. Cariappa
7	CDE Programme on “Periodontal Medicine” held on September 1 st 2012. MCOADS, Manipal	Dr. Srikanth G
8	National Symposium on Cleft Lip and Palate held on 7 th ,8 th &	Dr. K.M.

	9 th of September 2012, at Yenepoya University, Deralakatte, Mangalore, Karnataka	Cariappa, Dr. Manish Bhagania
9	Basic Life Support Workshop at Medical Simulation Centre, Manipal 29th and 30th November 2012	Dr. Manish Bhagania

2013

S. No	Title of the programme	Attended by
1	CDE programme on “Patient Evaluation and Peri/Post-operative care in OMFS” held at MCOADS, Mangalore in March 2013	Dr. Abhay T. Kamath

2014

S. No	Title of the programme	Attended by
1	CPD Programme on “Current concepts and challenges in Maxillofacial Infections” on 31 st October ,2014 at MCOADS Mangalore	Dr. Abhay T. Kamath Dr. Chithra. A Dr. Adarsh Kudva
2	AOCMF Introductory Seminar attended as Faculty National on 14 November 2014 at Goa	Dr. Abhay T. Kamath
3	Dental implant competence program module 1 and module 2 held at SCIdent Implant training Institute, Mumbai from 11-13 July 2014 and 31 October to 2 November 2014	Dr. Manish Bhagania
4	AOCMF Course attended on Principles in craniofacial fracture management from 17-19 October 2014 at New Delhi	Dr. G. Srikanth
5	Internal Auditor Course on Integrated Management System (ISO 9001:2008 &ISO 14001:2004)	Dr. G. Srikanth
6	CDE Programme on “Panfacial Trauma & ICU Protocol” held at A.B. Shetty memorial Institute of Dental Sciences, Mangalore on 28 th June 2014	Dr. Adarsh Kudva
7	Workshop on Pedagogic and Personal Effectiveness” from 25 th to 28 th August,2014 Organized by Manipal centre for Professional and Personal Development	Dr. Adarsh Kudva

8	Awareness program on Prevention of maxillofacial Injuries from dogbites in children hosted by MCODES Manipal from July 22-28,2014	Dr. Chithra. A
9	Workshop on Botox and Fillers on 3 rd August 2014 during Facethetics 2014 at Bangalore	Dr. Chithra A
10	Preconference course on” Integrating Implants into your Practice from diagnosis to Placement”(Hands On) during 2 nd Interstate and 42 nd Karnataka State Dental conference from 27 th to 30 th November 2014 at Shayadri Institute of Technology, Mangalore	Dr. Chithra. A Dr. Anand Shukla
11	Two-Day hands on training programme held by Association for Advancement of Orofacial Research (Orthognathic Surgery)	Dr. Adarsh Kudva
12	Half-day workshop held by Health Sciences Library and Department of Library and information science, Kasturba Medical College, Manipal University, Manipal (How to get published)	Dr. Adarsh Kudva
13	CPD Programme held by Manipal College of Dental Sciences, Manipal University (Diagnosis and Ethics-a straddle for oral cancer care)	Dr. Adarsh Kudva
14	AOCMF Introductory Seminar,28 Feb to March 1 st at Mangalore	Dr. Adarsh Kudva
15	CME held by Kasturba Medical College, Manipal University, Manipal (Palliative Medicine)	Dr. Adarsh Kudva
16	CDE/CME Programme-2014 held by A.B Shetty Memorial Institute of Dental Sciences (Panfacial Trauma & ICU Protocol)	Dr. Adarsh Kudva

9. Participation of teachers in academic activities including teaching, consultancy and research:

Teaching:

- The entire faculty is actively involved in teaching UG and PG students

Consultancy:

- Emergency consultation in Trauma center and casualty for the head and neck region
- Surgical consultation and assistance with neurosurgery, ENT, Surgical oncology.

10. Collaborations with other departments and institutions at the national and international level and their outcome during the past two years

- Nil

11. Priority areas for research and details of ongoing projects, important and noteworthy publications of the faculty during the past two years

Thrust areas of the department

- Maxillofacial Trauma
- Orthognathic Surgery
- Craniofacial Surgery
- Office based sedation.

Ongoing:

Category	Number
Funded research projects	Nil
Non- Funded research projects	06
PhD research projects	Nil
PG research projects	06
UG research Projects	Nil

Last 3 Years (2012-2014)

		2012	2013	2014
Completed funded research projects		-	-	-
Completed non-funded research projects		02	03	03
Completed PhD research projects		-	-	-
Completed PG research projects		02	03	03
Completed UG research Projects		-	-	-
Publications	International	04	01	06
	National	06	02	01
Books		-	-	-
Chapters in books		-	-	-
Conference presentations	International	-	09	02
	National	12	14	13

Ongoing PG projects

S. No	Title	Name of the Student	Guide
1.	Intraocular pressure changes in Zygomaticomaxillary complex fractures and orbital blowout fractures	Dr. Shingala Hardik	Dr. Abhay. T. Kamath
2.	Comparison between CBCT & digital OPG to analyse the proximity of mandibular third molar to inferior alveolar canal	Dr. Kanika Nanda	Dr. Abhay. T. Kamath Dr. Junaid Ahmed
3.	Comparison of efficacy of oral diclofenac and oral Paracetamol in the control of post-operative pain in minor oral surgical procedure – a split mouth study	Dr. Surabhi Chowdhery	Dr. K.M. Cariappa Dr. Abhay T Kamath
4.	Elective neck dissection in clinical T1/T2 NOMO oral cancer and its effectiveness in predicting occult metastasis	Dr. Amar	Dr. Abhay Kamath Dr. Adarsh Kudva Dr. Nirmala N Rao
5.	Minimizing occupational hazard for oral & maxillofacial surgery in the outpatient setting by application of Ergonomics	Dr. Neelesh Patel	Dr. K. M. Cariappa
6.	Assessment Eustachian of like functioning following surgical correction of oral submucous fibrosis	Dr. Sreea Roy	Dr. Manish Bhagania Mr. Kishen (Dept. of speech & Hearing)

Completed PG research projects:**2012**

S. No	Title	Name of the student	Guide
1	Comparing Hemodynamic status and Recovery time during conscious sedation using two different drug combinations in minor Oral Surgery – A clinical Study	Dr. Anand Deep Shukla	Dr. K. M. Cariappa
2	Anesthetic efficacy of two different concentrations of Ropivacaine with adrenaline	Dr. Jimish Desai	Dr. K. M. Cariappa

against 2% lignocaine with adrenaline for inferior alveolar nerve block – a Clinical Study		
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2013

S. No	Title	Name of the student	Guide
1.	Effect of Alkalinisation of lignocaine on pain during injection and onset of anesthesia during oral and maxillofacial surgical procedures	Dr. Satpal Singh	Dr. Abhay. T. Kamath
2.	Evaluating the Efficacy of Transdermal route of analgesic administration for pain control in minor oral surgery procedures	Dr. Amit	Dr. K.M. Cariappa
3.	Comparative study of Lignocaine with Mepivacaine for onset and duration of action in local anesthesia used for minor oral and maxillofacial surgery	Dr. Ambika Pradeep	Dr. Abhay. T. Kamath

2014

S. No	Title	Name of the student	Guide
1.	Sternocleido mastoid muscle flap-Adding a new dimension in cases of ameloblastoma of the mandible	Dr. Neha	Dr. Abhay. T. Kamath
2.	Current spectrum of microbiology in head and neck infections	Dr. Anukool	Dr. Abhay. T. Kamath
3.	Intra procedural effect on mean arterial pressure and myocardial work during the extraction under local anesthesia; A monitored study	Dr. Prem	Dr. K.M. Cariappa

Details of Publications:**2012**

1. Abhay T Kamath, Raghu Radhakrishnan, Manish Bhagania, Anand Mohan Tuberculous Osteomyelitis of the Mandible, Journal of Maxillofacial and Oral Surgery Ref: Ms. No. MAOS-D-12-00078R1, 2012

2. Abhay T Kamath, Manish Kumar Bhagania, R. Balakrishna, Ganesh Kamath Sevagur, R. Amar. Ludwig's Angina in Pregnancy necessitating pre mature delivery, Journal of Maxillofacial and Oral Surgery Ref: Ms.No. MAOS – D-12-00091R1, 2012
3. Gaurav Mittal, Ramakanth Reddy Dubbudu, K.M. Cariappa. Three Dimensional Titanium Mini plates in oral and Maxillofacial Surgery: A Prospective Clinical Trial, Journal of Maxillofacial and Oral Surgery April- June) 2012, 11(2):152-159
4. B. Vidya, K.M. Cariappa, Abhay T Kamath. Current perspectives in intra operative airway management in maxillofacial trauma, Journal of Maxillofacial and Oral Surgery (April-June) 2012,11(2): 138-143
5. Preethi Bhat, K.M. Cariappa. Inferior alveolar nerve deficits and recovery following surgical Removal of Impacted mandibular third molars, Journal of Maxillofacial and Oral Surgery July –Sept 2012, 11(3); 304-308
6. Abhay T Kamath, K.M. Cariappa, Manish Kumar Bhagania. Ostoid osteoma in the body of the mandible- A case report, Manipal Odontoscope, Official publication of Indian Dental Association, Manipal Branch (Volume 4) 2012
7. Deepika Pai, Abhay T Kamath. Hemangioma associated with erupting permanent molar teeth – A case report, International Journal of Dental Clinics Volume 4 issue 1(Ref. NO: 547 2012 4.2/R8/8 INTJDC)
8. Santhosh Kumar, Arun Srinivas Urala, Abhay T Kamath, Priyanka Jayaswal, Ashima Valiathan. Unusual intraosseous transmigration of impacted tooth, Imaging Science in Dentistry Vol. 42, Number 1, March 2012,47-54
9. Lokendra Gupta, I.N. Aparna, B. Dhanasekar, Abhay T Kamath, Lingeshwar D, Priyanka Agarwal. Fabrication of a Surgical Splint in an Emergency Situation. A Clinical Report, Journal of Prosthodontics: Implant, Esthetic, and Reconstructive Dentistry July 1, 2012
10. Subhalakshmi Sen, Abhay Kamath, Mukund Gupta, Raghu Radhakrishnan. A localised soft tissue and bone enlargement in an infant mandible, British Medical Journal – Case report, June 2013-010291

2013

1. Abhay Taranath, Pai Deepika, Sham Bhat, Sharan Sargod. An analysis of genetic influence on salivary parameters and caries experience-by correlation of incidence of dental caries and salivary parameters International Journal of Dental research , 1(2) (2013) 39-44

2. Subhalakshmi Sen, Abhay Kamath, Mukund Gupta, Raghu Radhakrishnan. A localised soft tissue and bone enlargement in an infant mandible British Medical Journal – Case report, June 2013-010291
3. Parul Sah, Abhay Kamath, Chithra A, Raghu Radhakrishnan. Kimura's disease-An unusual presentation involving subcutaneous tissue, parotid gland and lymphnode. JOMFP vol.17, issue 3 Sep-Dec2013

2014

1. Srikanth G, Abhay Kamath, Cariappa KM, Manish Bhagania, Hemodynamics during intravenous conscious sedation: an institutional experience. Egyptian Journal of Oral Maxillofacial Surgery 5: 1-3 Jan 2014
2. Abhay Taranath, Deepika Pai, Kalyan Chakravarthy. The role of casein phosphopeptide-amorphous calcium phosphate products in remineralisation of incipient enamel lesions and its substantivity. J Exp Integr Med 2014; 4(1): 67-70 ISSN: 1309-4572
3. Abhay Kamath, Manish Bhagania, Deepika Pai, Satpal Singh, Amit and Ambika Pradeep. Challenges in Rehabilitation of long standing ankylosis of temporo mandibular joint-A case report of a 65 years old lady. Acta Medica Scientia 01 (01) 2014.
4. Dr. Subhalakshmi, Dr. Mary Mathew, Dr. Raghu A R, Dr. Abhay T Kamath. An Infiltrative Squamous cell carcinoma of the sinonasal tract –A report of a rare case. International Journal of Advanced Research (2014), Vol. 2, Issue 5, 792-798.
5. Dr. Manish Kumar Bhagania, Dr. Srikanth G. Dr. Neha Sharma, Dr. Abhay Taranath Kamath, Dr. Anukool Choube, Dr. Prem Sasikumar. Intraoperative Radiography for Assessment of clearance during surgical resection of jaws, International Journal of Scientific Research Nov. 2014, Page No: 344
6. Abhay Taranath kamath, Srikanth gadicherla, Neha sharma, Anand Deep shukla, Satpal Singh gill. Oculocardiac reflex in a pediatric orbital floor fracture: a case report, Hellenic archives of Oral & Maxillofacial Surgery (2014)59-64
7. Chithra A, K. M. Cariappa Abhay Taranath Kamath, Adarsh Kudva. Role of Rapid Tetanus Antibody test in accident and emergency department-comparative study Journal Maxillofacial Oral Surgery Oct. 14, 2014

Details of Conference presentations:

2012

1. Dr. Abhay T Kamath delivered a Guest lecture: “Antibiotic prophylaxis in oral surgery “ during 16th Mid-term conference and 3rd Post Graduate Convention of AOMSI held at Mount Abu, Rajasthan from 14th to 16th June 2012
2. Dr. Abhay T Kamath delivered a Guest lecture:” Aesthetic and facial assessment in Pan Facial Trauma : Fourth Dimension” in 37th National conference of Association of Oral and Maxillofacial Surgeons of India , held at Hyderabad on 29th, 30th Nov and 1st Dec 2012
3. Dr. Abhay T Kamath delivered a Guest lecture:” New Horizon-Recent Advances in Oral &Maxillofacial Surgery”2nd Annual Conference of Karnataka State chapter of Association of Oral and Maxillofacial Surgery held at Bagalkot on 17th& 18th Feb. 2012
4. Dr. Manish Bhagania presented a paper” Intraoperative radiographic assessment of jaw tumors” in 37th National conference of Association of Oral and Maxillofacial Surgeons of India , held at Hyderabad on 29th, 30th Nov and 1st Dec 2012
5. Dr. Anand Mohan presented a paper titled “SCM flap in mandibular resection for Ameoloblastoma” in 16th Mid-Term Conference and 3rd Post graduate convention of AOMSI held at Mount Abu, Rajasthan from 14th to 16th June 2012.
6. Dr. Mukund Gupta presented a paper titled “Care and cure: Pediatric maxillofacial injuries” in 16th Mid-term conference and 3rd Post Graduate Convention of AOMSI at Mount Abu, Rajasthan from 14th to 16th June 2012
7. Dr. Ambika Pradeep presented poster “Orbital floor fracture in pediatric population 37th National conference of Association of Oral and Maxillofacial Surgeons of India , held at Hyderabad on 29th, 30th Nov and 1st Dec 2012
8. Dr. Satpal Singh presented a poster Palatal fractures management:- Comparative study National conference of Association of Oral and Maxillofacial Surgeons of India , held at Hyderabad on 29th, 30th Nov and 1st Dec 2012
9. Dr. Amit presented a paper” A Ludwig’s angina in pregnancy: handling two lives in one go-“ Case report 16th Mid-Term Conference and 3rd Post graduate convention of AOMSI held at Mount Abu, Rajasthan from 14th to 16th June 2012.
10. Dr. Ambika Pradeep presented poster “Sternocleidomastoid muscle flap: changing face of reconstruction at “2nd Annual Conference of Karnataka State chapter of Association of Oral and Maxillofacial Surgery held at Bagalkot on 17th& 18th Feb. 2012
11. Dr. Satpal Singh presented a poster “Osteosynthesis: past, present and future at “2nd Annual Conference of Karnataka State chapter of Association of Oral and Maxillofacial Surgery held at Bagalkot on 17th& 18th Feb. 2012

12. Dr. Amit presented a poster “Bone cement: A novel modality for craniofacial skeleton contour deformity at ”2nd Annual Conference of Karnataka State chapter of Association of Oral and Maxillofacial Surgery held at Bagalkot on 17th& 18th Feb. 2012.

2013

1. Dr. Abhay T. Kamath attended the 35th Asia Pacific Dental Congress held at Kuala Lumpur, Malaysia from the 8th to the 12th of May 2013 and won the 3rd Prize for the scientific poster “Role of collagen in the management of Oral Submucous fibrosis.
2. Dr. K.M. Cariappa attended IOFOS Congress at Florence, Italy 29th August 2013 to 31st August 2013 read a paper titled “Orthognathic Surgery – A good guise”.
3. Dr. Manish Bhagania attended 1st Asian Oral and Maxillofacial Surgery PG Convention held at Mangalore from 29th to 31st August 2013 presented paper titled “Klippel Feil Syndrome snatches the smile of a Child”.
4. Dr. Chithra attended 1st Asian Oral and Maxillofacial Surgery PG Convention held at Mangalore from 29th to 31st August 2013 titled” Atypical Cephalometry for Ethnic Malaysian corrected by Orthognathic Surgery”.
5. Dr. Chithra A attended COSMOS 2013 & presented a poster titled “Glandular Odontogenic cyst of posterior maxilla – A Rare Entity held on 1st & 2nd February 2013 at Yenepoya University.
6. Dr. Ananddeep Shukla presented a poster titled “Glandular Odontogenic cyst of posterior maxilla – A Rare Entity at COSMOS 2013 held on 1st & 2nd February 2013 at Yenepoya University.
7. Dr. Ananddeep Shukla attended 38th National Conference Association of Oral and Maxillofacial Surgeons of India & presented a paper titled Atypical Cephalometry for an ethnic Malaysian treated by orthognathic surgery at Bhubaneswar, Odisha, India from 21st to 23rd November, 2013.
8. Dr. Ambika Pradeep presented Paper in 1st Asian Oral and Maxillofacial Surgery PG Convention held at Mangalore from 29th to 31st August 2013 titled “Orbital injuries”.
9. Dr. Ambika Pradeep attended 3rd Annual Conference of Karnataka State Chapter of AOMSI “Renaissance Revival in Oral and Maxillofacial Surgery” & presented a poster titled ”Distraction osteogenesis in hemifacial microsomia” held from March 7-9, 2013 at Manipal College of Dental Sciences, Manipal University, Manipal.
10. Dr. Satpal Singh presented a paper in 1st Asian Oral and Maxillofacial Surgery PG Convention held at Mangalore from 29th to 31st August 2013 titled “Distraction Osteogenesis – An Era in Maxillofacial Surgery.

11. Dr. Satpal Singh attended 3rd Annual Conference of Karnataka State Chapter of AOMSI “Renaissance Revival in Oral and Maxillofacial Surgery” & presented a poster on “Post traumatic deformity corrections” held from March 7-9, 2013 at Manipal College of Dental Sciences, Manipal University, Manipal.
12. Dr. Amit attended 38th National Conference Association of Oral and Maxillofacial Surgeons of India presented a Poster at Bhubaneswar, Odisha, India from 21st to 23rd November, 2013.
13. Dr. Amit attended 1st Asian Oral and Maxillofacial Surgery PG Convention held at Mangalore from 29th to 31st August 2013 presented a paper titled “Intricacies in Management of Mandibular Condylar Fractures – Retrospective Study”.
14. Dr. Amit attended 3rd Annual Conference of Karnataka State Chapter of AOMSI “Renaissance: Revival in Oral and Maxillofacial Surgery” & presented a poster on “Distraction osteogenesis as a primary treatment of TMJ ankylosis” held from March 7-9, 2013 at Manipal College of Dental Sciences, Manipal University, Manipal.
15. Dr. Neha Sharma attended 38th National Conference Association of Oral and Maxillofacial Surgeons of India & presented a Poster “Transmasseteric anterior parotid approach for management of condylar fracture” at Bhubaneswar, Odisha, India from 21st to 23rd November, 2013.
16. Dr. Neha Sharma presented a poster in 1st Asian Oral and Maxillofacial Surgery PG Convention held at Mangalore from 29th to 31st August 2013 titled “Sternocleidomastoid flap: Adding a new dimension to facial Esthetics”.
17. Dr. Neha Sharma attended 3rd Annual Conference of Karnataka State Chapter of AOMSI “Renaissance: Revival in Oral and Maxillofacial Surgery” presented a poster on “Surgical options in ameloblastoma” held from March 7-9, 2013.
18. Dr. Anukool Chube attended 38th National Conference Association of Oral and Maxillofacial Surgeons of India presented a Poster “Sterno cleidomastoid muscle flap: Adding a new dimension to facial esthetics” at Bhubaneswar, Odisha, India from 21st to 23rd November, 2013.
19. Dr. Anukool Chube presented a Poster in 1st Asian Oral and Maxillofacial Surgery PG Convention held at Mangalore from 29th to 31st August 2013 titled “Infantile cortical hyperostosis”.
20. Dr. Anukool Chube attended 3rd Annual Conference of Karnataka State Chapter of AOMSI “Renaissance: Revival in Oral and Maxillofacial Surgery” & presented a poster on “Mucormycosis of maxilla” held from March 7-9, 2013.

21. Dr. Prem Sasikumar attended 38th National Conference Association of Oral and Maxillofacial Surgeons of India & presented a Poster “Distraction osteogenesis in triad patients” at Bhubaneswar, Odisha, India from 21st to 23rd November, 2013.
22. Dr. Prem Sasikumar attended 1st Asian Oral and Maxillofacial Surgery PG Convention held at Mangalore from 29th to 31st August 2013 presented a poster titled “ Distraction Osteogenesis in a Triad Patient
23. Dr. Prem Sasikumar attended 3rd Annual Conference of Karnataka State Chapter of AOMSI “Renaissance: Revival in Oral and Maxillofacial Surgery” presented a poster on “Surgical options in bimaxillary protrusion” held from March 7-9, Feb, 2013.

2014

1. Dr. Abhay. T. Kamath delivered Key note lecture at KLE Vishwanath Katti Institute of Dental Sciences, Belgaum on 27th, 28 and 29th March 2014
2. Dr. Abhay T Kamath 18th National Mid-Term Conference at APMOSI and PG Convention to be held at Trissur, Kerala from May 23-25 2014.
3. Dr. Abhay T. Kamath Delivering a Guest Lecture on "Evaluation of Orthognathic case- A Surgeon's perspective on 14th and 15th June 2014.
4. Dr. Abhay T Kamath delivered Key note lecture on AO Instrumentation AOCMF Introductory Seminar at Mangalore from 28 Feb to 1st March 2014
5. Dr. K. M. Cariappa delivered lecture at 1st Global Manipal Alumni Health, Science & Technology Convention from 7th to 8th August 2014 at The Royale Chulan Kaula Lumpur
6. Dr. K. M. Cariappa presented paper at the 8th in house conference at Kota Kinabalu Specialist Centre on 28th and 29th October 2014
7. Dr. Manish Bhagania presented scientific paper titled “Scan the Canal...Save the nerve” at 2nd Interstate & 42nd Karnataka state Dental conference held on 28th, 29th, & 30th November 2014 at Sahyadri Institute of Technology, Mangalore
8. Dr. Chithra. A presented scientific paper titled “Uncommon presentation of common tumour” at 2nd Interstate & 42nd Karnataka state Dental conference held on 28th, 29th & 30th November 2014 at Sahyadri Institute of Technology, Mangalore
9. Dr. Chithra. A presented a poster during Facethetics 2014 held at Bangalore on 1st and 2nd August 2014
10. Dr. Adarsh Kudva presented poster titled Management of Oral Submucous fibrosis- Manipal Experience at 14th Annual conference of the Foundation for Head and Neck Oncology

11. Dr. Ananddeep Shukla presented scientific paper titled “All roads into Rome-Our experience in the management of Ameloblastoma” at 2nd Interstate & 42nd Karnataka state Dental conference held on 28th,29th,&30th November 2014 at Sahyadri Institute of Technology, Mangalore
12. Dr. Srikanth G presented scientific paper titled Spectrum of oral and maxillofacial infections at 67th Indian dental conference on 21st -23rd February 2014 Hitex Hyderabad.
13. Dr. Srikanth G presented scientific paper titled Palatal fractures at AOMSICON 2014 39th national conference on 14th -16th November 2014 at Goa.
14. Dr. Hardik presented poster on Management of Cyst in Maxillofacial region – Different treatment modalities, AOMSICON 2014 at 39th national conference on 14th -16th November 2014 at Goa.
15. Dr. Surbhi Chowdhery presented poster on Tuberculous Osteomyelitis -case report in AOMSICON 2014 at 39th national conference on 14th -16th November 2014 at Goa.

12. Placement record of the past students and the contribution of the department to aid student placements

S. No	Year of passing postgraduate course	Name of the student	Institution where employed
1	April 2012	Dr. Anand Deep Shukla	Manipal College of Dental Sciences, Manipal
2	April 2012	Dr. Jemish Desai	Indian Army Major
3	April 2013	Dr. Anand Mohan	Sri Sai Dental College, Hyderabad
4	April 2013	Dr. Mukund Gupta	Safdurjung Hospital, Delhi
5	April 2014	Dr. Amit Bamboo	Jaipur Dental College
6	April 2014	Dr. Satpal Singh	Private Practice, Dubai
7	April 2014	Dr. Ambika Pradeep	Junior Dentist, New Zealand

13. Plan of action of the department for the next five years

- In the next five years we plan to take help from senior experts from India and abroad, plan to operate on complex cases of craniofacial trauma and dentofacial deformities.

- After the Annual State Conference is over, we plan to organize CDE at regular intervals to focus on key areas as applicable for the benefit of residents and delegates.
- There is a plan to visit national and foreign universities to acquire higher fellowships in the field of Distraction Osteogenesis and Esthetic surgeries

PROSTHODONTICS AND CROWN AND BRIDGE

1. Faculty profile-adequacy and competency of faculty

The teaching faculty meets the stipulated requirements of the statutory body (i.e. Dental Council of India) with respect to undergraduate and postgraduate training. The entire faculty therefore have competency as laid down by DCI. The faculty maintains and upholds the standards and competency by keeping abreast of latest developments in the field and regularly attends workshops and conferences to meet higher standards.

S. No	Name of faculty member	Qualification	Designation	Number of years of teaching experience (As of 31 st December 2014)
1.	Dr. Dhanasekar B	MDS	Professor and Head	12
2.	Dr. Aparna IN	MDS	Professor	16
3.	Dr. Veena Hegde	MDS	Professor	18
4.	Dr. Pradeep S	MDS	Addl. Prof.	11
5.	Dr. Nayana Prabhu	MDS	Assoc. Prof.	08
6.	Dr. Vinu Thomas George	MDS	Assoc. Prof.	08
7.	Dr. Lokendra K Gupta	MDS	Asst. Prof.	03
8.	Dr. Jyoti Hassija	MDS	Asst. Prof.	03
9.	Dr. Uday Shankar	BDS	Lecturer	01
10.	Dr. Apurv Jhawar	BDS	Lecturer	01
11.	Dr. Eshan Verma	BDS	Lecturer	01
12.	Dr. Vasudha	BDS	Lecturer	<01
13.	Dr. Vani Verma	BDS	Lecturer	01

Category	Sanctioned (as per DCI)	Filled
Teaching staff	08	08
Lecturer	04	05

2. Student profile entry level competencies, socioeconomic status, language proficiency etc.

Refer Annexure 01. Student Profile for details

3. Changes made in the courses or programmes during the past two years and the contribution of the faculty to those changes

The course is regulated by DCI and the department strictly complies with the syllabus and the guidelines of the DCI and the same is endorsed by the Board of Studies, Manipal University. The examinations conducted reflect the synergy between the clinic-pathologic field and are designed in as Objective a manner.

- Change in examination pattern
- Objective test assessment included
- Amendment in curriculum of BDS (course reverted back to four years with one year compulsory rotating internship implemented from August 2011).

4. Trends in the success and drop-out rates of students during the past two years

BDS Second Year

Year of examination	Total no. of students appeared	Total no. of students passed	Percentage of pass	Dropouts
June 2012	96	94	98	0
Nov 2012	05	04	80	0
June 2013	93	93	100	0
Nov 2013	06	06	100	0
June 2014	97	96	99	0
Nov 2014	02	02	100	0

BDS final year

Year of examination	Total no. of students appeared	Total no. of students passed	Percentage of pass	Dropouts
Jan 2012	11	08	72.73	0
June 2012	06	05	83.3	0
Aug 2012	87	86	98.9	0
Dec 2012	08	07	87.5	0
July 2013	86	82	97	0
Dec 2013	08	06	75	0
July 2014	93	88	95	0
Dec 2014	12	10	92	0

MDS

Year of examination	Total no. of students appeared	Total no. of students passed	Percentage of pass	Dropouts
April 2012	04	04	100	0
April 2013	04	04	100	0
April 2014	03	03	100	0

Dental mechanic course

Year of examination	Total no. of students appeared	Total no. of students passed	Percentage of pass	Dropouts
2012	NIL	NIL	NIL	NIL
2013	NIL	NIL	NIL	NIL
2014	NIL	NIL	NIL	NIL

Certificate course in Implantology

Year of examination	Total no. of students appeared	Total no. of students passed	Percentage of pass	Dropouts
August 2012	20	20	100	0
August 2013	19	19	100	0
August 2014	15	15	100	0

5. Learning resources of the departments - library, computers, laboratories and other resources

Description of resource	Quantity
Textbooks of Complete dentures	18
Textbooks of Partial dentures	30
Textbooks of Maxillofacial prosthetics	31
Manuals	06
Computer with internet facility	01
IPS Empress ceramic unit	02
Furnace burnout	04

Multimat NTX press ceramic unit furnace	01
Degussa Gold polishing unit	01
Degussa multi vacumat	01
Casting machine	06
Omec die cutting machine	02
Valplast flexible denture machine	01
Sirio hydraulic bench press	03
Orion pressure molding machine	02
Hanau wide view articulators	10
Hot air oven	01
Pindex die system	07
Sprue cutting machine	01
Sand blasting machine	03
Pressure pot	03
Electro Polishing unit	01
Micro Surveyor	02
Spindle grinder	01

6. Modern teaching methods practiced and use of ICT in teaching-learning

BDS, DMC and PG Diploma

- Use of LC Display (power point)
- Small group teaching
- Tutorials
- Assignments
- Revision tests

MDS

- Seminars
- Chair side discussion in clinics
- Case discussion
- Exams preparatory discussions
- CDE lecture and hands on programmes
- Inter-department clinical club

7. Participation of teachers in academic and personal counseling of students

Faculty members are involved in the academic counseling (poor performance or poor attendance) of the students. The counseling is conducted at the end of each periodic examination.

8. Details of faculty development programmes and teachers who have been benefited during the past two years

2012

S. No	Details of the program	Attended by
1.	“Full Mouth Rehabilitation” A Compromised Approach. Held on the 2 nd Feb 2012 at Attavar Campus MCOODS Mangalore.	Dr. Aparna I.N., Dr. Veena Hegde, DR. Pradeep S, Dr. Nayana Prabhu, Dr. Vinu Thomas, Dr. Mahesh, Dr. Gagan Khanna, Dr. Manawar, Dr. Lokendra Gupta, Dr. Jyoti,
2.	“Periodontal Medicine”. Held on the 1 st Sep 2012 at MCOODS Manipal.	Dr. Aparna I.N., Dr. Veena Hegde, Dr. Pradeep S, Dr. Nayana Prabhu, Dr. Vinu Thomas, Dr. Gagan Khanna, Dr. Lokendra Gupta
3.	360 ⁰ in Complete Denture held on 22 nd October 2012 at MCOODS Manipal.	Dr. Aparna I.N., Dr. Veena Hegde, Dr. Pradeep S, Dr. Nayana Prabhu, Dr. Vinu Thomas, Dr. Manawar Dr. Lokendra Gupta,

2013

S. No	Details of the program	Attended by
1.	CDE programme on Surgical site development in compromised mandibular and maxillary Ridges and soft tissue for intra oral Endosteal implants for rehabilitating partially dentate/edentulous patients by	Dr. Veena Hegde

	osseointegrated supported prosthesis conducted by A. B. Shetty Memorial Institute of Dental Sciences, Nitte University Mangalore on 27 th and 28 th March 2013	
2.	Towards success in research-need for best practice organized by MCOODS Manipal on 6 th July 2013	Dr. Dhanasekar B, Dr. Aparna I.N, Dr. Veena Hegde,, Prabhu, Dr. Vinu Thomas, Dr. Pradeep, Dr. Lokendra Gupta, Dr. Jyoti Hassija
3.	CDE program on “Implant – Solutions” at Yenepoya University Campus, Deralakatte, Mangalore on 17 th August, 2013.	Dr. Vinu Thomas
4.	Emerging Trends in Dental Education by Dr. K. Ramnarayan, Dr. Sudhakar Nayak and Dr. Ciraj organized by MCPD Manipal on 17 th Sep 2013	Dr. Dhanasekar B, Dr. Aparna I.N., Dr. Veena Hegde,, Prabhu, Dr. Vinu Thomas, Dr. Pradeep, Dr. Lokendra Gupta, Dr. Jyoti Hassija
5.	Spectrum’13 by Dr. Arvind Shenoy and Dr. Kundabala shenoy organized by MCOODS Manipal on 24 th Oct 2013	Dr. Dhanasekar B, Dr. Aparna IN, Dr. Veena Hegde, Prabhu, Dr. Vinu Thomas, Dr. Pradeep, Dr. Lokendra Gupta, Dr. Jyoti Hassija
6.	Excellence In Dental Research by Dr. Arun and Dr. Joseph Thomas organized by MCOODS Manipal on 16 th Nov 2013	Dr. Lokendra Gupta
7.	Workshop on Electronic communication organized by Manipal Centre for Professional and Personal Development(MCPD) on 28 th December 2013	Dr. Veena Hegde

2014

S.	Details of the program	Attended by
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No		
1.	Workshop on “Teachers Effectiveness” on 25 th January 2014 organized by Manipal Center for Professional and Personal Development	Dr. Dhanasekar B, Dr. Aparna I.N., Prabhu,
2.	Mini workshop for Post graduate Dissertation Guides organized by Manipal unit of UNESCO Chair in Bioethics on 27 th June, 2014 at Kasturba Medical College, Manipal University, Manipal.	Dr. Dhanasekar B, Dr. Aparna I.N, Dr. Vinu Thomas, Dr. Veena Hegde
3.	“Intellectual property rights” organized by MCPD Manipal on 14 th August 2014.	Dr. Dhanasekar B, Dr. Aparna I.N., Dr. Veena Hegde,, Prabhu, Dr. Vinu Thomas, Dr. Pradeep, Dr. Lokendra Gupta, Dr. Jyoti Hassija
4.	Workshop on Persuasive Communication organized by MCPD, Manipal University on 28th & 29th November 2014	Dr. Dhanasekar B, Dr. Aparna
5.	Diagnosis and Ethics-a Straddle for oral cancer care by Dr. Nirmala N Rao and Dr. Vidya Sagar organized by MCODES Manipal on 13 th December 2014	Dr. Lokendra Gupta
6.	Work shop at the International Conference on Computational methods in Engineering and Health Sciences organized by the Directorate of Research, Manipal University, Manipal during 15-16 December, 2014	Dr. Dhanasekar B, Dr. Aparna I.N, Prabhu,

9. Participation/contribution of teachers to the academic activities including teaching, consultancy and research

Teaching

All the faculty members are involved in the undergraduate and postgraduate teaching. In addition, faculty members of the department are involved in the following academic activities

- In planning and execution of lesson plan, lecture schedule and delivery of lecture contents
- Demonstration and supervision of practical/clinical work of the students
- Members of the Board of studies
- Preparation of question papers and curriculum design.
- As members in various committees set up by the college
- Involved in Quality management system and environmental management system

Consultancy

- Department of prosthodontics is involved in consultancy with various medical as well as dental departments.

Research by faculty

S No.	Title	Faculty Involved
1.	Performance evaluation of a novel dental implant system	Dr. Aparna IN

10. Collaboration with other departments/institutions, at the state, national and international levels, and their outcome during the past two years.

2012

1. Dr. Donny Philip Varughese completed a project titled 'Evaluation of the effect of an antimicrobial agent on the physical properties of an irreversible hydrocolloid impression material- an in vitro study' under the guidance of Dr. Veena Hegde in collaboration with Department of Dental Materials MCOODS, Manipal.
2. Dr. Gurkaran Preet Singh completed a project titled 'In vitro evaluation of the influence of surface treatment of artificial tooth on the adhesive bond strength to a commercially available denture base resin' under the guidance of Dr. Veena Hegde in collaboration with Department of dental materials, MCOODS, Manipal and School of life sciences, Manipal.
3. Dr. Puneeth Hegde completed a project titled 'Comparison of stress patterns in edentulous mandibular bone around; two-implant retained four-implant retained overdenture and all-on-four concept. A three dimensional finite element analysis' under the guidance of Dr. Dhanasekar B in collaboration with Department of Aeronautical Engineering, MIT, Manipal.
4. Dr. Lingeshwar D completed a project titled 'Quantification of residual monomer in commonly available heat cured denture base products using high performance liquid

chromatography- an in vitro study’ under the guidance of Dr. Aparna IN in collaboration with Department of Quality Assurance, MCOPS, Manipal.

2013

1. Dr. Manav Kalra completed a project titled , An in vitro study to evaluate the dimensional accuracy of autoclavable and non-autoclavable polyvinylsiloxane impression materials subjected to disinfection and steam autoclave sterilization procedures under the guidance of Dr. Dhanasekar B in collaboration with Department of mechanical and manufacturing engineering, MIT , Manipal
2. Dr. Tapan Tirumala Teja completed a project titled, “A comparative evaluation of metal to ceramic bond strength of Ni-Cr and Co-Cr alloys subjected to repeated castings – A in vitro study” under the guidance of Dr. Pradeep in collaboration with Department of community Dentistry and Department of Dental Materials , MCOADS, Manipal
3. Dr. Karthik Sivaraman completed a project titled, Effect of time and disinfection on dimensional accuracy of vinylsiloxanether impression material under the guidance of Dr. Aparna in collaboration with department of Microbiology , KMC, Manipal
4. Dr. Lakhveer Kaur completed a project titled, Evaluation of the antibacterial properties and flexural strength of heat cure acrylic resin modified with tetrapod like zinc oxide whiskers under the guidance of Dr. Veena Hegde in collaboration with Department of oral pathology MCOADS, Manipal and microbiology and Department of Microbiology, KMC , Manipal

2014

1. Dr. Shraddha Doshi completed a project titled ‘Evaluation of the effect of food simulating liquids and artificial saliva on the mechanical properties of provisional restorative materials’ restorations’ under the guidance of Dr. Veena Hegde in collaboration with Department of Dental Materials, MCOADS, Manipal and Department of mechanical engineering and Department of Biochemistry, KMC, Manipal.
2. Dr. Meghna Chauhan completed a project titled ‘Comparative study of bond strength of commercially available temporary soft liners to different types of denture base resins- an in vitro study’ under the guidance of Dr. Aparna I N in collaboration with Department of Dental Materials , MCOADS, Manipal and School of Life sciences, MU, Manipal.
3. Dr. Archana Harsha completed a project titled ‘Comparative evaluation of conventional heat cure and commercially available hypoallergenic denture base resins for color stability- an in vitro study under the guidance of Dr. Aparna I N in collaboration with department of Printing and Media engineering , MIT , Manipal

4. Dr. Sangeetha Nair completed a project titled 'Evaluation of the bond strength between ceramic to Ni-C and Co-Cr alloys after repeated firing cycles- an in vitro study' under the guidance of Dr. Aparna I N in collaboration with Department of Dental Materials, MCOADS, Manipal

Ongoing projects

1. Dr. Tanuka Dutta a study titled An in vitro study to evaluate the marginal fit of castings with varying sprue diameter and using ring and ringless casting technique' under the guidance of Dr. Vinu Thomas
2. Dr. Sonam Gupta a study titled Comparative evaluation of different types of impression trays and elastomeric impression materials on the accuracy of open tray implant impression – an in vitro study under the guidance of Dr. Aparna IN
3. Dr. Akanksha Sachdeva a study title 'Effect of conventional and microwave glazing on surface roughness, color and flexural strength of metal ceramic systems – an in vitro study under the guidance of Dr. Nayana Prabhu
4. Dr. Pankaj Kulkarni , a study 'Comparative evaluation of the influence of different taper on retention of metal crowns using two resin cements under the guidance of Dr. Veena Hegde.
5. Dr. Shashwat Jain a study 'Evaluation of dimensional accuracy of an implant cast obtained using diverse splinting materials in an open tray multiple implant impression - in vitro study 'under the guidance of Dr. Dhanasekar B.
6. Dr. Neha Chugh a study 'To compare the flexural properties of three commercially available heat cure denture base resins after long term water immersion an in vitro study' under the guidance of Dr. Pradeep S.
7. Dr. Anasua Debnath a study 'Comparative evaluation of certain surface characteristics and color stability of two different types of ceramics when surface treated with bleaching agents, fluorides and different types of beverages – an in vitro study' under the guidance of Dr. Pradeep S.
8. Dr. Sushma Yadav a study 'Evaluation of mechanical properties of polymethyl methacrylate denture base resin incorporated with acrylamide 'under the guidance of Dr. Aparna IN.
9. Dr. Parampreet Kohli a study Comparative evaluation of efficacy of gingival retraction using chemical and mechanical methods: an in vivo study' under the guidance of Dr. Veena.

10. Dr. Saumya Kapoor a study ‘Comparison of the effect of different surface treatments on the bond strength of three different cements with nickel chromium metal alloy: an in-vitro study’ under the guidance of Dr. Veena.
11. Dr. Archit Choudhry a study Evaluation of the effect of surface treatment on bond strength of silt denture lining materials to an acrylic resin denture base ‘under the guidance of Dr. Dhanasekar B.
12. Dr. Varun Yarramaneni a study ‘An in-vitro comparative evaluation of flexural strength of two commercially available interim restorative resins impregnated with silane treated and untreated E- glass fibres’ under the guidance of Dr Veena Hegde.

11. Priority areas for research and details of the ongoing projects, important and noteworthy publications of the faculty, during past two years

Priority areas of research

- Dental Implants
- Maxillofacial prosthetics
- Dental ceramics
- Polymeric materials for prosthodontics applications

Ongoing

Category	Number
Funded research projects	-
Non-funded research projects	-
PhD research projects	01
PG research projects	12
UG research projects	-

Last three years (2012-2014)

		2014	2013	2012
Completed funded research projects		-	-	-
Completed non-funded research projects		-	-	-
Completed PhD research projects		-	-	-
Completed PG research projects		04	04	04
Completed UG research projects		-	-	
Publications	International	07	06	02

	National	07	03	06
Books		-	-	-
Chapters in books		-	-	-
Conference presentations	International	01	02	02
	National	07	06	08

Ongoing PG Projects

S. No.	Title	Name of the student	Guide
1	An in vitro study to evaluate the marginal fit of castings with varying sprue diameter and using ring and ringless casting technique.	Dr Tanuka Dutta	Dr Vinu Thomas
2	Comparative evaluation of different types of impression trays and elastomeric impression materials on the accuracy of open tray implant impression – an in vitro study	Dr Sonam Gupta	Dr Aparna IN
3	Effect of conventional and microwave glazing on surface roughness, color and flexural strength of metal ceramic systems – an in vitro study	Dr Akanksha Sachdeva	Dr Nayana
4	Comparative evaluation of the influence of different taper on retention of metal crowns using two resin cements	Dr Pankaj Kulkarni	Dr Veena Hegde
5	Evaluation of dimensional accuracy of an implant cast obtained using diverse splinting materials in an open tray multiple implant impression - in vitro study	Dr. Shashwat Jain	Dr Dhanasekar
6	To compare the flexural properties of three commercially available heat cure denture base resins after long term water immersion an in vitro study	Dr. Neha Chugh	Dr Pradeep
7	Comparative evaluation of certain surface characteristics and color stability of two different types of ceramics when surface	Dr. Anasua Debnath	Dr Pradeep S

	treated with bleaching agents, fluorides and different types of beverages – an in vitro study		
8	Evaluation of mechanical properties of polymethyl methacrylate denture base resin incorporated with acrylamide.	Dr. Sushma Yadav	Dr Aparna IN
9	Comparative evaluation of efficacy of gingival retraction using chemical and mechanical methods: an in vivo study	Dr Parampreet Kohli	Dr Veena Hedge
10	Comparison of the effect of different surface treatments on the bond strength of three different cements with nickel chromium metal alloy: an in-vitro study	Dr Saumya Kapoor	Dr Nayana
11	Evaluation of the effect of surface treatment on bond strength of soft denture lining materials to an acrylic resin denture base.	Dr Archit Choudhry	Dr Dhanasekar
12	An in-vitro comparative evaluation of flexural strength of two commercially available interim restorative resins impregnated with silane treated and untreated E- glass fibres	Dr Varun Yarramaneni	Dr Vinu Thomas

Completed PG projects

2012

S. No.	Title	Name of the student	Guide
1	Evaluation of the effect of an antimicrobial agent on the physical properties of an irreversible hydrocolloid impression material- an in vitro study	Dr Donny Philip Varughese	Dr. Veena Hegde
2	In vitro evaluation of the influence of surface treatment of artificial tooth on the adhesive bond strength to a commercially available denture base resin	Dr Gurkaran Preet Singh	Dr Veena Hegde
3	Comparison of stress patterns in edentulous mandibular bone around; two-implant retained four-implant retained overdenture and all-on-four	Dr Puneeth Hegde	Dr Dhanasekar B

	concept. A three dimensional finite element analysis		
4	Quantification of residual monomer in commonly available heat cured denture base products using high performance liquid chromatography- an in vitro study	Dr Lingeshwar D	Dr Aparna IN

2013

S. No.	Title	Name of the student	Guide
1	An in vitro study to evaluate the dimensional accuracy of autoclavable and non-autoclavable polyvinylsiloxane impression materials subjected to disinfection and steam autoclave sterilization procedures.	Dr Manav Kalra	Dr Dhanasekar
2	A comparative evaluation of metal to ceramic bond strength of Ni-Cr and Co-Cr alloys subjected to repeated castings – A in vitro study.	Dr Tapan Tirumala Teja	Dr Pradeep
3	Effect of time and disinfection on dimensional accuracy of vinylsiloxanether impression material.	Dr Karthik Sivaraman	Dr Aparna IN
4	Evaluation of the antibacterial properties and flexural strength of heat cure acrylic resin modified with tetrapod like zinc oxide whiskers.	Dr Lakhveer Kaur	Dr Veena Hedge

2014

S. No.	Title	Name of the student	Guide
1	Evaluation of the effect of food simulating liquids and artificial saliva on the mechanical properties of provisional restorative materials'	Dr Shraddha Doshi	Dr. Veena Hegde
2	Comparative study of bond strength of commercially available temporary soft liners to different types of denture base resins- an in vitro study	Dr Meghna Chauhan	Dr. Aparna IN
3	Comparative evaluation of conventional heat cure	Dr Archana	Dr.

	and commercially available hypoallergenic denture base resins for color stability- an in vitro study	Harsha	Pradeep S
4	Evaluation of the bond strength between ceramic to Ni-C and Co-Cr alloys after repeated firing cycles- an in vitro study'	Dr Sangeetha Nair	Dr. Veena Hegde

Details of Publications

2012

1. Ahmad M, Dhanasekar B, Aparna IN. A Comparative Evaluation of Linear Dimensional Accuracy of the dies obtained using three conceptually different die systems in the fabrication of implant prosthesis - An in vitro study. International Journal of Oral Implantology and clinical Research. 2012; 3(1) 17-23.
2. Aparna IN, Dhanasekar B, Lingeshwar D, Gupta L. Implant crest module: A review of biomechanical consideration. Indian J Dent Res. 2012; 23:257-63.
3. N Sridhar, Dr. Jyoti Hassija. Bruxism in children and adolescent patients. Manipal odontoscope 2012;4:33-37
4. S Manjunath, Dr, Shankar M, Dr. Pradeep Kumar, Dr. Vrinda Bhat, Dr. Nayana Prabhu, Asha Kamath, Raghvendra Babu. Palatal rugae patterns among the Indians at Manipal, India. Journal of pharmaceutical and biomedical sciences.2012 ,Vol 20,issue 20 , pages 1 to 5
5. Suraj R Suvarna, Dr. Pradeep Sherigar, Dr. Ankit Mehrotra, Dr. Bhaskar Agarwal Dr. Srishti Agarwal, Allergy to methyl methacrylate: A review. Clinical Dentistry, Mumbai September 2012 14 – 18
6. Tanya, Dr. Jothi Varghese, Dr. Jyoti Hassija. A pre prosthetic soft tissue augmentation using a simplified technique. J of interdisciplinary dentistry 2012 vol 2 (2) pages 138-140
7. Vinu Thomas George, Dr. Kamalakanth Shenoy. A comparative in vitro study on the physical properties of reused nickel - chromium alloy (Verasoft ®) using different proportions to fresh alloy (Verasoft ®). Journal of Indian Prosthodontic Society. 2012; :54-66
8. Vinu Thomas George, Veena Hegde. Distraction osteogenesis-An overview of principles and its applications. Indian journal of dentistry 2012 Oct. to Dec vol 3 issue 4 pages 222 to 225

2013

1. Gupta L, Aparna IN, Dhanasekar B, Kamath AT, Lingeshwar D, Agarwal P. Fabrication of a surgical splint in an emergency situation: a clinical report. *J Prosthodont.* 2013 Apr;22(3):223-5
2. Khanna G, VTT Teja, Pradeep S and Gupta L. An Approach towards Successfully Restoring a Partially Resected Dentulous Mandible. *J Orofac Res* 2013;3(3)221-224.
3. Singh GP, Sherrigar P, Khanna. Prosthetic conformer as a pressure device in the prophylactic management of postsurgical auricular keloid formation- *J Prosthodont.* 2013 Jan; 22(1):81-4.
4. Kollu S Hegde V & Chakravarthy K, .Efficacy of chlorhexidine in reduction of microbial contamination in commercially available alginate materials–In-vitro study. *Global Journal of Medical Research,* 2013 13(2).
5. Mundathaje, M., & Hegde, V. Effect of infection control aids on polymerization inhibition of polyvinyl siloxane impression materials–An in vitro study. *Indian Journal of Dentistry,* 2013 4(1), 18-21.
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2014

1. Lokendra Gupta, I. N. Aparna, B. Dhanasekar, Nayana Prabhu, Nirjalla Malla, Priyanka Agarwal. Three-Dimensional Orientation of Iris in an Ocular Prosthesis Using a Customized Scale. *J Prosthodont* 23 (2014), 252-255.

2. Anish Goyal, Aparna I N, Dhanasekhar B, Pradeep S, Nayana Prabhu. Aiding phonetics by adding palatal rugae in a balanced complete denture- A case report. Manipal Odontoscope , vol 6 ,2014 ,Page no 32-34.
3. Alex Leo Sequeira, Aparna I N, Dhanasekhar B, Pradeep S, Nayana Prabhu. Posterior tooth replacement with a Resin bonded bridge- A case report. Manipal Odontoscope, vol 6, 2014, Page no 35-38.
4. Akanksha Sachdeva, Pankaj Kulkarni, Aparna I N, Dhanasekhar B, Pradeep S, Nayana Prabhu. Digital Dentures-An Emerging paradigm in Prosthodontics. Manipal Odontoscope, vol 6, 2014 , Page no70-75.
5. Jyothi H. Healthy lifestyle for healthy gums: Dentistry, Vol 4(6),2014:1-8
6. Jyothi H. An in vitro study on effect of Ceramic thickness and multiple firings on color of metal ceramic restorations. Journal of Indian prosthodontic society. DOI 10.1007/s13191-014-0370-2
7. Gupta L, Aparna I, Balakrishnan D, Deenadayalan L, Hegde P, Agarwal P¹. Cranioplasty with custom made alloplastic prosthetic implant: A case report. World J Clin Cases. 2014 Sep 16;2(9):482-7
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9. Hegde, V, Rodrigues S.J., & Saldanha. S. Redefining the treatment modalities for denture stomatitis-A review. International Journal of Research in Dentistry,2014 4(2), 8-27.
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11. Goyal S, Goyal MK, Balkrishnan D, Hegde V, Narayana AI. The posterior palatal seal: Its rationale and importance: An overview Eur J Prosthodont 2014;2:41-7
12. Hegde V, Acharya SR, Singh GP. Validity of crown to root ratio as a prognostic tool in clinical practice. Journal of Evolution of Medical and Dental Sciences 2014; Vol. 3, Issue 74, December 29; Page: 15589-15599
13. Mallika S Shetty, Rekha P. Shenoy, Vinu Thomas George. Role of self-care practices and denture maintenance in oral health. Journal of orofacial research. 2014 Jan-Mar; 4(1): 7 – 11
14. Hegde P, Shetty S and Gupta L. Role and Importance of Forensic Odontology in Identification. International Interdisciplinary Journal of Scientific Research 2014;1(3):64-69.

Details of Conference Presentations

2012

1. Dr. Aparna IN attended and presented a poster at 65 Indian Dental Conference on 9th to 12th February 2012 IDA- Pepsodent poster competition conducted by Maharashtra Dental Council, IDA Mumbai Branch
2. Dr. Nayana Prabhu attended and presented a poster at 65 Indian Dental Conference on 9th to 12th February 2012 IDA- Pepsodent poster competition conducted by Maharashtra Dental Council, IDA Mumbai Branch.
3. Dr. Jyoti Hassija attended 8th Biennial Conference, Pediatric Dentistry Association of Asia, Bali-Indonesia, May 25th and 26th, 2012.
4. Dr. Manawar Ahmad attended and presented paper title “An Innovative Technique to Fabricate Palatal lift prosthesis for a patient with cleft lip and palate associated with mutilated dentition – A case report at FDI Conference on 28th August 2012 to 1st September 2012 Hong Kong.
5. Dr. Aparna I.N. chaired the session of paper presentation at 40th Indian Prosthodontics Society Conference and 8th Biennial meeting of Asian academy of prosthodontics Dec. 5th to 9th 2012, Chennai, India.
6. Dr. Pradeep S. Presented paper titled “Shortened Dental Arch” at 40th Indian Prosthodontics Society Conference and 8th Biennial meeting of Asian academy of prosthodontics Dec. 5th to 9th 2012, Chennai, India.
7. Dr. Nayana Prabhu presented paper Titled “The Anterior reference point – A Dilemma” at 40th Indian Prosthodontics Society Conference and 8th Biennial meeting of Asian academy of prosthodontics Dec. 5th to 9th 2012, Chennai, India.
8. Dr. Vinu George Thomas Presented paper titled “Significance of Psychological Assessment is the successful rehabilitation of maxillofacial trauma cases” at 40th Indian Prosthodontics Society Conference and 8th Biennial meeting of Asian academy of prosthodontics Dec. 5th to 9th 2012, Chennai, India.
9. Dr. Gagan Khanna presented paper ‘Hobo’s Twin stage technique revisited Augmented stability at an implant supported over denture - Case report’ at 40th Indian Prosthodontics Society Conference and 8th Biennial meeting of Asian academy of prosthodontics Dec. 5th to 9th 2012, Chennai, India.
10. Dr. Lokendra Gupta presented paper Titled “Sculpting the Cranium using custom made Alloplastic Implant at 40th Indian Prosthodontics Society Conference and 8th Biennial meeting of Asian academy of prosthodontics Dec. 5th to 9th 2012, Chennai, India.

2013

1. Dr. Veena Hegde attended and chaired the session of paper presentation at 41st Indian Prosthodontic Society National Conference held at Ahmedabad, Gujarat from 13th - 17th November 2013
2. Dr. Jyothi Hass did a paper presentation at 41st KSDC IDA conference held at Coorg from 27th-29th November 2013
3. Dr. Nayana Prabhu presented a poster at the FDI/CDA/SLDA Joint International Conference held in Colombo, Srilanka on 28-30 June 2013
4. Dr. Dhanasekar B, Chaired the scientific session at the 2nd Karnataka Prosthodontic Society Conference held on September 18th -20th, 2014 at JSS Dental College and Hospital, Mysore.
5. Dr. Aparna I N, Chaired the scientific session at the 2nd Karnataka Prosthodontic Society Conference held on September 18th -20th, 2014 at JSS Dental College and Hospital, Mysore.
6. Dr. Nayana Prabhu, Chaired the scientific session at the 2nd Karnataka Prosthodontic Society Conference held on September 18th -20th, 2014 at JSS Dental College and Hospital, Mysore.
7. Dr. Pradeep S, Chaired the scientific session at the 2nd Karnataka Prosthodontic Society Conference held on September 18th -20th, 2014 at JSS Dental College and Hospital, Mysore.
8. Dr Vinu Thomas presented a paper at 41st Indian Prosthodontic Society Conference at Gujarat University Convention and Exhibition Centre, Ahmedabad on November 14th to 17th, 2013.

2014

1. Dr Vinu Thomas attended 67th Indian dental conference held at Hitex, Hyderabad from 21-23rd February 2014.
2. Dr Pradeep S presented a paper on Occlusal prematurities no more a challenge at IDC Hyderabad , 21-22 Feb, 2014
3. Dr Dhanasekar B , delivered a guest lecture at 4th Borneo Dental Congress , MDA Eastern Zone, Kuching, Sarawak, East Malaysia, 22-23rd February 2014
4. Dr Jyothi Hassija did a poster presentation at the 36th Asia Pacific Dental Congress held at Dubai world trade center, Dubai between 17-19th June 2014.
5. Dr. Veena Hegde attended and chaired the scientific session at 21st Indian Society of Oral Implantologist Conference held at Chennai from 2nd-4th October 2014

6. Dr Lokendra Gupta presented a poster on Quintessence Aesthetic with Acrylic Gum Veneer- A case Series. 2nd Inter State & 42nd Karnataka State Dental Conference held in Mangalore from 28th to 30th November 2014.
7. Dr Vinu Thomas presented a paper at 42nd Indian Prosthodontic Society Conference at Park Plaza Convention Centre, Chandigarh on November 6th to 8th, 2014.
8. Dr Aparna presented a paper on Effect of Grid Size on Fatigue Calculations of A Dental Implant at the International Conference on Computational methods in Engineering and Health Sciences organized by the Directorate of Research, Manipal University , Manipal during 15-16 December, 2014

12. Placement record of the past students and the contribution of the department to aid student placement

S. No	Year of completion	Name of the Postgraduate	Institution where employed
1.	2012	Dr. Donny Phillip	Vassan Dental Care , Kerala
2.	2012	Dr. Puneeth Hegde	Manipal College of Dental Sciences, Mangalore
3.	2012	Dr. Lingeshwar D	Madha Dental College , Chennai
4.	2012	Dr. Gurukaran	Working in Max Hospital, Chandigarh, Punjab
5.	2013	Dr. Manav Kalra	Kalra Dental Clinic, New Delhi
6.	2013	Dr. Tapan Vallabhaneni	Pursuing DDS is USA
7.	2013	Dr. Karthik Sivaraman	FOD, Melaka Manipal Medical College, Manipal
8.	2013	Dr. Lakhveer Kaur	Army, Jammu and Kashmir
9.	2014	Dr. Shraddha Doshi	Pursuing DDS is USA
10.	2014	Dr. Meghna Chauhan	Malla Reddy College, Hyderabad
11.	2014	Dr. Sangeeta Nair	Kamineni Institute of dental sciences, Hyderabad

13. Plan of action of the department for the next five years

- Introduce problem based learning in the undergraduate curriculum

- Organize denture camps for the under privileged in rural areas
- Encourage collaborative research
- Encourage publication in high impact journals
- Encourage faculty to register for PhD
- Develop indigenous biomaterials for prosthodontic practice
- Establish multisystem implantology programme

PEDODONTICS AND PREVENTIVE DENTISTRY

1. Faculty profile - adequacy and competency of faculty:

The teaching faculty meets the stipulated requirements of the statutory body (i.e. Dental Council of India) with respect to undergraduate and postgraduate training. The entire faculty therefore have competency as laid down by DCI. The faculty maintains and upholds the standards and competency by keeping abreast of latest developments in the field and regularly attends workshops and conferences to meet higher standards.

S. No.	Name	Qualification	Designation	Experience in years (As of 31 st December 2014)
1	Dr. Rashmi Nayak	MDS	Professor and Head	14
2	Dr. Sridhar. N	MDS	Assoc. Prof.	07
3	Dr. Deepika Pai	MDS	Assoc. Prof.	07
4	Dr. Sumit Gaur	MDS	Assoc. Prof.	05
5	Dr. Saurabh Kumar	MDS	Reader	04
6	Dr. Mirza Aumir Beg	MDS	Lecturer	<01
7	Dr. Mariam Sophia	BDS	Lecturer	01
8	Dr. Jakka Sabareesh	BDS	Lecturer	01

Category	Sanctioned (as per DCI)	Filled
Teaching staff	04	06
Lecturer	-	02

2. Student profile – entry level competencies, socioeconomic status, language proficiency etc.

Refer annexure 01, student profile for details

3. Changes made in the courses or programs during the past two years and the contribution of the faculty to those changes

The course is regulated by DCI and the department strictly complies with the syllabus and the guidelines of the DCI and the same is endorsed by the Board of Studies, Manipal University. The examinations conducted reflect the synergy between the clinic-pathologic field and are designed in as Objective a manner.

- Change in examination pattern with inclusion of MCQs and short answers
- Pedodontics and Preventive Dentistry has been moved to Part-II BDS curriculum according to DCI amendment August 2011.
- OSCE is included in clinical examination pattern.
- Table clinic presentations were introduced for undergraduate students and all the faculty members are actively involved in mentoring the same.

4. Trends in the success and drop-out rates of students during the past two years:

Course	Pass Percentage			Drop outs		
	2012	2013	2014	2012	2013	2014
BDS	100	100	98	0	0	0
MDS	100	100	100	0	0	0

5. Learning resources of the departments - library, computers, laboratories and other resources:

Description of resource	Quantity
Textbooks	30
Journals	33
Dissertations	135
Library dissertations	30
Computer with internet connection	01
Special child care room	01
Root ZX	01
Conscious Sedation Unit	01
RVG	01
Intraoral camera	01
Velopex (automatic X-ray processor)	01
Diagnodent	01
Counseling room	01
PG seminar room	01
PG laboratory	01
Televisions for patient education and behavior management	04
School based dental clinics under school dental health programme	02

Anesthesia work station	01
New dental chairs	03
LCD Projector	01
Manual X ray developer machine	01

6. Modern teaching methods practiced and use of ICT in teaching – learning:

- Introduced problem oriented learning have developed material for same in the department
- Table clinic presentations for undergraduate students
- Video demonstrations of clinical procedures for undergraduate students
- Chair side demonstration of clinical procedures on models or extracted teeth for undergraduate students
- Model exercises for undergraduate students during clinical hours

7. Participation of teachers in academic and personal counseling of students

- All the faculty involvement in counseling for attendance and academic performance

8. Details of faculty development programs and teachers who have been benefited during the past two years

2012

S. No	Title of the program and details (Date and place)	Attended by
1	Attended CPD program on ‘Predictable Esthetic Restorations’ organized by the Department of Conservative Dentistry and Endodontics, Manipal College of Dental Sciences, Manipal on 1 st March 2012.	Dr. Rashmi Nayak Dr. Sridhar N. Dr. Deepika Pai Dr. Sumit Gaur
2	Attended CDE program and conducted hands on course on 30 April 2012 at Babu Banarasi Das College of Dental Sciences, Lucknow.	Dr. N. Sridhar
3	Attended CDE program on ‘Anterior Esthetics with composites’ conducted by KVG Dental College and Hospital, Sullia on 16 July 2012.	Dr. Deepika Pai
4	Attended CDE program on ‘Periodontal Medicine’ conducted by Department of Periodontology on first September 2012.	Dr. Sumit Gaur Dr. N. Sridhar

5	Attended CPD program on 'Bridging the gap between oral and systemic health' organized by Department of Periodontology, Manipal College of Dental Sciences, Mangalore on 14 July 2012.	Dr. Saurabh Kumar
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2013

1	Attended CPD program SPECTRUM'13 held on the 24th October 2013, at MCOODS, Manipal.	Dr. Rashmi Nayak Dr. Deepika Pai Dr. Saurabh Kumar
2	Attended CPD on "Emerging trends in dental education" at MCPD: 17th September 2013 at Manipal.	Dr. Rashmi Nayak Dr. Saurabh Kumar
3	Work shop on curriculum designing at MCPD Manipal on 9 th July 2013	Dr. Rashmi Nayak
4	Attended CPD: Towards success in research- Need for best practices at MCOODS Manipal 6th July 2013	Dr. Rashmi Nayak Dr. N. Sridhar Dr. Deepika Pai Dr. Sumit Gaur
5	Attended CDE program "Excellence in dental research" held on 16th November 2013 at MCOODS Manipal.	Dr. Rashmi Nayak
6	CDE on patient evaluation and peripost- operative care in OMFS on 30 March 2013 at Yenepoya Dental College Mangalore	Dr. Deepika Pai

2014

1	Attended work shop on "Systematic review and meta-analysis", on 22 nd and 23 rd August 2014 at MCOODS Manipal.	Dr. Rashmi Nayak
2	Attended CPD: PedoApp 2014 on 30th July 2014 at Mangalore	Dr. Sridhar N
3	Work shop on "Effective electronic communication" 4th January 2014 at MCPD Manipal.	Dr. Rashmi Nayak
4	Attended CDE program "Moulding smiles & changing lives" held on 13th & 14th August 2014 at MCOODS, Manipal.	Dr. Rashmi Nayak Dr. N. Sridhar Dr. Deepika Pai Dr. Sumit Gaur

		Dr.Saurabh Kumar Dr. Aumir beg
5	“Updates in adhesive industry, composite, cements galore” on 3 rd march 2014 at MCOODS, Manipal	Dr.Saurabh Kumar

9. Participation / contribution of teachers to the academic activities including teaching, consultancy and research

Teaching:

- The entire faculty is actively involved in teaching UG and PG students.
- QP preparation
- Members of Board studies
- Internal/ External Examiners
- Members of counsel of college committee

Consultancy:

- All faculty members are involved in performing treatment for clinical cases

Research by faculty:

2012

S. No.	Title	Faculty Involved
1	Enamel remineralisation after acid etching and air abrasion.	Dr. N Sridhar
2	Effects of passive smoking on oral health of children.	Dr. Sumit Gaur

2013

S. No.	Title	Faculty Involved
1	The role of casein phosphopeptide-amorphous calcium phosphate products in remineralisation of incipient enamel lesions and it's substantivity	Dr. Deepika Pai

2014

S.	Title	Faculty Involved
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No.		
1	Co-investigator in the institutional Colgate - Palmolive funded research project titled: To evaluate the clinical efficacy of a desensitizing toothpaste containing 8% arginine, calcium carbonate and 1450 ppm fluoride as sodium monofluorophosphate on dentin hypersensitivity relief immediately after a single professional application and after 2-weeks of product use.: A hypersensitivity study.	Dr. Rashmi Nayak
2	Prevention of maxillofacial injuries resulting from dog bites in school going children	Dr. Deepika Pai
3	Learning preferences of dental students using VARK questionnaire	Dr. Saurabh Kumar

10. Collaboration with other departments/ institutions, at the State, National and International levels, and their outcome during the past two years

- “The Effect of three commercially available chewing gums on the calcium and phosphorus uptake and Acidogenic potential of dental plaque” in collaboration with Department of Biochemistry conducted by Dr. Priya Jariwala under the guidance of Dr. Rashmi Nayak.
- Antibacterial efficacy of MTAD and 1% sodium hypochlorite in primary and permanent teeth: A comparative evaluation in collaboration with Department of Microbiology by Dr. Suryakanth Kumar under the guidance of Dr. Rashmi Nayak
- Effect of resin infiltration on artificial caries lesions –an invitro evaluation of resin penetration and microhardness in collaboration with NITK surathkal and MIT Manipal by Dr. Deepesh Prajapathi under the guidance of Dr. Rashmi Nayak
- Effect of probiotic lozenges on plaque pH and salivary and plaque levels of Streptococcus mutans in collaboration with department of microbiology by Dr. Munira Baldiwala under the guidance of Dr. Rashmi Nayak
- “A comparative analysis of the remineralization potential of three commercially available remineralizing agents on white spot lesions: an in vitro study” in association with biochemistry conducted by Dr. Pujan under the guidance of Dr. Rashmi Nayak
- “Morphological changes in dentin and its influence on tensile bond strength of composites with three different methods of tooth preparation: an in vitro study” in collaboration with Department of Dental materials conducted by Dr. Praveen under the guidance of Dr. Rashmi Nayak.

- “Comparison of Aloe vera gel, HBSS and Milk on periodontal ligament cell survival and clonogenic capacity” in collaboration with Manipal Life Sciences Centre conducted by Dr. Vipin Bhaskar under the guidance of Dr. Rashmi Nayak & Dr. N. Sridhar
- “Evaluation of flexural strength of glass ionomer cement reinforced with zinc oxide whiskers- An in vitro study” in association with Dental materials conducted by Dr. Priyanka under the guidance of Dr. Rashmi Nayak and Dr. Nagaraja Upadhya.
- “A comparative evaluation of hydroxyl and calcium ion diffusion from calcium hydroxide based intracanal medicaments in primary teeth - An in vitro study” conducted by Dr. B. Sneha in collaboration with Department of Environmental Sciences, Jawaharlal Nehru University, Hyderabad under the guidance of Dr. Rashmi Nayak

11. Priority areas for Research and details of the ongoing projects, important and noteworthy publications of the faculty, during past two years:

Priority areas for research:

- Minimal intervention dentistry
- Remineralisation of incipient enamel lesions
- Pediatric endodontics
- Effect of passive smoking on children

Ongoing:

Category	Number
Funded research projects	02
Non-funded research projects	04
PhD research projects	0
PG research projects	06
UG research projects	0

Last 3 years (2012-2014):

	2012	2013	2014
Completed funded research projects	-	-	02
Completed non-funded research projects	02	03	03
Completed PhD research projects	-	-	
Completed PG research projects	02	02	03

Completed UG research projects		-	-	-
Publications	International	06	02	09
	National	03	01	05
Books		-	-	-
Chapters in books		-	-	-
Conference presentations	International	03	04	04
	National	01	05	06

Ongoing PG projects:

S. No.	Title	Name of the student	Guide
1.	Effect of acid concentration and etch time on morphology and tensile bond strength of primary dentin- An in vitro study	Dr. Keertana Satish	Dr. Rashmi Nayak
2.	Antimicrobial efficacy of ajadirictha indica leaf aqueous extract mouth wash on streptococcus mutans count in children aged 8-11yrs. An in vivo study	Dr. Mahesh Pillai	Dr. Rashmi Nayak
3.	Remineralization potential of theobromine on artificial carious lesions. An in vitro study	Dr. Vani Taneja	Dr. N. Sridhar
4.	Effects of laser assisted fluoride therapy with diode laser & Er Cr YSGG laser on enamel of primary teeth. An in vitro study	Dr. Praveen kanth Reddy	Dr. Rashmi Nayak
5.	Shear bond strength of two novel dentin replacement materials and glass ionomer cement bonded to two resin composites-	Dr. Wasiur Rahman Chowdhury	Dr. N. Sridhar
6.	Comparative evaluation of erosive potential of fortified and non-fortified fruit juices	Dr. Priyanka Dedhia	Dr. Deepika Pai

Completed PG projects:**2012**

S. No.	Title	Name of the student	Guide
1.	The Effect of three commercially available chewing gums on the calcium and phosphorus uptake and Acidogenic potential of dental plaque-RCT	Dr. Priya Jariwala	Dr. Rashmi Nayak
2.	Antibacterial efficacy of MTAD and 1% Sodium hypochlorite in primary and permanent teeth- A Comparative Evaluation	Dr. Suryakant	Dr. Rashmi Nayak

2013

S. No.	Title	Name of the student	Guide
1.	Effect of resin infiltration on artificial caries lesions –an invitro evaluation of resin penetration and microhardness	Dr. Deepesh Prajapathi	Dr. Rashmi Nayak
2.	Effect of probiotic lozenges on plaque pH and salivary and plaque levels of Streptococcus mutans	Dr. Munira Baldiwala	Dr. Rashmi Nayak

2014

S. No.	Title	Name of the student	Guide
1.	Oral habits in school going children in Udupi district – A prevalence study.	Dr. Gayatri	Dr. Rashmi Nayak
2.	A comparative assessment of diffusion of hydroxyl & calcium ions from calcium hydroxide based intra canal medicaments in primary teeth: An in vitro study	Dr. Sneha Sreedhar	Dr. Rashmi Nayak
3.	Evaluation of flexural strength of glass ionomer cement reinforced with zinc oxide whiskers- An study	Dr. Priyanka	Dr. Rashmi Nayak and Dr. Nagaraja Upadhy

Details of publications:**2012**

1. Rupali Agnihotri, Sumit Gaur, Chemically modified tetracyclines: Novel therapeutic agents in the management of chronic periodontitis April 2012, Vol44(2)
2. Deepika Pai, Dr. Abhay Kamath. Hemangioma associated with an erupting permanent-molar – a case report, International journal of dental clinics, Vol-4,No-1, page no-72-73 2012
3. Jyoti Hassija, Sridhar. N. Bruxism in children & Adolescent patients: A review, Manipal Odontoscope, Vol:4,2012(33-37)
4. Sumit Gaur, Dr. Rupali Agnihotri Phenobarbital induced Steven-Johnson syndrome in a child. Journal of Indian Society of Pedodontics and Preventive Dentistry, Volume-44, Issue-4, Page-531,-July-Aug2012.
5. Saurabh Kumar, Runki Saran. Rehabilitation of teeth affected by Amelogenesis Imperfecta in mixed dentition period, National Journal of Integrated Medicine, Vol.3 (2).April-June2012. Page no. 95-97.
6. Aumir Beg. Management of a complicated Parasymphyseal Fracture Using Biodegradable Splinting Material: Two Case Reports, International Journal of Contemporary Dentistry January, 2012. 3(1)
7. Aumir Beg. Efficacy of Microwaves and Chlorhexidine for Disinfection of Pacifiers and Toothbrushes: An in vitro study. J Contemp Dent Pract 2012;13(5):690-694
8. Aumir Beg. Cleidocranial dysplasia – A Case Report. Int. J Dent Case Reports 2012;2(5):139-144
9. Aumir Beg. Down's syndrome – A Case Report. Int. J Dent Case Reports 2012;2(5):134-138

2013

1. Deepesh Prajapati, Rashmi Nayak Kashyap N and Kappadi Damodar Band and loop redefined. Unique Journal of Medical and Dental Sciences 01(02),Oct-Dec 2013
2. Deepesh prajapati, Rashmi Nayak. Rashmdeep's method: A novel method to confirm nasal breathing. J Contemp Dent Pract; March –April 2013, 14(2)2-4
3. Deepika Pai, Abhay T Kamath, Sham S Bhat, Sharan Sargod. An analysis of genetic influence on salivary parameters and caries experience–by correlation of incidence of dental caries and salivary parameters. International Journal of Dental Research, 1 (2) (2013)39-44

2014

1. Deepesh Prajapati, Rashmi Nayak. Damodar Kappadi, Anand Nayak. Complete maxilla in cross bite in the primary dentition- A rare case report. *Asian Pac. J. Health Sci.*2014;1(2)57-60
2. Bhaskar Vipin, Rashmi Nayak, Mopkar Pujan, Kumar Praveen. Antibiotic considerations in pediatric dentistry. *Manipal Odontoscope* 2014
3. Mopkar Pujan, Kumar Praveen, Nayak Rashmi, Bhaskar Vipin, Mouth Guards- Paving the way for safe sports. *Manipal Odontoscope* 2014
4. Dr. Deepesh Prajapati, Dr. Rashmi Nayak. Low level laser therapy in dentistry. *Guident* Jan 2014
5. Munira Baldiwala, Rashmi Nayak. Conservative Management of Riga-Fede disease. *Journal of dentistry for children* 81:2, 2014
6. Kumar Praveen, Nayak Rashmi, Bhaskar Vipin, Mopkar Pujan. Pulpotomy medicaments: continued search for newer alternatives *Oral Health and Dental Management* vol13 no.4 November 2014
7. Sridhar. N, Jyoti Hassija. Healthy lifestyle for healthy gums: *Dentistry*, Vol 4(6),2014:1-8
8. Ritesh B, Sridhar. N, Kalyan Chakravarthy. P, Shashidhar Acharya Efficacy of triphala mouth rinse (aqueous extracts) on dental plaque and gingivitis in children. *Journal of Investigative and Clinical Dentistry* (2014 May 22. DOI: 10.1111/jicd.12094.
9. Deepika Pai, Abhay Taranath, Kalyan Chakravarthy. The role of casein phosphopeptide-amorphous calcium phosphate products in remineralisation of incipient enamel lesions and its substantivity. *J Exp Integr Med* 4(1):67-70,2014.
10. Abhay T Kamath, Deepika Pai, Amit B, Ambika Pradeep, Satpal Singh, Manish Bhagania. Challenges in rehabilitation of long standing ankylosis of temporomandibular joint- A case report of a 65 year old lady. *Acta Medica Scientica* 01(01)2014 9-10.
11. Agnihotri R, Gaur S. Implications of tobacco smoking on the oral health of older adults. *Geriatr Gerontol Int.* 2014 Jul; 14(3):526-40.
12. Gaur S, Agnihotri R. Green tea: a novel functional food for the oral health of older adults. *Geriatr Gerontol Int.* 2014 Apr;14(2):238-50.
13. Agnihotri R, Gaur S. Rheumatoid arthritis in the elderly and its relationship with periodontitis: a review. *Geriatr Gerontol Int.* 2014 Jan;14(1):8-22
14. Saurabh K, Runki Saran, Kalyan Chakravarthy P. "General Anaesthesia in Paediatric dentistry – An institutional experience. *GJMR* volume:14 issue 6; November 2014

Details of Conference presentations:

2012

1. Dr. attended and presented a paper on “Surface remineralization after acid etching and air abrasion: A laser fluorescence analysis” at Eighth PDAA conference held at Sanur Paradise Plaza, Bali, Indonesia on 24-26 May 2012.
2. Dr. Deepika Pai attended 37th National Conference of AOMSI , Held at Hyderabad, 29, 30th November & 1st December, 2012 and presented a poster on “Update on management protocols of maxillofacial infections in children”.
3. Dr. Saurabh Kumar attended FDI Annual World Dental Congress in Hong Kong on 29 August 2012 and presented a paper on “Soluble CD14-A novel tool for caries risk assessment in children”.
4. Dr. Aumir Beg presented a paper titled ‘Effect of Plasma on E fecalis’ at 34th ISPPD conference Pattaya, Thailand 13th- 14th September 2012

2013

1. Dr. Rashmi Nayak attended Pedoscope, 35th Indian Society of Pedodontics and Preventive Dentistry Conference held in September 2013 at Jaipur and delivered a guest lecture on “Preventive pediatric dentistry: fact, fantasy or reality”
2. Dr. Rashmi Nayak attended 3rd Annual Conference of Karnataka State Chapter of AOMSI held at Manipal College of Dental Sciences, Manipal in March 2013
3. Dr. N. Sridhar presented paper titled “*Probiotics in dentistry: A review of current status*” at 41st KSDC IDA conference held at Coorg from 27th-29th November 2013
4. Dr. N. Sridhar as a co-author for Poster presentation titled “*Bacteria: Not So Bad After All*” at Sri Lanka Dental Association & FDI Conference held at Colombo, Sri Lanka from 27th June to 1st July 2013.
5. Dr. Deepika Pai presented a poster on “Toe sucking habit a cause for recurrent pyrexia –a case report” at 35th APDC at KLCC Kuala Lumpur, Malaysia 7-12th May 28, 2013.
6. Dr. Sumit Gaur presented “Ribbond” A Versatile Material in Pediatric Dentistry: Case Series At the 35th APDC Conference Held in Kuala Lumpur, Malaysia from 7-12 May, 2013.
7. Dr. Sumit Gaur presented poster on "General Anesthetic considerations in pediatric dental management of congenital muscular dystrophy – a case report" at the 3rd Annual Conference of Karnataka State Chapter of AOMSI at Manipal from March 7-9, 2013.

8. Dr. Sumit gaur presented “Oxidative stress associated with passive smoking - A risk for future periodontal disease in children?” at TM’s 1st World Dental Online Conference, USA held on August 13-15, 2013.
9. Dr. Saurabh Kumar attended and presented a paper on “General Anesthesia: An Asset to pediatric dentist” 41st Karnataka State Dental Conference attended – 22nd to 24th Nov 2013 at Coorg, Karnataka.

2014

1. Dr. Rashmi Nayak attended Pedofest, 36th Indian Society of Pedodontics and Preventive Dentistry Conference held in October 2014 at Lucknow and participated in as invited resource person in a debate titled “Pulpotomy: a never ending saga”
2. Dr. Rashmi Nayak attended 2nd interstate and 42nd Karnataka state dental conference in November 2014 at Mangalore and participated as a panel member for discussion on “Preventive & interceptive orthodontics- Pedodontic and Orthodontic prospectives.
3. Dr. N. Sridhar presented paper on “*zirconia crowns in pediatric dentistry*” at 67th Indian Dental Conference held at HITEK, Hyderabad between 21-23rd February 2014
4. Dr. N. Sridhar presented a poster titled: “Fiber reinforced composites: Diversities in their clinical use” at 36th Asia Pacific Dental Congress held at Dubai world trade center, Dubai Between 17-19th June 2014
5. Dr. N. Sridhar attended and delivered a guest lecture on “An insight into pulp revascularization” at 36th ISPPD National Conference held at Lucknow, 14th -16th October, 2014
6. Dr. Deepika Pai attended and presented a paper on: “Man Vs wild: spectrum of cases of maxillofacial injuries in children. An update on management, evaluation of need for prevention policies” 36th ISPPD National Conference held at Lucknow, 14th -16th October, 2014
7. Dr. Sumit Gaur presented “Parental cigarette smoking and oral health of children” in the Annual World Dental Congress, from 11th – 14th September 2014, New Delhi NCR, India
8. Dr. Sumit Gaur presented “Miracle foods for dental health” at TM’s 2nd World Dental Online Conference, USA held in August 19-21, 2014
9. Dr. Saurabh Kumar attended and presented Poster presentation on “Essentiality of early diagnosis of molar incisor hypo mineralization in children, etiology, clinical presentation & its management- a review” at 67th IDC in February 2014 at Hyderabad.

10. Dr. Saurabh Kumar attended and presented poster on “General Anesthesia: A boon for pediatric dentistry” 25th IADR-SEAADDE Conference attended in 11th -14th August in Kuching, Malaysia 2014

12. Placement record of the past students and the contribution of the department to aid student placements

S. No	Year of completion of postgraduate course	Name of the Postgraduate	Institution where employed
1.	April 2012	Dr. Priya Jariwala	Per suing DDS
2.	April 2012	Dr. Suryakanth Singh	Private practice
3.	April 2013	Dr. Deepesh Prajapathi	NIMS dental college and Hospital, Jaipur
4.	April 2013	Dr. Munira Baldiwala	Per suing DDS
5.	April 2014	Dr. Pujan mopkar	Private practice
6.	April 2014	Dr. Vipin bhaskar	Mahe Institute of Dental Sciences & Hospital, Mahe
7.	April 2014	Dr. Praven kumar	Navodaya Dental College, Raichur, Karnataka

13. Plan of action of the department for the next five years

- Expand preventive dental services
- Conduct awareness programs regarding dental treatment of children for school teachers
- Training program on rotary endodontics for faculty & PGs
- To undertake school based brushing programs in government schools around Manipal.

ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS

1. Faculty profile, adequacy and competency of faculty member:

The teaching faculty meets the stipulated requirements of the statutory body (i.e. Dental Council of India) with respect to undergraduate and postgraduate training. The entire faculty therefore have competency as laid down by DCI. The faculty maintains and upholds the standards and competency by keeping abreast of latest developments in the field and regularly attends workshops and conferences to meet higher standards.

S. No	Name of faculty member	Qualification	Designation	Experience in years (As of 31 th Dec 2014)
1	Dr. Arun S Urala	MDS	Professor & HOD	08
2	Dr. Madhumitha	MDS	Reader	04
3	Dr. Ritesh Singla	MDS	Asst. Prof.	03
4	Dr. Siddharth Mehta	MDS	Asst. Prof.	02
5	Dr. Divya S	MDS	Asst. Prof.	<01

Description	Sanctioned	Filled
Teaching staff	04	05
Lecturer	-	-

2. Student profile – Entry level competencies, socioeconomic status, language proficiency etc.

Refer Annexure 01. Student Profile for details

3. Changes made in the courses or programmes during the past two years and the contribution of the faculty members to those changes

The course is regulated by DCI and the department strictly complies with the syllabus and the guidelines of the DCI and the same is endorsed by the Board of studies, Manipal University. The examinations conducted reflect the synergy between clinic-pathologic fields and are designed in an objective manner

- Changes made in the pattern of examinations from pure essay to MCQ's and Essay. By faculty members participation in the Board of Studies of Manipal University.

- Five year BDS course prescribed by DCI – implemented for August 2008 batch of BDS.

4. Trend in the success rate and dropout rate of students during the last five years

Course	Pass percentage			Drop outs		
	2012	2013	2014	2012	2013	2014
Final BDS	100	96	95	Nil	Nil	Nil
MDS	100	100	100	Nil	Nil	Nil

5. Learning resources of the department like library, computers, laboratories and other such resources

Description of Resource	Quantity
Textbooks and Reference Books	62
Computers	03
Laboratory	01
Biostar Machine	02
Dolphin Software	01

6. Modern teaching methods practiced and use of ICT in teaching-learning:

BDS

- Group discussion methods
- Chair side discussion of case history
- Demonstration
- Practical classes

MDS

- Seminars and journal clubs.
- Chair side discussion of cases
- CDE programmes
- Inter-department clinical club

7. Participation/contribution of teachers to the academic activities including teaching, consultancy and research

- Personal counseling regarding matters related to attendance and performance in examination by individual staff members (Teacher Guardian –Dr. Arun Urala and Dr. Siddharth Mehta).

8. Details of faculty development programmes and teachers who benefited during the past two years:

2012

S. No	Title of the program and details (Date and place)	Attended by
1	CDE Programme “Coming Together”, on Combined Orthodontic – Surgical Management of Dentofacial Deformities conducted on the 6 th January 2012 at MCOODS, Mangalore	Dr. Madhumitha, Dr. Arun S Urala, Dr. Santosh Kumar
2	Continuing Professional Development Program on “Predictable Esthetic Restorations” held by Department of Conservative Dentistry & Endodontics, MCOODS, Manipal.	Dr. Arun S Urala, Dr. Santhosh kumar
3	Clear Path Certification Workshop in MCOODS, Manipal on 24 th July, 2012	Dr. Santhosh kumar Dr. Arun S Urala, Dr. Madhumitha
4	Class II Correction” at MGM Dental College & Hospital, Navi Mumbai from July 27th – 29th of July, 2012.	Dr. Arun S Urala
5	Pedagogic and personal effectiveness workshop conducted by MCPD, Manipal University	Dr. Siddharth Mehta
6	CDE by Dept. of Periodontology - Periodontal Medicine on Sep 1st 2012.	Dr. Santhosh kumar Dr. Arun S Urala, Dr. Madhumitha
7	CDE by Dept. of Periodontology – Management of biofilm in periodontal disease on Sep 15TH 2012.	Dr. Arun S Urala
8	CDE on composites-Colour sciences and clinical considerations on NOV 22nd 2012, MCOODS, Manipal.	Dr. Arun S Urala
9	Colgate and JDA for Future dental professionals program on 17th Nov 2012.	Dr. Arun S Urala

2013

S. No	Title of the program and details (Date and place)	Attended by
1	Excellence in Dental Research, conducted by Dept. of Oral Pathology and Microbiology at MCOODS, Manipal on 16 November 2013.	Dr. Madhumitha,

2	21 st century Orthodontic patient-Are we ready? conducted by the Dept. of Orthodontics at A.B Shetty Dental college on 3 October 2013.	Dr. Siddharth Mehta
3	Emerging trends in dental education, conducted by Dept. of Prosthodontics on 17 th September 2013.	Dr. Madhumitha
4	Emerging trends in dental education, conducted by Dept. of Prosthodontics on 17 th September 2013.	Dr. Ritesh Singla
5	Emerging trends in dental education, conducted by Dept. of Prosthodontics on 17 th September 2013.	Dr. Siddharth Mehta
6	Towards in success in research - Need for best practices. conducted by Dept. of Public Health Dentistry on 6 July 2013	Dr. Arun S Urala
7	Towards in success in research-need for best practices, conducted by Dept. of Public Health Dentistry on 6 July 2013.	Dr. Madhumitha
8	Towards in success in research-need for best practices conducted by Dept. of Public Health Dentistry on 6 July 2013.	Dr. Ritesh Singla
9	Towards in success in research-need for best practices conducted by Dept. of Public Health Dentistry on 6 July 2013.	Dr. Siddharth Mehta
10	ICD Mid-year convention conducted by Mangalore Orthodontic Study Group on 3 August 2013.	Dr. Arun Urala
11	Visualization of CBCT conducted by Dept. of Oral medicine and radiology at MCOADS, Mangalore on 22 nd February 2013.	Dr. Arun Urala
12	CDE in Orthodontics, at A.J Shetty dental college on 31 st January 2013	Dr. Arun Urala
13	Global health and nutrition at A.B Shetty dental college on 12-13 February 2013	Dr. Santhosh Kumar.

2014

S. No	Title of the program and details (Date and place)	Attended by
1	Orthodontic Cornucopia conducted by Orthodontic Department at MCOADS, Mangalore on 11 th January 2014	Dr. Arun S Urala
2	7 th international dental students and 1 st dental surgeons congress on 28-29 March 2014 at Goa.	Dr. Siddharth Mehta
3	36th Asia Pacific dental congress, Dubai, UAE on 17-19 June 2014	Dr. Madhumitha N

4	36th Asia Pacific dental congress, Dubai, UAE on 17-19 June 2014	Dr. Ritesh Singla.
5	Understanding the Damon system conducted by Mangalore Orthodontic Study Group on 5 th July 2014.	Dr. Siddharth Mehta
6	Understanding the Damon system conducted by Mangalore Orthodontic Study Group on 5 th July 2014.	Dr. Divya S.
7	49 th Indian orthodontic conference on 21-23 rd November 2014 at Kolkata	Dr. Arun S Urala
8	2 nd interstate and 42 nd Karnataka state dental conference on 28-30 December 2014	Dr. Siddharth Mehta
9	Management of skeletal class III Malocclusions on 31 st march 2014 at A.B. Shetty dental college, Mangalore.	Dr. Siddharth Mehta.

9. Participation / contribution of teachers to the academic activities including teaching, consultancy and research

- Setting up the question papers of Manipal University and other universities
- Writing articles for national as well as international journals.
- Contributing chapters in books.
- Presenting scientific papers in national and international annual conferences.
- As guest speakers in international conference and foreign universities
- As examiners for undergraduate and postgraduate examinations in other Universities.
- Members of ISO core committee of the college.
- Members of Board of Studies
- Part of Teacher Guardian Scheme
- Members of Institutional Image Enhancement Committee
- Part of condemnation Committee

10. Collaborations with other departments and institutions at the national and international level and their outcome during the past two years

- Impact of orthodontic treatment and socio economic status on daily performances in Indian school children: a two center study; collaboration with **A.B. Shetty Memorial Institute, Mangalore.** (Article published in JIAPHD, Siddharth Mehta, Nikhil Malviya, Ashima Valiathan, Sivakumar, U.S. Krishna Nayak.)

- In-vitro evaluation of new adhesive systems to prevent demineralisation adjacent to orthodontic brackets and to assess bracket bond strength with **Department of Microbiology, KMC, Manipal.**(Past thesis)
- Present thesis-a) Comparison of enamel surface after debonding and cleanup in teeth with untreated and treated white spot lesions-An in vivo study and 2) The effect of the oral environment on the flexural strength, tensile strength and modulus of elasticity of Niti wires - An in vivo study with **Department of Biochemistry, KMC Manipal and Department of Dental materials, MCOODS, Manipal.**

11. Priority areas for research and details of the ongoing projects, important and noteworthy publications of the faculty members, during past two years

Priority areas for research:

- Study model analysis of dental malocclusions
- Analysis of Bond strength and Re-mineralizing properties of newer adhesive systems
- Cephalometric analysis of common malocclusions and FEM evaluation of craniofacial deformities
- Newer ortho-surgical methods to reduce treatment duration
- Frictional properties of various bracket types and archwire combination

Ongoing projects:

Category	Number
Funded research projects	-
Non-funded research projects	-
PhD research projects	-
PG research projects	06
UG research projects	-

Last 3 years (2012-2014)

	2012	2013	2014
Completed funded research projects	-	-	-
Completed non-funded research projects	-	-	-
Completed PhD research projects	-	-	-
Completed PG research projects	03	03	03

Completed UG research projects		-	-	-
Publications	International	11	10	16
	National	03	01	05
Books		02	03	05
Chapters in books		-	-	-
Conference presentations	International	02	03	03
	National	-	-	02

Ongoing PG projects:

S. No	Topic	Name of the Postgraduate student	Guide
1	Comparison of enamel surface after debonding and cleanup in teeth with untreated and treated white spot lesions-An in vivo study	Dr. Tazeen Wadiwala	Dr. Arun Urala
2	The effect of the oral environment on the flexural strength, tensile strength and modulus of elasticity of Niti wires - An in vivo study	Dr. Amogh Chandra	Dr. Arun Urala
3	An EMG study to evaluate chewing efficiency before and after orthodontic treatment	Dr. Vivek Reddy	Dr. Arun Urala
4	Effect of real time environment on mechanical properties of 0.019 x 0.025 stainless steel preformed archwire: An in-vivo study	Dr. Divya Pai	Dr. Arun Urala
5	Effect of fluoridated mouthwash on surface characterization and mechanical properties of different orthodontic archwires	Dr. Gaurav Agarwal	Dr. Arun Urala
6	Evaluation of friction of stainless steel archwires coated with zinc oxide nanoparticles and the effect of fluoridated chlorhexidine mouthwash on it: An in vitro study	Dr. Sukriti Pahwa	Dr. Arun Urala

Completed PG Projects:**2012**

S. No	Topic	Name of the Postgraduate	Guide
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		student	
1	Mandibular morphology and pharyngeal airway space: A cephalometric evaluation.	Dr. Siddharth Mehta	Dr. Ashima Valiathan
2	A comparative evaluation of the retention of metallic brackets bonded with resin modified glass ionomer cement under different enamel preparations: A pilot study.	Dr. Padmaja Sharma	Dr. Ashima Valiathan
3	Nasal morphology and lip morphology as an indicator of underlying vertical skeletal discrepancy.	Dr. Sushma Manjunath	Dr. Ashima Valiathan

2013

S. No	Topic	Name of the Postgraduate student	Guide
1	An in vitro comparative evaluation of effects of reconditioning on the base morphology, slot width and shear bond strength of stainless steel metallic brackets.	Dr. Divya Omprakash Boob	Dr. Arun Urala
2	In vitro evaluation of new adhesive systems to prevent demineralisation adjacent to orthodontic brackets and to assess bracket bond strength.	Dr. Kini Nivedita suresh	Dr. Subraya Mogra
3	Effect of soft drinks on friction between the archwire and bracket: An in vitro evaluation.	Dr. Shaik Mohammed Saad shakil	Dr. Subraya Mogra

2014

S. No	Topic	Name of the Postgraduate student	Guide
1	The effect of alcohol free and alcohol containing mouth rinses on the force decay of elastomeric chains-an in vitro study	Dr. Uzma Mukri	Dr. Subraya Mogra
2	Effect of artificial saliva on mechanical properties of stainless steel archwires :an in vitro evaluation	Dr. Parul Dasson	Dr. Subraya Mogra

3	Effects of vibration on frictional forces on retraction of orthodontic brackets along the archwire	Dr. Apurava Singh	Dr. Arun Urala
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Details of publications

2012

1. Santosh Kumar, Priyanka Jayaswal, Kalyana Chakravarthy Pentapati, Ashima Valiathan, Nidhi Kotak. Investigation of the transmigrated canine in an orthodontic patient population. *Journal of Orthodontics* 2012; 39:89-94.
2. Santosh Kumar, Arun Urala, Abhay Kamath, Priyanka Jayaswal, Ashima Valiathan. Unusual intraosseous transmigration of impacted tooth, *Imaging Science in Dentistry*.2012; 42:47-54.
3. Santosh Kumar, Ashima Valiathan, Pawan Gautam, Kalyana Chakravarthy Pentapati, Priyanka Jayaswal. An Evaluation of the Pi Analysis in the Assessment of Antero-posterior Jaw Relationship. *Journal of Orthodontics*.2012;39(4): 262-269
4. Chand Sawhney and Santosh Kumar. Modified Transpalatal Appliance: A Simple Non-Invasive Technique for Maxillary Molar Intrusion. *Dental Update*.2012; 39:228.
5. Eety Jain, Ashima Valiathan, Arun Urala, Santosh Kumar, Madhumitha Osteogenesis Imperfecta and Pneumatization of bone- a hidden reality. *World Journal of Orthodontics*;2012;39(4): 262-269.
6. Santosh Kumar, Sumit Gandhi, Ashima Valiathan. Perception of smile esthetics among Indian dental professionals and laypersons. *Indian Journal of Dental Research* 2012;23(2) 295-302.
7. Rakesh Agarwal, Chand Sawhney, Santosh Kumar, Amit Agarwal. Beggs technique: revisiting the old glory. *Heal Talk*. 2012; 4:10.
8. Siddharth Mehta, Surendra Lodha, Arun Urala. Arch Form : Is the shape right? *Guident* 2012; 5:51.
9. Surendra lodha, Farhan parkar, Eety jain. Shadow free intraoral photography. *Guident*.2012; 5:65-66.
10. Surendra Lodha, Siddharth Mehta, Ashima Valiathan. Pearls- Suction tip holder. *JCO* 2012; 46(12) :738
11. Surendra Lodha, Siddharth Mehta. Modified labial bow. *Dental Update* 2012,July issue, page 444
12. Siddharth Mehta, Surendra Lodha, Eety Jain. Management of congenitally missing premolars- a literature review.*Guident*.2012; 5:40.

13. Siddharth Mehta, Gurkaran preet singh, Surendra Lodha. Utility Ties: Modified Kobayashi Ties. JIOS 2012;46(4):232.
14. Madhumitha N, Surendra Lodha, Chakradhar; Modified Butterfly Deprogrammers: Made Easy Dental update 2012:march issue, page 148.

2013

1. Ritesh Singla and Nishu Singla. Dentists- Are they the first informers? Guident dental journal, Feb. 2013.
2. Dr. Santosh Kumar. Effect of low pull headgear on head position. The Saudi dental journal 2012;25:23-27
3. Madhumitha N, Ritesh Singla. Orthodontic Management of congenitally missing maxillary lateral incisors-A Case Report. Guident 2013
4. Ritesh Singla, Nishu Singla, Madhumitha N., Vijay R. Naik. North Karnataka patients' expectations of orthodontic treatment – A questionnaire study. E journal of Dentistry March 2013;3(1):318-25.
5. Ritesh Singla, Madhumitha N., Nishu Singla. Management of Impacted Maxillary Canine – Two Case Reports. Guident Dental Journal May 2013;6(6):42-8.
6. Ritesh Singla, Madhumitha N., Nishu Singla. Management of Deep Overbite – A Case Report. Guident Dental Journal.
7. Ritesh Singla, Madhumitha N., Nishu Singla. Management of Class I malocclusion with unilateral first premolar extractions – A Case Report. Journal of Dentofacial Sciences. 2013;2(3):51-4.
8. Ritesh Singla, Nishu Singla. Oral Health care during pregnancy – A Review. Guident Dental Journal. 2013;6(10):82-3.
9. Ritesh Singla, Nishu Singla. Oral Health Care in aging- A Review. Guident Dental Journal. 2013;6(11):64-7.
10. Madhumitha N, Ritesh Singla and Dr. Bharath Rao. Bilateral Bifid mandibular condyle. E-journal of dentistry, Vol 4(1),Oct-Dec 2013,e-513-516.
11. Eety Jain, Ashima Valiathan, Arun Urala, Santosh Kumar, Madhumitha N. Osteogenesis Imperfecta and Pneumatization of bone- a hidden reality. The art and practice of dentofacial enhancement(formerly World Journal of Orthodontics) Year book 2013,Vol1(4),e-1513-516

2014

1. Siddarth Mehta, Dr. Anjali Mehta, Dr. Surendra Lodha. Face Mask Therapy-A Review. Guident Dental Journal. Feb 2014, pages50-52.

2. Dr. Surendra Lodha, Siddarth Mehta and Dr. Rajesh Agarwal. Double loop de-rotator. APOS Trends in Orthodontics.2014;4(2):15-16.
3. Madhumita N, Dr. Bharath Rao and Dr. Parul Dasson. Rationale for bi-jaw surgery in an asymmetric class III mandible-A Case Report, Guident Dental Journal, March 2014,Pages 50-54.
4. Bharath K Rao, Dr. Sam Raj Srinivasan and Madhumita N. Evaluation and comparison of Lip print patterns among Indians, Chinese and Malay. Guident Dental Journal, April 2014,Pages 16-18.
5. Sudeendra Lodha, Dr. Agarwal Rajesh, and Siddarth Mehta. Alternative method zur aktivierung einer forsus - apparatur. Orthodontics: The magazine for practical frequency. March 2014,Vol28(1),Pages 79-80.
6. Surendra Lodha, Siddharth Mehta, Rajesh Agarwal. A smart elastic reminder. Journal of Clinical Orthodontics 2014;48(3):180.
7. Siddharth Mehta, Ashima Valiathan, Arun Urala. Treatment of class II subdivision malocclusion with congenitally missing upper lateral incisors: a case report. APOS Trends in Orthodontics 2014;4:70-5.
8. Pankhuri Jain, Jasleen Suri, Lalith Nag Mora, Siddharth Mehta. Assessment of oral impacts of orthodontic treatment on school children in Manipal. Journal of International Academic Research For Multidisciplinary 2014;2(5):308-13.
9. Surendra Lodha, Santosh Kumar, Siddharth Mehta. Active lingual retainer: a technique tip. Dental update 2014;41(5):473.
10. Nishu Singla, Shashidhar Acharya, Ritesh Singla, Deepak Singhal. Prevalence of needle stick injury among the nursing personnel in an Indian medical hospital: A cross sectional survey. Journal of International Academic Research for Multidisciplinary 2014;1(12):449-459.(Jan)
11. Anchal Goel, Ritesh Singla, Nishu Singla. Evaluation Of Impact On Daily Performances in Patients Wearing Fixed Orthodontic Appliances. Journal of International Academic Research for Multidisciplinary 2014;1(12):693-701.(Jan)
12. Nikhil Patil, Ritesh Singla, Nishu Singla. Pain Perception Due To Orthodontic Separators with and without Diclofenac Mouthwash. Journal of International Academic Research for Multidisciplinary 2014;2(2):475-486.(March)
13. Nishu Singla and Ritesh Singla. Green Dentistry-A Revolution: A review. Guident Dental Journal 2014;7(4):86-87.(March)
14. Siddharth Mehta, Anjali Mehta and Surendra lodha. Occupational hazards in dentistry- a review. Guident 2014;7(5):76-8

15. Siddharth Mehta, Anjali Mehta and Surendra lodha. Cleft palate case: Treatment with an obturator. Guident Aug 2014;50
16. Ritesh Singla, Capt. Sardeep Kasana, Keluskar K.M, Nishu Singla, Vaishali Keluskar. Assessment of external root resorption-A Radiographic study. E journal of dentistry Jan-Mar 2014;4(1):545
17. Siddharth Mehta, Anjali Mehta and Surendra lodha. Standard edgewise simplified. Guident Sept 2014;72
18. Surendra lodha, Siddharth Mehta and Rajesh Agarwal. Technique tips-a smart radiograph viewer. Dental Update Oct 2014
19. Anjali Mehta, Siddharth Mehta. Tooth or implant: What's the difference? Guident Nov 2014:72
20. Nishu Singla, Shashidhar Acharya, Suganthi Martena, Ritesh Singla. Effect of oil gum massage therapy on common pathogenic oral microorganisms - A randomised controlled trial. Journal of Indian Society of Periodontology 2014;18:441-6.
21. Nishu Singla, Shashidhar Acharya, Kalyana Chakravarthy, Deepak Singhal, Ritesh Singla. Role of patients 'socioeconomic status, knowledge and attitude towards dental care on their treatment preference for root canal treatment versus extraction. e-Journal of Dentistry. Jul - Sep 2014 Vol 4 Issue 3. Page 630-6.

Details of books published by faculty:

2012

S. No	Title of the Book	Name of the faculty	Publisher
1	Molar Distalization- Basics, Concepts & Methods	Dr. Ritesh Singla	Lambert academic publishing
2	Orthodontics and medically compromised	Dr. Siddharth Mehta	Lambert academic publishing

2013

S. No	Title of the Book	Name of the faculty	Publisher
1	Fixed functional appliances	Dr. Ritesh Singla	Lambert academic publishing
2	Hormonal regulation of craniofacial growth	Dr. Siddharth Mehta	Lambert academic publishing

3	Orthodontics and law	Dr. Siddharth Mehta	Lambert academic publishing
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2014

S. No	Title of the Book	Name of the faculty	Publisher
1	Functional matrix hypothesis and its modifications	Dr. Ritesh Singla	Lambert academic publishing
2	Oral habits and psychotherapy	Dr. Siddharth Mehta	Lambert academic publishing
3	Surgical orthodontics	Dr. Siddharth Mehta	Lambert academic publishing
4	Pernicious oral habits and its management aspects in orthodontics	Dr. Divya S	Lambert academic publishing
5	Evolution of muscles of face	Dr. Divya S	Lambert academic publishing

Details of Conference presentations**2012**

1. Dr. Santhosh kumar was a Speaker at 8th Biennial Conference, Pediatric Dentistry Association of Asia, held at Bali, Indonesia from 25th& 26th May, 2012.
2. Dr. Madhumitha presented a E-poster titled "Holistic approach in treating bruxism and masticatory myalgia - A case report at American association of orthodontics(AAO), Annual session, in Honolulu, HI, USA, May 5-8, 2012

2013

1. Dr. Madhumitha. Clinical poster presentation at AOS biennial orthodontic conference, at Marina bay sands, Singapore, March 22-24, 2013.
2. Dr. Madhumitha. Scientific E-poster presentation at the American Association of Orthodontics Conference (AAO), Annual Session, Philadelphia, May 4-7,2013
3. Dr. Ritesh Singla presented Poster titled "Management of Impacted maxillary canine – Two case reports" at FDI/CDA/SLDA joint International Conference held on 28th-30th June, 2013 at Colombo, Sri Lanka.

2014

1. Dr. Madhumitha. Scientific E-poster presentation at the American Association of Orthodontics Conference (AAO), Annual Session, New Orleans, LA, April 25-29,2014.
2. Dr. Madhumitha. Clinical poster presentation at Asia Pacific Dental Congress (APDC 2014), at Dubai, U.A.E, June 17th-19th 2014.
3. Dr. Ritesh Singla presented Poster titled “Management of Skeletal Class II malocclusion with ForsusTM fatigue-resistant device (FRD) at 36th Asia Pacific Dental Congress held on 17th-19th June, 2014 – at Dubai, UAE.
4. Dr. Siddarth Mehta presented eposter titled “Treatment of class II subdivision malocclusion with congenitally missing lateral incisor” at 7th international dental students and 1st dental surgeons congress on 28-29 March 2014 at Goa.
5. Dr. Siddarth Mehta presented eposter titled “ Cleft palate: Treatment with obturator” at 2nd inter-state and 42nd Karnataka state dental conference on 28-30 November 2014 at Mangalore

12. Placement record of the past students and the contribution of the department to the student placements: (2012 to 2015)

S.No	Year of passing postgraduate exam	Name of the student	Institution where employed
1	2012	Dr. Sushma Dilipraj	Private Practice, Mangalore
2	2012	Dr. Padmaja Sharma	Baroda Dental College, Baroda
3	2012	Dr. Siddharth Mehta	MCOADS, Manipal
4	2013	Dr. Eety Jain	Senior Resident Orthodontist, London, U.K
5	2013	Dr. Surendra Lodha	Private Practice, Bhilwara, Rajasthan
6	2013	Dr. Farhan Parkar	Consultant Orthodontist, Kuwait
7	2014	Dr. Boob Divya Omprakash	Private Practice, Maharashtra
8	2014	Dr. Niveditha kini Suresh	Consultant Orthodontist, Bangalore
9	2014	Dr. Shaik mohammed Saad Shakil	Consultant Orthodontist, Pune

13. Plan of action of the department for the next five years

- Enhancement of student learning resources by providing more text books to the department library, organizing table clinics for students.
- Enhancement of patient care by getting more recent diagnostic equipment, ensure quality control on treatment outcome.
- Enhancement of research activities by encouraging funding from external resources, collaborations with other departments and institutions at the national and international level.

PUBLIC HEALTH DENTISTRY

1. Faculty profile, adequacy and competency of faculty member:

The teaching faculty meets the stipulated requirements of the statutory body (i.e. Dental Council of India) with respect to undergraduate and postgraduate training. The entire faculty therefore have competency as laid down by DCI. The faculty maintains and upholds the standards and competency by keeping abreast of latest developments in the field and regularly attends workshops and conferences to meet higher standards.

S. No	Name of faculty member	Qualification	Designation	Experience in years (As of 31 st December 2014)
1	Dr. Shashidhar Acharya	MDS	Professor & Head	12
2	Dr. Ram Prasad VP	MDS	Assoc. Prof.	06
3	Dr. P Kalyana Chakravarthy	MDS	Reader	04
4	Dr. Deepak Kumar Singhal	MDS	Asst. Prof.	03
5	Dr. Nishu Singla	MDS	Asst. Prof.	02
6	Dr. Bhawani Chandra	BDS	Lecturer	01
7	Dr. Kalavathi	BDS	Lecturer	01
8	Dr. Sonali C	BDS	Lecturer	01

Description	Sanctioned	Filled
Teaching staff	05	05
Lecturer	03	03

2. Student profile – entry level competencies, socioeconomic status, language proficiency etc.,

Refer Annexure 01. Student Profile for details

3. Changes made in the courses or programmes during the past two years and the contribution of the faculty members to those changes

The course is regulated by DCI and the department strictly complies with the syllabus and the guidelines of the DCI and the same is endorsed by the Board of studies,

Manipal University. The examinations conducted reflect the synergy between clinic-pathologic fields and are designed in an objective manner

- Changes made in the pattern of examinations from pure essay to MCQ's and Essay. By faculty members participation in the Board of Studies of Manipal University.
- Revision of the Clinical Record of the Department of Public Health Dentistry.
- Reorganization of the Departmental Academic activities
- One faculty member allotted to guide each Post Graduate student
- One faculty member made in charge of each batch of UG students.
- Interns to prepare five health education materials during their posting as per DCI 2011 amendment guidelines.
- Dental Outreach Programmes: mentoring of interns, Amchi Project 2012, 2013, 2014
- Improvement in Department Infrastructure.
- Procured LCD projectors, Tables, Cabinets and additional intercom lines.
- Collecting Health Education Material from Interns.

4. Trends in the success rate and dropout rate of students during the past two years

Course	Pass percentage			Drop outs		
	2012	2013	2014	2012	2013	2014
Final BDS	98.9	97.82	95.6	Nil	Nil	Nil
MDS	100	100	100	Nil	Nil	Nil

5. Learning resources of the department like library, computers, laboratories and other such resources

Resource Description	Quantity
Textbooks and Reference Books	130
Manipal University Main Dissertations (Thesis)	63
Other University Dissertations (Thesis)	38
Library Dissertations	38
Term Dissertations	61
Department Computer with Internet facility	02
Mobile Dental Van	01
LCD Projector	01
OHP Projector	01

During the last two years, text Books in Public Health Dentistry, Biostatistics, Epidemiology and Community Medicine procured for both the Departmental Library and Central Health Sciences Library, along with the renewal of e-journals.

6. Modern teaching methods practiced and use of ICT in teaching-learning:

BDS

- Group discussion methods and field visits
- Making of posters and pamphlets on oral health topics
- Health Survey, data entry and making of a report
- Chair side discussion of case histories and recording of dental indices

MDS

- Seminars and journal clubs.
- Problem solving exercises.
- Chair side discussion of case histories and preventive procedures in clinics
- CDE programmes
- Inter-department clinical club

7. Participation/contribution of teachers to the academic activities and counseling of students

- Counseling done for poor performers and irregular attendees on a regular basis.
- Options explained and records maintained in the department.
- In certain cases, improvement Sessional tests are arranged.
- Protocol Submitted for establishment of Tobacco Cessation centre at MCOOS, Manipal.
- 2013 Vision Group on Science and Technology Grant application – Under CESEM.

8. Details of faculty development programmes and teachers who benefited during the past two years:

2012

S. No	Details of the program	Attended by
1.	Continuing Dental Education programme on “Periodontal Medicine” organized by Department of Periodontology,	Deepak Kumar Singhal Nishu Singla

	Manipal College of Dental Sciences, Manipal on 1 st Sep 2012	
2	Continuing Dental Education programme on “Management of Biofilm in Periodontal Disease” organized by Department of Periodontology, Manipal College of Dental Sciences, Manipal on 15 th Sep 2012	Deepak Kumar Singhal
3	Faculty Development Program on “Data Analysis for Research” organized by Manipal Institute of Management, Manipal on 5-7 th Oct 2012 at Manipal	Deepak Kumar Singhal
4	Future Dental Professional Program conducted by Colgate and IDA on 17 th Nov 2012.	Deepak Kumar Singhal P Kalyana Chakravarthy Ram Prasad VP Nishu Singla Shashidhar Acharya
5	Workshop on “Tax Planning and Investment” organized by Finance Forum of MIM held at 24 th Jan 2012 at Manipal Institute of Management, Manipal	Deepak Kumar Singhal

2013

S. No	Details of the program	Attended by
1	Continuing Dental Education programme on “Towards success in Dental Research –Need for Best Practices” organized by Department of Public Health Dentistry, Manipal College of Dental Sciences, Manipal on 6 th July 2013	Deepak Kumar Singhal P Kalyana Chakravarthy Ram Prasad VP Nishu Singla Shashidhar Acharya
2	Workshop on “Ethical Issues in Biomedical Research” jointly organized by Manipal Centre for Professional and Personal Development and Department of Hospital Administration, KMC, Manipal On 29 th and 30 th May 2013	Deepak Kumar Singhal
3	National Workshop on statistical analysis using R: 7-8 th Feb 2013 KMC, Manipal	P Kalyana Chakravarthy
4	National Seminar on Healthcare Management 3-5 th	Ram Prasad VP

	December 2013, Kasturba Medical College, Manipal	
5	CDP program on 'Emerging trends in dental education' conducted by Manipal Centre for professional and personal development, Manipal university on 17th September 2013.	Nishu Singla
6	Workshop – Data to Action: Building blocks of Tobacco Control Research. 9 th September 2013, New Delhi	Ram Prasad VP
7	Excellence in Dental Research, Oral Pathology and Microbiology, MCOBS, Manipal 16 th November 2013	Ram Prasad VP

2014

S. No	Details of the program	Attended by
1	Oral Health Policy - State level symposium: Yenepoya University, Mangalore on 17 th Feb 2014,	Deepak Kumar Singhal, P Kalyana Chakravarthy Ram Prasad VP Nishu Singla Shashidhar Acharya
2	“Management of persons with tobacco use disorders” organized jointly by the Department of Community Medicine and Psychiatry, KMC, Manipal University, Manipal in association with the Dr. TMA Pai Endowment Chair for Social Entrepreneurship on 22 nd May 2014	Deepak Kumar Singhal, Ram Prasad V.P.
3	Workshop on “Knowledge, Memory and Learning” organized by Manipal Centre for Professional and Personal Development, Manipal on 26 th April 2014	Deepak Kumar Singhal
4	Mini Workshop on Teacher Effectiveness, MCPD 25 th January 2014	Ram Prasad VP
5	Evolution of Teaching and Learning in Higher Education 15 th May 2014, MCPD, Manipal	Ram Prasad VP
6	Tobacco Use Cessation: Perspectives and Practice. 7 th June 2014, MCOBS, Mangalore	Ram Prasad VP
7	25 years of ART approach – 1-2 nd Sep 2014, GDCRI, Bangalore	Ram Prasad VP, Deepak Kumar Singhal, P Kalyana Chakravarthy

9. Participation /contribution of teachers in academic activities including teaching, consultancy and research

Teaching

- Setting up the question papers of Manipal University and other universities
- Writing articles for national as well as international journals.
- Contributing chapters in books.
- Presenting scientific papers in national and international annual conferences.
- As guest speakers in international conference and foreign universities
- As examiners for undergraduate and postgraduate examinations in Manipal University, Rajiv Gandhi University and Dr. MGR Medical University.
- Members of ISO core committee of the college.
- Members of Board of Studies
- Part of Teacher Guardian Scheme
- Members of Institutional Image Enhancement Committee
- Part of Surprise Check Squad.
- Part of Dental Council of India Local Inspection Committee Inspections.
- Part of Condemnation Committee
- Part of Community Health Services committee
- Part of IDA Manipal branch – President and Editor
- Member of Oral Health Working Group

Research by faculty

2014

S. No	TOPIC	Name of faculty
1.	Cynical hostility and its relationship with dental anxiety among dental patients	Dr. Shashidhar Acharya
2.	Reliability of intra-oral camera for diagnosing oral diseases	Dr. P Kalyana Chakravarthy
3.	Knowledge and attitude of dental students towards HIV/AIDS patients: A questionnaire survey	Dr. Deepak Kumar Singhal
4.	Use of Fagerstrom Addiction Scale amongst Out Patients and use of tobacco.	Dr. Ram Prasad VP
5.	Use of Case Based Learning amongst Dental Interns	Dr. Ram Prasad

		VP
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2013

S. No	TOPIC	Name of faculty
1	Unmet restorative treatment needs among orphanage children of Uttara Kannada District.	Dr. P Kalyana Chakravarthy
2	Socioeconomic mobility and tobacco consumption patterns in fish industry workers in Udupi District of coastal Karnataka	Dr. Shashidhar Acharya
3	Prevalence and clinical consequences of untreated dental caries using PUFA index among school children in Udupi taluk, India	Dr. Deepak Kumar Singhal
4	Advocacy of Oral hygiene Practices.	Dr. Ram Prasad VP
5	Oral Cancer Awareness	Dr. Ram Prasad VP

2012

S. No	TOPIC	Name of faculty
1	Association of anthropometric measures and dental caries among a group of adolescent cadets of Udupi district, South India	Dr. P Kalyana Chakravarthy
2	Relationship with dental anxiety and beliefs among Indian dental patients	Dr. Shashidhar Acharya
3	Social mobility and tobacco habits among fishing industry workers of Udupi district	Dr. Shashidhar Acharya

10. Collaborations with other departments and institutions at the State, National and International level and their outcome during the past two years

- Along with Wisdom Tooth, European Dental Students Association and Manipal University, Dental Outreach Programme at Ladakh – Amchi Project.

11. Priority areas for research and details of the ongoing projects, important and noteworthy publications of the faculty members, during past two years.

If research is a significant activity, the thrust areas of the department

- Oral disease epidemiology

- Clinical trials
- Oral health promotion

Details of the ongoing projects:

Category	Number
Funded research projects	-
Non-funded research projects	-
PhD research projects	-
PG research projects	06
UG research projects	04

Last 3 years (2012-2014):

		2012	2013	2014
Completed funded research projects		-	-	-
Completed non-funded research projects		-	-	-
Completed PhD research projects		-	-	-
Completed PG research projects		02	02	02
Completed UG research projects		02	08	04
Publications	International	08	14	18
	National	06	08	14
Books		-	-	01
Chapters in books		-	01	-
Conference presentations	International	04	04	04
	National	05	02	02

Ongoing PG projects:

S. No	Topic	Name of the Postgraduate student	Guide
1.	Change In Oral Health Related Quality Of Life In Patients Undergoing Conventional Prosthodontic Rehabilitation: A One Month Follow Up Study	Dr. Abhinav T.N.	Dr. Shashidhar Acharya
2.	Prevalence And Severity Of Untreated Carious Lesions And Its Impact On Quality Of Life Of	Dr. Shatakshi Srivastava	Dr. Shashidhar Acharya

	Children		
3.	A Cross Sectional; Study To Assess Root Surface Caries Status Amongst Elderly Population Including Known Diabetics In Udupi District, Karnataka State.	Dr. Kush Kalra	Dr. Ram Prasad VP
4.	Comparison of long term effects of chronic respiratory disease medication on the oral health status of adults- a case control study	Dr. Raashi Raj	Dr. Shashidhar Acharya
5.	A Cross Sectional; Study To Assess Root Surface Caries Status Amongst Elderly Population Including Known Diabetics In Udupi District, Karnataka State.	Dr. Kush Kalra	Dr. Ram Prasad V.P.
6.	Comparison of long term effects of chronic respiratory disease medication on the oral health status of adults- a case control study	Dr. Raashi Raj	Dr Shashidhar Acharya

Completed PG Projects:**2012**

S. No	Topic	Name of the Postgraduate student	Guide
1	Prevalence and risk factors for Dental erosion among 11-14 year old school children in Udupi taluk, Karnataka.	Dr. Sandeep Kumar	Dr. Shashidhar Acharya
2	Lifestyle factors affecting the periodontal health status of adult population attending dental outreach centers of Udupi taluk.	Dr. Nishu Gupta	Dr. Shashidhar Acharya

2013

S. No	Topic	Name of the Postgraduate student	Guide
1	Oro-facial pain: Prevalence and associated factors in people of Udupi taluk.	Dr. Siddhi Hathiwala	Dr. Shashidhar Acharya
2	Effectiveness of school dental health program in	Dr. Snehal Patil	Dr. Shashidhar

	improving oral health beliefs and oral hygiene in school children of Udupi Taluk.		Acharya
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2014

S. No	Topic	Name of the Postgraduate student	Guide
1.	Comparative evaluation of arginine containing dentifrice in reducing dentinal hypersensitivity, a randomized controlled trial.	Dr. Samuel Raj	Dr. Shashidhar Acharya
2.	Comparative evaluation of retention and caries preventive effect of different pit and fissure sealants in 6-9 year old school children, a randomized controlled trial.	Dr. Sachin Khatri	Dr. Shashidhar Acharya

Details of the publication:**2012**

- Honne T, Pentapati K, Kumar N, Acharya S. Relationship between obesity / overweight status, sugar consumption and dental caries among adolescents in South India. *Int J Dent Hygiene*. 2012;10:240-244.
- Shashidhar Acharya, P Kalyana Chakravarthy. Work stress and oral health-related quality of life among Indian information technology workers: an exploratory study. *IDJ* 62:132-136:2012.
- P Kalyana Chakravarthy, Shashidhar Acharya. Efficacy of Extrinsic Stain Removal by Novel Dentifrice Containing Papain and Bromelain Extracts. *Journal of Young Pharmacists*, 4, 245-249, 2012.
- Addala Lakshmi, Sadhnani Muralidhar, CH Kalyan, Addala Pavan, Pentapati Kalyana, Vasala Anjaneyulu, Jamil Kaiser. Cyclooxygenase-2)765G>C functional promoter polymorphism and its association with oral squamous cell carcinoma, *Journal of investigative and clinical dentistry*, 3, 182-188, 2012.
- Lakshmi Addala, Kalyana Chakravarthy Pentapati, Parvathi Kumara Reddy Thavanati, Anjaneyulu V, Sadhnani. Risk Factor Profiles Of Head And Neck Cancer Patients Of Andhra Pradesh, *Indian Journal of cancer*, 49, 2012, 215-219.

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13. Kalyana Chakravarthy Pentapati, Shashidhar Acharya. Oral Health related quality of life as a predictor for caries experience and SiC Index, *Manipal Odontoscope*, 4, 2012, 10-14
14. Thippeswamy HM, Kalyana Chakravarthy Pentapati, Oral Hygiene practices and dental caries among 5, 12 and 15 year old schools children of Davangere district, *Manipal Odontoscope*, 4, 2012, 18-23.

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4. Pentapati KC, Acharya S, Bhat M, Krishna Rao SV, Singh S. Oral health impact, dental caries, and oral health behaviors among the National Cadets Corps in South India. *J Investig Clin Dent*. 2013;4:39-43.
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31. Anirudha Agnihotry, Karanjot S. Gill, Deepak Singhal, Zbys Fedorowicz, Sambit Dash, Vinicius Pedrazzi. A Comparison of the Bleaching Effectiveness of Chlorine Dioxide and Hydrogen Peroxide on Dental Composite. Brazilian Dental Journal (2014) 25(6): 524-527
32. Deepak Kumar Singhal. Dental caries experience among 3-5 years old pre-school children in Udupi Taluk, Karnataka, India. E-Journal of Dentistry Oct - Dec 2014 Vol 4 Issue 4. 671-676

Details conference presentations:

2012

1. P Kalyana Chakravarthy. Do pregnant women have the knowledge about the implications of dental caries? : a study from rural India at 65th Indian Dental Conference, Mumbai (9th -12th Feb 2012).
2. Ram Prasad VP. Geriatric Oral Health Concerns at 65th Indian Dental Conference, Mumbai (9th -12th Feb 2012).
3. Deepak Kumar Singhal. Socio-demographic, Psychological and self-reported oral health factors influencing preventive dental behavior in adults, at 65th Indian Dental Conference, Mumbai (9th -12th Feb 2012).
4. P Kalyana Chakravarthy. Stain Removal Efficacy of Novel Dentifrice Containing Papain and Bromelain Extracts - randomized controlled trial presented in IDEM conference, Singapore (20th – 21st April 2012).
5. Nishu Singla. Lifestyle factors affecting the periodontal health status of adult population attending dental outreach centers of Udupi taluk in International conference on Environmental and Occupation Health. (20-22nd Dec 2012).

6. Deepak Kumar Singhal. Ergonomics in dental practice in International conference on Environmental and Occupation Health. (20-22nd Dec 2012).
7. Ram Prasad VP. Significance of Dental education environment in the institution and countries of south East Asia. International Association for Dental research- South East Asian Division 1-4th November 2012 Hong Kong.
8. Deepak Kumar Singhal. Oral Health status of preschool children and their mother's oral health-related knowledge, attitude and practices in Udupi taluk 17th IAPHD, at Chennai. (23rd-22th Nov 2012).
9. Ram Prasad VP. ISO – Points to consider at 17th IAPHD, in Chennai. (23rd-22th Nov 2012).

2013

1. P Kalyana Chakravarthy Relationship of body mass index and dental caries with oral health related quality of life among adolescents of Udupi district, South India. APDC Malaysia 2013
2. P Kalyana Chakravarthy Stain Removal Efficacy of Herbal Mouth Rinses Containing Sodium Hexametaphosphate. IADR – APR 2013 Thailand.
3. Dr. Shashidhar Acharya. 'Factors affecting oral health among post-partum women in South India' at the UAE International Dental Conference & Arab Dental Exhibition. AEEDC Dubai , 5th -7th February 2013
4. Dr. Shashidhar Acharya. Presented an Oral Presentation- Socioeconomic mobility and tobacco consumption patterns in fish industry workers. FDI World Dental Congress at Istanbul, Turkey, 28-31st August 2013.
5. Dr. Deepak Kumar Singhal. "Prevalence and clinical consequences of untreated dental caries using pufa index among school children in Udupi taluk, India" at XVIII National Conference of Indian Association of Public Health Dentistry in Sardar Patel Post Graduate Institute of Dental and Medical Sciences, Lucknow, 22nd – 24th Nov 2013
6. Dr. Ram Prasad V. P. " Use of Fagerstrom Addiction Scale amongst Outpatients of Udupi Taluk, a Cross Sectional Study." at the International Conference on Public Health Priorities in the 21st Century: The endgame for Tobacco, September 10-12, 2013., New Delhi, India.

2014

1. P Kalyana Chakravarthy Unmet Restorative Treatment Needs Among Orphanage Children of Uttara Kannada District FDI AWDC, New Delhi (11th -14th September 2014)
2. Nishu Singla - 'Effect of oil gum massage therapy on common pathogenic oral microorganisms – A Randomised controlled trial' at 36th Asia Pacific Dental Congress Held on 17-19 June 2014 at Dubai, United Arab Emirates.
3. Shashidhar Acharya. Attended the IADR/AMER General Session & Exhibition, and presented the following research: 'The Development of a Sociodental Impacts Locus of Control Scale' at Cape Town, South Africa, June 23-28, 2014.
4. Shashidhar Acharya presented a draft plan for "Addressing oral cancer and Tobacco cessation in Dental Practice" during the formulation of an Action Plan for Promoting Oral Health & Surveillance in the South-East Asia Region, conducted by WHO in association with AIIMS, New Delhi on 27 - 28 October 2014.
5. Dr. Deepak Kumar Singhal. "Assessment of KAP among mothers of 3-5 years old school children in Udupi Taluk" at 7th International Dental Students and 1st Dental Surgeons Congress Conference held at Kala Academy, Goa, India on 28th and 29th March 2014
6. Dr. Deepak Kumar Singhal. "Dental neglect and oral health of preschool children in Udupi taluk, India" at FDI Annual World Dental Congress 2014, in New Delhi from 11-14th Sep 2014.

12. Placement record of the past students and the contribution of the department to the student placements

S.No	Year of passing postgraduate course	Name of the student	Institution where employed
1	April 2012	Sandeep Kumar	Aurobindo Dental College, Indore
2	April 2012	Nishu Singla	Manipal College of Dental Sciences, Manipal, Karnataka
3	April 2013	Siddhi Hathiwala	Rungta College of Dental Sciences and Research, Bhilai, Chhattisgarh
4	April 2013	Snehal Patil	School of Dental Sciences, Karad, Maharashtra

5	April 2014	Samuel Raj	Thai Moogambigai Dental College, Dr. MGR University, Chennai
6	April 2014	Sachin Khatri	Government Dental College, Nagpur

13. Plan of action of the department for the next five years

- To host IAPHD national conference in November 2015
- Increase in health promotional and research activities
- Increase in local and international tie ups
- Increase in the number of publications from the Department
- To acquire extramural funds for research
- To establish Tobacco Cessation Centre at MCOODS, Manipal

ORAL PATHOLOGY AND MICROBIOLOGY

1. Faculty profile - adequacy and competency of faculty:

The teaching faculty meets the stipulated requirements of the statutory body (i.e. Dental Council of India) with respect to undergraduate and postgraduate training. The entire faculty therefore have competency as laid down by DCI. The faculty maintains and upholds the standards and competency by keeping abreast of latest developments in the field and regularly attends workshops and conferences to meet higher standards.

S. No.	Name	Qualification	Designation	Experience in years (As of 31 st December 2014)
1	Dr. Monica Charlotte Solomon	MDS	Professor and Head	18
2	Dr. Nirmala N Rao	MDS	Professor	24
3	Dr. Raghu A.R	MDS, PhD	Professor	17
4	Dr. Sunitha Carnelio	MDS	Addl. Prof.	16
5	Dr. Chetana Chandrashekar	MDS	Assoc. Prof.	07
6	Dr. Ankur Kaur Shergill	MDS	Asst. Prof.	03

Category	Sanctioned (as per DCI)	Filled
Teaching staff	5	6
Lecturer	-	-

2. Student profile – entry level competencies, socioeconomic status, language proficiency etc.,

Refer Annexure 01. Student Profile for details

3. Changes made in the courses or programs during the past three years and the contribution of the faculty to those changes

The course is regulated by DCI and the department strictly complies with the syllabus and the guidelines of the DCI and the same is endorsed by the Board of Studies, Manipal University. The examinations conducted reflect the synergy between the clinic-pathologic field and are designed in as objective a manner.

Courses:

- BDS – Changes include planning and execution of revised practical manual for Dental Anatomy, Oral Histology and Oral Pathology
- MDS – Changes in periodic assessment and feedback were designed and implemented
- PG Diploma in Dental Materials – Changes include planning of project work and successful completion

4. Trends in the success and drop-out rates of students during the past three years:

Course	Pass Percentage (%)	Dropout Rate		
	2012-2013	2013-2014	2012-2013	2013-2014
I BDS	100	97	0	0
III BDS	95	99	0	0
MDS	100	100	0	0

5. Learning resources of the departments - library, computers, laboratories and other resources:

Description of resource	Numbers
Clinic	01
Demonstration laboratory	01
Museum	01
Research laboratory	01
Reporting room	01
Seminar Room	01
Library books	117
E books	05
Internet points	06
Computers	03
Multi viewing microscope	01
Image Proplus	01

6. Modern teaching methods practiced and use of ICT in teaching – learning:

- Audio visual aids such as LCD projectors are being used.
- Objective structured practical examination (OSPE) for undergraduates
- Tutorials and assignments for undergraduate students

- Demonstration of carving of tooth morphology

7. Participation of teachers in academic and personal counseling of students

- Mentoring all the undergraduate and post graduate students
- Teacher Guardian scheme for Year I students.
- Periodic monitoring of attendance and assessment of assigned work
- Academic counseling at the end of each session for under graduate students
- Members of counsel of college committee
- Members of the board of studies
- Panel of internal and external examiners
- Preparation of quality policy and institutional enhancement activities

8. Details of faculty development programmes and teachers who have been benefited during the past three years

2012

S. No	Title of the programme and Details	Attended by
1	“An approach to the diagnosis of salivary gland tumors”. AECS Maaruti College of Dental Sciences and Research Center. 17 th Mar 2012	Dr. Raghu AR
2	“Teacher as Leader” Manipal Center for Professional and Personal Development. 22 nd March 2012	Dr. Monica Solomon, Dr. Raghu AR, Dr. Sunitha C, Dr. Chetana C.
3	Workshop in Oral Pathology. AB Shetty Memorial Institute of Dental Sciences, Mangalore. 30-31 March, 2012	Dr. Monica Solomon, Dr. Raghu AR, Dr. Sunitha C, Dr. Chetana C.
4	“Medical Writing” Department of Medicine. KMC Manipal 16-17 June 2012	Dr. Monica Solomon, Dr. Sunitha Carnelio
5	“Search” Manipal Center for Professional and Personal Development. 28 th Aug. 2012	Dr. Raghu AR
6	CDE Programme on Sign-Outs Every Report Counts at MCODES Manipal on 15th Dec. 2012	Dr. Nirmala N Rao, Dr. Monica C Solomon, Dr. Raghu AR, Dr. Sunitha C, Dr. Chetana C, Vimi S, Ankur S
7	Continuing Dental Education programme on	Dr Nirmala N Rao,

	“Periodontal Medicine” organized by Department of Periodontology, Manipal College of Dental Sciences, Manipal on 1 st Sep 2012	
8	CME on /forensic Odontology “Tooth do Tell Tales” an aid in forensic investigation held on 3 rd March 2012 at Department of Medical Education, KMC Mangalore	Dr Nirmala N Rao
9	Manipal University HR Workshop on “Leadership Transformation Programme” MU, Manipal, on November 23-24, 2012	Dr Nirmala N Rao

2013

S. No	Title of the programme and Details	Attended by
1	Excellence in Dental Research on 16-11-2013 at Manipal	Dr. Monica C Solomon Dr. Nirmala N Rao, Dr. Sunitha C, Dr. Chetana C, Dr. Ankur Kaur Shergill
2	First Mid-term conference of IAOMP that was held from January 24-26, 2013 at Chennai	Dr. Monica C Solomon. Dr. Raghu AR, Dr. Chetana C
3	XXII National Conference of IAOMP, Mumbai, 8-10 Nov, 2013	Dr. Monica C Solomon. Dr. Raghu AR, Dr. Chetana C, Dr. Ankur Kaur Shergill
4	3rd Annual Conference of Karnataka State Chapter of AOMSI, March 7th – 9th 2013.	Dr. Sunitha Carnelio, Dr. Ankur Kaur Shergill
5	Continuing Dental Education programme on “Towards success in Dental Research –Need for Best Practices” organized by Department of Public Health Dentistry, Manipal College of Dental Sciences, Manipal on 6 th July 2013	Dr Nirmala N Rao

2014

S. No	Title of the programme and Details	Attended by
1	Mini Workshop for Postgraduate Dissertation Guides by Manipal Unit of UNESCO Chair in Bioethics: at	Dr. Chetana Chandrashekar, Dr. Monica C Solomon

	Kasturba Medical College, Manipal University, Manipal on 7th June 2014.	
2	Master Class Series: An Eclectic Patho med Rendezvous at MS Ramaiah Dental College, Bangalore on 14th and 15th March 2014.	Dr. Chetana Chandrasekhar
3	National workshop on “Design” conducted by MCPD on 17th and 18th of February 2014	Dr. Monica C Solomon Dr. Chetana chandrashekar
4	XXIII National Conference of IAOMP, Bangalore, Nov, 2014	Dr. Nirmala N Rao
5	CPD Program - “Systematic Review and meta-Analysis on 22-23 August 2014 by department of Periodontology, MCOADS, Manipal.	Dr Nirmala N Rao
6	CPD Diagnosis and ethics - a straddle for Oral Cancer care on 13-12- 2014 Organized by Department of Oral Pathology Manipal College of Dental Sciences Manipal	Dr. Monica C Solomon Dr. Chetana chandrashekar Dr Nirmala N Rao, Dr. Sunita Carnelio, Dr. Ankur

9. Participation/contribution of teachers to the academic activities including teaching, consultancy and research

Teaching:

- Entire faculty is involved in teaching undergraduate and postgraduate students
- Setting question papers of Manipal university and other universities
- Writing articles for national as well as international journals.
- Contributing chapters in books.
- Presenting scientific papers in national and international annual conferences.
- Guest speakers for national conferences.
- Examiners for undergraduate and post-graduate examinations of other universities.

Consultancy:

- Faculty members are actively involved in biopsy reporting
- Diagnosis of oral and orofacial diseases and disorders
- Board of studies: Chairperson and members
- Writing oral health related articles in Newspapers and magazines for the general public

Research by faculty**2012**

S. No.	Title	Faculty Involved
1.	Evaluation of multiple markers for prognostication of locally advanced oral squamous cell carcinoma	Dr. Monica Solomon
2.	Evaluation of Proliferative verrucous leukoplakia utilizing immuno markers	Dr. Raghu AR, Dr. Monica Solomon
3.	The role of Ki-67, CD34, MMP-2, MMP-9 in cystic ameloblastoma	Dr. Sunitha C, Dr. Chetana C
4.	Clinicopathological correlation of recurrent and non-recurrent odontogenic keratocyst	Dr. Raghu AR, Dr. Chetana C

2013

S. No.	Title	Faculty Involved
1.	Evaluation of multiple markers for prognostication of locally advanced oral squamous cell carcinoma	Dr. Monica Solomon
2	Assessing the pathogenicity of Candida Species	Dr. Sunitha Carnelio

2014

S. No.	Title	Faculty Involved
1.	Evaluation of multiple markers for prognostication of locally advanced oral squamous cell carcinoma	Dr. Monica Solomon
2.	Assessing the pathogenicity of Candida Species	Dr. Sunitha Carnelio

10. Collaboration with other departments/ institutions, at the State, National and international levels and their outcome during the past three years

2012

Collaborations	Project	Outcome
Radiation Oncology, KMC Manipal	Evaluation of multiple markers for prognostication of locally advanced oral squamous cell carcinoma	PhD Work

Surgical Oncology	Assessment of surgical margins in head and neck cancer	Faculty Project
ART Center, Govt. Hospital, Udupi	Candida carriage in HIV subjects	MDS Project
General Medicine	Candidal virulence in Type II Diabetics	MDS Project

2013

Collaborations	Project	Outcome
Radiation Oncology, KMC Manipal	Evaluation of multiple markers for prognostication of locally advanced oral squamous cell carcinoma	PhD Work
Microbiology, KMC Manipal	Microbiology studies on candida species	Research work
Clinical Oral Pathology, University of Sheffield	Potentially Malignant Lesion	Post-Doctoral Fellowship

2014

Collaborations	Project	Outcome
Radiation Oncology, KMC Manipal	Evaluation of multiple markers for prognostication of locally advanced oral squamous cell carcinoma	PhD Work
Microbiology KMC Manipal	Microbiology studies on candida species	Research work
Clinical Oral Pathology University of Sheffield	Potentially Malignant Lesion	Post-Doctoral Fellowship

11. Priority areas for Research and details of the ongoing projects, important and noteworthy publications of the faculty, during past three years:

- Evaluation of biomarkers in potentially malignant oral disorders and oral cancer
- Saliva as a diagnostic tool in Diabetes mellitus and HIV
- Assessment of tumor progression in oral cancer
- Validation work on fibro osseous lesions
- Morphometric analysis of tumor cells in oral cancer
- Microbiology studies on candida species

Ongoing:

Category	Number
Funded research projects	02
Non-funded research projects	01
PhD research projects	01
PG research projects	05
UG research projects	02

Last 3 years (2013-2014)

		2012	2013	2014
Completed funded research projects		01	02	03
Completed non-funded research projects		02	01	-
Completed PhD research projects		-	-	-
Completed PG research projects		02	03	03
Completed UG research projects		-	-	-
Publications	International	05	12	19
	National	10	04	03
Books		-	01	-
Chapters in books			01	-
Conference presentations/ Invited lectures	International	04	02	-
	National	07	05	16

Ongoing PG projects:

S. No.	Title	Name of the student	Guide
1.	An Immunohistochemical study on assessment of Rascin – 1 expression in ameloblastoma”	Dr. Hari Shankar	Dr. Sunitha Carnelio
2.	“To Study the Expression of Fibronectin in severe dysplasia, Early invasive carcinoma and oral squamous cell carcinoma: An immuno-histochemical appraisal	Dr. Jasleen Grover	Dr. Nirmala N Rao
3.	Elucidating the role of Cyclooxygenase-2 in Pathogenesis of Oral Lichen Planus –An Immunohistochemical and Histochemical Analysis	Dr. Pratyush Singh	Dr. Monica Solomon

4.	Expression of ERCC1 in oral squamous cell carcinoma- An immunohistochemical analysis	Dr Deepthi pankaj	Dr Monica Charlotte Solomon
5.	Estimation of L-detyrosinated tubulin in oral squamous cell carcinoma- an immunohistochemical study	Dr Neha Agarwal	Dr Sunitha Carnelio

Completed PG projects:**2012**

S. No.	Title	Name of the student	Guide
1	MMP-2 and MMP-9 as predictive indicators in early tongue squamous cell carcinoma	Aparna Menon	Dr. Raghu AR
2	Expression of S100A4 in oral squamous cell carcinoma	Jayalakshmi	Dr. Raghu AR

2013

S. No.	Title	Name of the student	Guide
1	Oral Candidal Speciation and Fluconazole Susceptibility in HIV Patients	Parul Sah	Dr. Raghu AR
2	Expression of cyclooxygenase – 2 in different grades of oral squamous cell carcinoma – An immunohistochemical study	Aditi Amit Byatnal	Dr. Monica Solomon
3	A study on expression of osteocalcin in neoplastic and fibro osseous lesions of jaw bones	Aatish Thennavan	Dr. Nirmala N Rao

2014

S. No.	2014	Name of the student	Guide
1	Assessment of proliferative potential of tumor cells using morphometric analysis and Ki-67 expression of prognostication of oral squamous cell carcinoma	Mahima Rakheja	Dr. Monica Solomon
2	Oral Candidal speciation, virulence and antifungal susceptibility in asymptomatic type 2 diabetes Mellitus	Pratik Patel	Dr. Raghu AR

3	Expression of Epithelial cell adhesion molecule (EpCAM) in oral squamous cell carcinoma	Subhalakshmi Sen	Dr. Sunitha Carnelio
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Details of Publications:

2012

1. Jiji George, Ramandeep Singh Narang, Nirmala N Rao, Stromal response in different histological grades of oral squamous cell carcinoma: A histochemical study: Indian Journal of Dental Research: vol: 23(6), page no. 842, 2012
2. Upadhyay RB, Upadhyay J, Agrawal P, Rao NN. Analysis of gonial angle in relation to age, gender, and dentition status by radiological and anthropometric methods. J Forensic Dent Sci. vol:4(1):Page nos. 29-33, 2012
3. Agarwal P, Rao NN. Bisphosphonate-associated osteonecrosis of the jaws. Indian J Dent Res. Vol:23(1):Page nos. 107-11: 2012
4. Koshy AV, Rao NN, Kamat SS, Kiswani K, Kapse SC, Shaikh NA. Expression of extracellular matrix-laminin in oral squamous cell carcinoma: an immunohistochemical study. J Contemp Dent Pract. vol1;13(2): page nos. 194-200. 2012
5. Juhi Verma, Nirmala N Rao, Ram Ballabh Upadhyay, A Comparative analysis of langerhans cell in oral epithelial dysplasia and ora squamous cell carcinoma using antibody CD-1a: J Cancer Res There. vol 8(4), page no. 591-597; 2012
6. Amar A Sholapurkar, Keerthilatha M Pai, Monica C Solomon: Recurrent Exophytic Growth on Maxillary Posterior Edentulous Alveolar Ridge - A Diagnostic Challenge: Dental Update: vol: 39 page no. 286-290, 2012
7. Monica Charlotte, Shwetha Rehani, Manna Valiathan, Lakshmi Rao, Raghu A R, Nirmala N Rao, Sunitha Carnelio, Chethana Chandrashekar, Vimi S Mutalik: Benign Cementoblastoma involving Multiple Deciduous and Permanent Teeth of the Maxilla - A case report. Oral & Maxillofacial Pathology Journal (OMP): vol – 3 page no. 258, 2012
8. Monica Mehendiratta, Shwetha Rehani, Monica C Solomon: The histological spectrum of myxoma, myxofibroma/fibromyxoma and odontogenic fibroma – “A chicken and egg situation’, IOSR JDMS: vol 1(2): page nos. 3-5, 2012
9. Reddy VM, Kamath A, Radhakrishnan RA. p53 immunoprofiling of potentially malignant oral disorders: a case series analysis. Indian J Cancer. 2012Jan-Mar;49(1):27-32.

10. Thennavan A, Narayanaswamy V, Niazi TM, Rao L, Radhakrishnan R. Infantile myofibroma eroding into the frontal bone: a case report and review of its histopathologic differential diagnosis. *Case Rep Pediatr.* 2012;2012:630804.
11. Mutalik VS, Shreshtha A, Mutalik SS, Radhakrishnan R. Adenomatoid odontogenic tumor: A unique report with histological diversity. *J Oral Maxillofac Pathol.* 2012 Jan;16(1):118-21.
12. Bose R, Adiga SK, D'Souza F, Salian SR, Uppangala S, Kalthur G, Jain N, Radhakrishnan RA, Bhat N, Krishnamurthy H, Kumar P. Germ cell abnormalities in streptozotocin induced diabetic mice do not correlate with blood glucose level. *J Assist Reprod Genet.* 2012 Dec;29(12):1405-13.
13. Kaur GA, Sivapathasundharam B, Berkovitz BK, Radhakrishnan RA. An erupted odontoma associated with pigmentation: a histogenetic and histological perspective. *Indian J Dent Res.* 2012 Sep-Oct;23(5):699.
14. Gurkiran Kaur, Sunitha Carnelio, Gabriel Rodrigues. An unusual case of oral Leiomyoma mimicking a gingival epulis: *RSBO: vol 9(2) , Page Nos. 204-206, 2012*
15. Gabriel Rodrigues, Sunitha Carnelio, Lakshmi Rao. Intraoral Lipoma Masquerading as a Minor Salivary Gland Tumor. *Surgery Chron, vol 17(3), page nos. 217-218: 2012*

2013

1. Aditi Amit Byatnal, Anuradha CK Rao¹, Monica C Solomon, Raghu A Radhakrishnan A guise of osteosarcoma: Chondroblastoma-like. *Indian Journal of Dental Research,* 2013; 24(5): 631 635
2. Shrestha A, Carnelio S, Evaluation of Matrix Metalloproteinases – 2 (MMP-2) and Tissue Inhibitors of Metalloproteinases – 2 (TIMP – 2) in Oral submucous Fibrosis and Their Correlation with Disease Severity, *Kathmandu University Medical Journal,* 44(4), 274-281, 2013
3. Manikkath Aparna, Mukund Gupta, Nandita Sujir, Abhay Kamath, Monica Charlotte Solomon, Keerthilatha M Pai, Raghu Radhakrishnan. Calcifying Odontogenic cyst – a rare report of non-neoplastic variant associated with cholesterol granuloma. *J Contemporary dental practice* 2013;14 (6): 1178-1182.
4. Rahman F Rao NN, Tippu S R, Patil S, Agarwal S, Srivastava S The expression of laminin -5 in severe dysplasia/carcinoma in situ and early invasive squamous cell carcinoma: An immunohistochemical study, *Minerva Stomatologica* 2013 62(5), 139-146

5. Parul Sah Abhay Kamath, Chithra Aramanadka, Raghu Radhakrishnan Kimura's disease – An unusual presentation involving subcutaneous tissue, parotid gland and lymph node. *Journal of Oral and Maxillofacial Pathology* 2013 17(3) 455 -459
6. Mohit sharma Parul Sah, Sonal Soi Sharma, Raghu Radhakrishnan *Journal of Oral and maxillofacial Pathology* 2013 Vol 17(2) 240-247
7. Pratik Nalinbhai Patel Vimi Sunil Mutalik, Shweta Rehani, Raghu Radhakrishnan Basaloid Squamous cell carcinoma of oral cavity with incongruent clinical course *BMJ Case Reports* 2013 DOI 10.1136/bcr 2013-200441 4 pages
8. Vimi S Mutalik Aparna Menon, N Jayalakshmi, Asha Kamath, A R Raghu Dr. Raghu A R Utility of cheiloscopy, rugoscopy, and dactyloscopy for human identification in a defined cohort *J Forensic Dent Sci* 2013., Vol 5(1) 2-6
9. Parul Sah Aditi Amit Byatnal, Lakshmi Rao, Venkadasalapathy Narayanaswamy, Raghu Radhakrishnan, Dr. Raghu A R, Inflammatory Myofibroblastic Tumor: A Rapidly Growing Soft Tissue Mass in the Posterior Mandible Head and neck *Pathol* 2013 DOI 10.1007/s 12105-013-0474-8
10. Subhalakshmi SenAbhay Kamath, Mukund Gupta, Raghu Radhakrishnan R. A localised soft tissue and bone enlargement in an infant mandible *BMJ Case Report* DOI: 10.1136/ bcr- 2013-010291 2013.
11. Aatish Thennavan Lakshmi Rao, Raghu Radhakrishnan Polymorphous low –grade adenocarcinoma of maxillary alveolus metastasising to the abdomen: *BMJ Case Rep* Doi:10.1136/bcr-2013-009633 2013
12. A.Ather Hunaiza Ather, Shashi Rashmi Acharya, R A Radhakrishnan Lobodontia: the unraveling of the Wolf Teeth, *Romanian Journal of Morphology & Embryology (RJME)* 2013; 54(1) 215-217.
13. Aditi Byatnal, Jayalakshmi Natarajan, Venkadasalapathy Narayanaswamy Raghu Radhakrishnan, Orthokeratinized odontogenic cyst – critical appraisal of a distinct entity *Brazilian Journal of Oral Sciences*, 2013 12(1) 71-75
14. Aparna M Gupta M, Sujir N, Kamath A, Solomon M, Pai K, Radhakrishnan Calcifying odontogenic cyst: a rare report of nonneoplastic variant associated with cholesterol granuloma, *Jaypee Brothers Medical Publishers (P) Ltd.*, 2013; 14(6): 1178-1182
15. Parul Sah, Aparna Menon, Asha Kamath, Chetana Chandrashekar, Sunitha Carnelio, and Raghu Radhakrishnan. Role of immuno-markers in the clinicopathological analysis of unicystic ameloblastoma *Dis Markers*. 2013; 35(5): 481–488.
16. Maheshwari P, Chandrashekhar C, Radhakrishnan R. Vascularized mandibular anterior ameloblastoma- An entity still unresolved *Minerva Stomatol*, 2013, 62(5):183-88.

2014

1. Mutalik VS, Nichat P, Carnelio S, Solomon M, Radhakrishnan R. Clear cell variant of calcifying epithelial odontogenic tumor without calcification: a rarity. *J Contemp Dent Pract.* 2014 Jan 1;15(1):119-21.
2. Monica Charlotte Solomon, MS Vidyasagar, Donald Fernandes and Vasudev Guddattu. Clinico-Pathological Correlation of the Expression of Cyclin D1 and Bcl-2 in Oral Squamous Cell Carcinomas -A Tissue Microarray Study. *Int J Scientific research.* 3 (2) 361-365. 2014;
3. Dipshikha Bajracharya, Bijayatha Shrestha, Asha Kamath. Aparna Menon and Raghu Radhakrishnan - Immunohistochemical Correlation of Matrix Metalloproteinase – 2 and Tissue Inhibitors of Metalloproteinase – 2 in Tobacco Associated Epithelial Dysplasia, Hindwai Publishing Corporation Disease Markers, Volume 2014, Article ID 197813, 9 pages, Jan 2014
4. Manikkath Aparna, Arumugam Chakravarthy, Sashi Rashmi Acharya, Raghu Radhakrishnan -A clinical report demonstrating the significance of distinguishing a nasopalatine duct cyst from a radicular cyst, *BMJ Case Report* 2014, 1-3, Feb 2014
5. Mahima Rakheja, Jasleen Grover, Chetana Chandrashekar, Monica Charlotte Solomon - Multiplication Magnitude: Significance of Epithelial Cell Proliferation in Oral Squamous cell Carcinoma : A Systematic Review, *Research and Reviews Journal of Dental Sciences*, 2(1), 47-58, April-June 2014.
6. NDVN Shyam, Nirmala N Rao, Raman DS Narang, Jiji George, Sanjay R Bommu, G Kiran, Immunohistochemical Characterization of cyclin dependent Kinase - 4 in different histological grades of Oral leukoplakia and oral squamous cell carcinoma, *Journal of Oral and Maxillofacial Pathology*, 18(1), 36-41, 2014
7. Parul Maheshwari, Nirmala N Rao, Raghu Radhakrishna, Histochemical Evaluation of stromal components in fibrous dysplasia, central ossifying fibroma and juvenile ossifying fibroma affecting the jaw bones, *International Journal of Dental Research*, 2(1), 3-7, 2014
8. Dr. Subhalakshmi, Dr. Mary Mathew, Dr. Raghu A R, Dr. Abhay T Kamath, Dr. Sunitha Carnelio, Dr. Monica C Solomon- An Infiltrative Squamous cell carcinoma of the sinonasal tract – A report of a rare case, *International Journal of Advanced Research*, 2(5), 792-798, May 2014.
9. Mahima Rakheja, Raghu Radhakrishnan, Monica Charlotte Solomon - Sentinel lymph node biopsy in oral squamous cell carcinoma – Ensuing from elective to selective, *Journal of Research in Medical and Dental Sciences*, (2), 5-10, April-June 2014.

10. Ankur Kaur Shergill, Pratyush Singh, Monica Charlotte Solomon, Gurshinder Pal Singh, Dentigerous Cyst associated with an Erupted Tooth – An Unusual Presentation, International Journal of Scientific Study, 2(2), 100-102, May 2014
11. Dr. Pratyush Singh, Pratik Patel, Raghu A R, Ankur Kaur Shergill, Monica Charlotte Solomon - Current Assessments Regarding the Pathogenesis and Treatment Strategies of Oral Lichen Planus – A Review, Asian Pacific Journal of Health Sciences, 1(2), 96-103, 2014
12. Aditi Amit Ayatnal, Subhalakshmi Sen, Amit Byatnal, Monica Charlotte Solomon- “Cyclooxygenase – 2” A vibrant Chemical Mediator in A Plethora of oral Lesions, Int. J Cur Res Rev, 6(12), 33-36, June 2014
13. Vignesh Kailasam, Ashima Valiathan, Nirmala Rao – Histological evaluation after electrothermal debonding of ceramic brackets, Indian Journal of Dental Research, 25(2), 2014, 143-149
14. Monica Charlotte Solomon MS Vidyasagar, Donald Fernandes. Tissue Microarray technology a novel research tool for Oral Squamous Cell Carcinoma: A review. International Res J Med Sci 2014; 2 (7): 21-29
15. Hari shanker, A Subhalakshmi. Sen, Chetana Chandrashekhar, Sunitha Carnelio, Ambika Nalwar, Monica C Solomon, Human Papilloma Virus and Head and Neck Cancer – A Review - International Journal of Recent Scientific Research, Vol.5 Issue 7, 1276-1280, 2014.
16. Hari Shankar alampally, Ankur Kaur Shergill, Sunitha Carnelio, Chetana Chandrashekar, Gurshinder Pal Singh. Unicystic ameloblastoma associated with a compound odontome: An unusual presentation. Int J Cur Res Rev 2014;1 7:17-20. Aug 2014
17. Monica Mehendiratta, Monica Charlotte Solomon, Karen Boaz, Vasudeva Guddattu, Aashima Mohindra. Clinico-pathological correlation of E cadherin expression at the invasive tumor front of Indian oral squamous cell carcinomas: An immunohistochemical study. J Oral Maxillofac Pathol 2014;18:17-22.
18. Jasleen Gover, Mahima Rakheja, Nirmala N Rao, Ankur Singh, Monica C Solomon, - “Emerging Strategies against Head and Neck Cancer- A Review published in IOSR Journal of Dental & Medical Sciences, Vol 13, Issue 9, Sept 2014.
19. Aparna M, Natarajan J, Arumugam C, Radhakrishnan R – Primary Synovial sarcoma of the maxilla – J cancer Res Ther, Jul-Sept 2014, Vol 10(3), 739-741
20. Jayalakshmi Natarajan, Chetana Chandrashekar, Raghu Radhakrishnan – Critical biomarkers of epithelial – mesenchymal transition in the head and neck cancers - Journal of Cancer Research and Therapeutics, vol 10(3), 512-518, July-Sept 2014

21. Aparna M, Rao L, Kunhikatta V, Radhakrishnan R – The role of MMP – 2, MMP-9 as prognostic markers in the early stages of tongue squamous cell carcinoma, J Oral Pathol Med, doi1111/jop.12245, Sept 2014
22. Jayalakshmi Natarajan, Keith Hunter, Vimi S Mutalik, Raghu Radhakrishnan Overexpression of S100a4 As A Biomarker Of Metastasis And Recurrence In Oral Squamous Cell Carcinoma J Appl Oral Sci. 2014;22(5):426-33

Details of chapters in books published by faculty:

S. No.	Name of the chapter	Title of the book	Name of the faculty	Publisher	Year
1	Manual of Salivary Gland Diseases	1. Anatomy of Human Salivary Gland 2. Physiology & Functional Disorders of Salivary Gland	Dr. Raghu A R	Jaypee Brothers Medical Publishers Pvt. Ltd.,	2013
2	Lesions of Oral Mucosa in Children	Text Book of Pedodontics III edition	Dr. Nirmala N Rao	Paras Publishers	2013

Details of Conference presentations, guest lectures and invited talks

2012

1. Raghu AR. Saliva as a diagnostic tool. KMCT Dental College, Calicut 25th April, 2012
2. Raghu A.R. Doc2B promoter methylation in oral cancer tissues. American Association of Oral and Maxillofacial Pathology, Minneapolis, USA, 26 June 2012
3. Monica Solomon. Role of MLH1 in oral cancer in Indian Population. 8th International Conference of Head and Neck Cancer, Toronto. 21-25 July, 2012
4. Raghu AR. Oral Pathology for General Dental Practitioners. Joint MDASZ Melaka Manipal Medical College 4th Dental Conference, Malaysia. 6-7 Oct. 2012
5. Chetana Chandrashekar. Immunohistochemical markers in the definitive diagnosis of salivary duct carcinoma. 21st National Conference of IAOMP, Goa. 26-28, Oct2012
6. Raghu AR. Untrodden Pathology: Exploring the Unknown. XX1 National Conference of IAOMP, Bambolim, Goa. 26-28, 2012
7. Dr. Ankur Kaur. Expression of MLHI in primary oral squamous cell carcinoma. 3rd International Conference on Stem Cells and Cancer (ICSCC-2012), New Delhi. 27-30 Oct. 2012
8. Nirmala Rao. How to write a histopathology report. Signout, MCOODS, Manipal, 15th

Dec. 2012

9. Monica Solomon and Chetana C. Spot the diagnosis. Signout, MCOODS, Manipal, 15th Dec. 2012
10. Sunitha Carnelio and Vimi Mutalik. Fibromatous lesions. Signout, MCOODS, Manipal, 15th Dec. 2012
11. Dr. Nirmala N Rao, Role of Dentists in Mass Disaster in CME on /forensic Odontology “Tooth do Tell Tales” an aid in forensic investigation held on 3rd March 2012 at Department of Medical Education, KMC Mangalore

2013

1. Dr. Raghu A R- Annual South Zone dental conference in Malaysia, May 2013
2. Dr. Sunitha Carnelio-3rd Annual Conference of Karnataka State Chapter of AOMSI, March 7th – 9th 2013. Chaired a session
3. Dr. Sunitha Carnelio-UAE Cancer Congress 2013, Dubai-Can MMP-2 expression in oral lichen planus herald the progression to oral malignancy?
4. Dr. Chetana Chandrasheka -First Mid-term conference of IAOMP that was held from January 24-26,2013 at Chennai “Histological Profiling of Recurrent and Non-Recurrent Odontogenic Keratocysts”
5. Dr. Chetana Chandrashekar-XXII National Conference of IAOMP, Mumbai 8, - 10Nov, 2013 Histochemical and immune histochemical Profiling of Recurrent and Non-Recurrent Odontogenic Keratocysts”
6. Dr. Ankur Kaur Shergill-3rd Annual Conference of Karnataka State Chapter of AOMSI, March 7th – 9th 2013. Cancer stem cells: a promising tool for targeted Therapeutics”
7. Dr. Ankur Kaur Shergill -XXII National Conference of IAOMP, Mumbai, 8-10 Nov 2013“Oral Cancer Sequencing- A conduit from Evolution to Cure”

2014

1. Dr Monica Charlotte Solomon and Dr Sunita Carnelio chaired a scientific session at the 42nd Karnataka state dental conference that was held at Mangalore on November 22nd 2014
2. Dr. Ankur Kaur Shergill attended 10th South Zone and 32nd Karnataka State Annual ENT conference 2014 that was held in Raja Rajeswari Medical College and Hospital, Bangalore on 10th 11th & 12th October 2014.
3. Dr. Chetana Chandrashekar attended the workshop, Manipal Unit of UNESCO Chair in Bioethics: Mini Workshop for Postgraduate Dissertation Guides at Kasturba Medical

- College, Manipal University, Manipal on 7th June 2014.
4. Dr. Monica C Solomon attended the workshop, Manipal Unit of UNESCO Chair in Bioethics: Mini Workshop for Postgraduate Dissertation Guides at Kasturba Medical College, Manipal University, Manipal on 20th June 2014.
 5. Dr. Chetana Chandrashekar attended the workshop Master Class Series: An Eclectic Pathomed Rendezvous at MS Ramaiah Dental College, Bangalore on 14th and 15th March 2014.
 6. Dr. Nirmala N Rao chaired Scientific /Literary session during “IGNITE” UG students and Interns Scientific Meet held from March 6-8, 2014 at Manipal College of Dental Sciences, Manipal.
 7. Dr. Monica Charlotte Solomon chaired Scientific /Literary session during “IGNITE” UG students and Interns Scientific Meet held from March 6-8, 2014 at Manipal College of Dental Sciences, Manipal.
 8. Dr Monica Charlotte Solomon and Dr Sunitha Carnelio were resource persons for a CPD program on Tissue Microarray technology at Yenepoya Dental College that was held on March 10th 2014.
 9. Dr. Monica C Solomon attended International CME in Pathology, Histopathology and Cytopathology organized in Goa on 27th, 28th February and 1st March 2014 by Indian Academy of Cytologists, Presented a paper titled “ Immunoprofiling of Oral Squamous Cell Carcinomas for Better Prognostication – A Tissue Microarray Approach”
 10. Dr. Pratyush Singh attended a conference on 1st Post Graduate Convention of Kairali Society of Oral & Maxillofacial Pathologists (KSOMP) at Trivandrum held on 22nd and 23rd February 2014, presented a paper titled “Current assessment regarding pathogenesis”.
 11. Dr. Jasleen Grover attended a conference on 1st Post Graduate Convention of Kairali Society of Oral & Maxillofacial Pathologists (KSOMP) at Trivandrum held on 22nd and 23rd February 2014, presented a paper titled “An insight to anti-cancer strategies and targeted approaches”.
 12. Dr. Hari Shankar attended a conference on 1st Post Graduate Convention of Kairali Society of Oral & Maxillofacial Pathologists (KSOMP) at Trivandrum held on and 2nd February 2014, presented a paper titled “HPV in Oral Cancer – A Review”.
 13. Dr. Monica C Solomon attended a national workshop on “Design” conducted by MCPD on 17th and 18th of February 2014
 14. Dr. Chetana chandrashekar attended a national workshop on “Design” conducted by MCPD on 17th and 18th of February 2014
 15. Dr Monica Charlotte Solomon was a resource person for a slide seminar conducted at

Babu Banaris dental college Lucknow on February 2nd 2014

16. Dr. Monica C Solomon attended International Oral Pre Cancer and Cancer Congress 3rd and 4th February 2014, at Lucknow and presented a paper titled “Simultaneous evaluation of the expression of EGFR, p53, Bcl – 2 & cyclin D1-a potential adjunct for Oral Squamous Cell Carcinoma”

12. Placement record of the past students and the contribution of the department to aid student placements

S. No	Year of passing postgraduate course	Name of the Postgraduate	Institution where employed
1	2012	Dr. Ankur Kaur Shergill	Manipal College of Dental Sciences, Manipal
2	2013	Dr. Jayalakshmi Natarajan	Tamilnadu Dental College, Chennai
3	2014	Dr. Aatish	PhD at University of North Carolina, USA
4	2014	Dr. Aditi Amit	Private practice

13. Plan of action of the department for the next five years

- Effective use of teaching aids and methodology in didactic lectures
- Small group discussions to improve the communication skills among undergraduate students
- Work on the curriculum to improve the PG training by including discussions and skills
- To involve them in research projects and scientific presentation and publication of research results
- Regular oral presentations of journal articles of interest
- Seminars on recent advances in Oral Pathology
- To procure more research equipment that can help us to diversify areas of research
- Generate funds to carry out oral cancer research
- Epidemiological screening of oral pre-cancer/oral cancer
- Microbiological Studies

DENTAL MATERIALS

1. Faculty profile –adequacy and competency of faculty members

The teaching faculty meets the stipulated requirements of the statutory body (i.e. Dental Council of India) with respect to undergraduate and postgraduate training. The entire faculty therefore have competency as laid down by DCI. The faculty maintains and upholds the standards and competency by keeping abreast of latest developments in the field and regularly attends workshops and conferences to meet higher standards.

S. No.	Name	Qualification	Designation	Experience in years (As of 31 st December 2014)
1	Dr. Nagaraja Upadhya P	MSc, PhD	Selection Grade Lecturer	23
2	Dr. Kishore Ginjupalli	MSc, PhD	Selection Grade Lecturer	14
3	Dr. Abhishek Bhagat	BDS, MSc	Lecturer	03

Description	Sanctioned	Filled
Teaching staff	-	02
Lecturer	-	01

2. Student profile – Entry level competencies, socioeconomic status, language proficiency etc.

Refer Annexure 01. Student Profile for details

3. Changes made in the courses or programs during the past two years and the contribution of the faculty to those changes

The course is regulated by DCI and the department strictly complies with the syllabus and the guidelines of the DCI and the same is endorsed by the Board of Studies, Manipal University. The examinations conducted reflect the synergy between the clinic-pathologic field and are designed in as Objective a manner.

- From 2011, new practical exercises have been introduced and the entire faculty has been involved in the design and execution of these practicals.
- From 2013, dental class quiz program for undergraduate students was introduced.
- From 2014, self-directed learning for undergraduate students was introduced

4. Trends in the success and dropout rates of students during the past two years

Course	Pass percentage			Drop outs		
	2012	2013	2014	2012	2013	2014
II BDS	95	98	96	Nil	-	-
PG Diploma in Dental Materials	100	-	100	Nil	01	Nil
I DMC	No Admission	No Admission	No Admission	-	-	-
II DMC	No Admission	No Admission	No Admission	-	-	-

5. Learning resources of the departments - Library, computers, laboratories and other resources

Resource description	Quantity
Department library books	30
Computers	03
Printer	02
Scanner	02
Laboratories	01 (UG lab) + 02 (PG laboratory)
Universal testing machine	01
Metallurgical microscope	01
Equipment for measurement and analysis	32
Museum	01 with approximately 1700 exhibits

6. Modern teaching methods practiced and use of ICT in teaching-learning

- Use of audio visual aids such as LCD projectors for better teaching-learning activity.
- Objective structured practical examination for undergraduates
- Seminar component for undergraduate students
- Self-directed learning
- Dental quiz program
- Demonstration of testing and evaluation of dental materials
- Under graduate research program

7. Participation of teachers in academic and personal counseling of students

- Faculty members are involved in the academic counseling (poor performance or poor attendance) of the students. The counseling is conducted at the end of each periodic examination.
- Dr. Abhishek Bhagat is a Teacher Guardian for 10 students since 2012.

8. Details of faculty development programs and teachers who have been benefited during the past two years

2012

S. No	Details of the program	Attended by
1	Workshop on “Composites – Color sciences & clinical considerations” organized by Manipal College of Dental Sciences, Manipal on November 22 nd 2012	Nagaraja Upadhya P Kishore Ginjupalli Abhishek Bhagat
2	Lecture for “Future dental professional” conducted by Colgate& JDA on 17 th Nov 2012	Nagaraja Upadhya P
3	CDE on “Bone Grafting” organized by department of Periodontics, Manipal College of Dental Sciences, Manipal on September 29th 2012	Nagaraja Upadhya P Kishore Ginjupalli
4	CDE on “Management of Biofilm in Periodontal Disease” organized by department of periodontics, Manipal College of Dental Sciences, Manipal on September 15th 2012	Nagaraja Upadhya P Abhishek Bhagat
5	CDE on “Periodontal Medicine” organized by department of Periodontics at Manipal College of Dental Sciences, Manipal on September 1st 2012.	Nagaraja Upadhya P Kishore Ginjupalli
6	CDE on “Predictable esthetic restorations” organized by department of conservative dentistry and endodontics at Manipal College of Dental Sciences, Manipal on March 1st 2012.	Kishore Ginjupalli Nagaraja Upadhya P Abhishek Bhagat

2013

S. No	Details of the program	Attended by
1	“Emerging trends in dental education” conducted by Manipal Center for professional and personal development and	Kishore Ginjupalli Abhishek Bhagat

	Department of Prosthodontics, MCOADS, Manipal on 17th September 2013 at Manipal University, Manipal.	Nagaraja Upadhya P
2	CDE on Spectrum 13 organized by department of conservative dentistry and endodontics, MCOADS Manipal on 24th October 2013.	Kishore Ginjupalli Abhishek Bhagat Nagaraja Upadhya P
3	CDE program on “Towards success in research-need for best practices organized by Department of Public Health Dentistry, MCOADS, Manipal on 6 th July 2013	Nagaraja Upadhya P

2014

S. No	Details of the program	Attended by
1	Faculty development program in Entrepreneurship organized by Manipal Institute of Technology, Manipal from 17th to 28th March 2014 at MIT, Manipal.	Kishore Ginjupalli
2	CDE on Updates in adhesive industry, composites, cements galore” conducted by Department of conservative dentistry and endodontics, MCOADS, Manipal on 3rd March 2014 at MCOADS, Manipal University, Manipal.	Kishore Ginjupalli
3	“How to get published” conducted by Health Science Library, Manipal University, Manipal on 10th December 2014 at, Health Science Library Manipal.	Abhishek Bhagat
4	NRC-M workshop on biomaterials organized by UGC Networking resource center for materials held at department of materials engineering, IISc Bangalore from 23 rd to 25 th May 2014	Nagaraja Upadhya P
5.	Faculty development program on Nurturing an effective work place organized by TAPMI, Manipal from 14 th to 15 th November 2014	Nagaraja Upadhya P

9. Participation/contribution of teachers to the academic activities including teaching, consultancy and research

Teaching

All the faculty members are involved in the undergraduate and postgraduate teaching. In

addition, faculty members of the department are involved in the following academic activities

- In planning and execution of lesson plan, lecture schedule and delivery of lecture contents
- Demonstration and supervision of practical work of the students
- Members of the Board of studies
- Preparation of question papers and curriculum design.
- As members in various committees set up by the college
- Involved in Quality management system and environmental management system

Consultancy

- Faculty members are involved in testing of materials for research purpose.

S. No.	Year	No. of Projects completed	Amount generated (in Rs)
1.	2011	99	23, 609.00
2.	2012	90	61, 894.00
3.	2013	69	1, 06, 656.00
4.	2014	115	1, 75, 362.00

- They are also involved in the material testing of various departments of sister institutions of Manipal University and completed about 50 projects.

Research by faculty

S. No.	Title	Faculty Involved
1.	Effect of different types of water on the properties of irreversible hydrocolloid impression materials	Dr. Abhishek Bhagat
2.	Evaluation of properties of nanoparticle incorporated alginates	Kishore Ginjupalli Nagaraja UP

10. Collaboration with other departments/ institutions, at the State, National and International levels, and their outcome during the past two years

- Nil

11. Priority areas for Research and details of the ongoing projects, important and noteworthy publications of the faculty, during past two years

- Glass ionomer cements; Biodegradable polymers; Titanium and its alloys

Ongoing:

Category	Number
Funded research projects	-
Non-funded research projects	01
PhD research projects	-
PG research projects	-
UG research projects	-

Last 3 years (2012-2014):

Category	2014	2013	2012
Completed funded research projects	-	-	-
Completed non-funded research projects	01	01	-
Completed PhD research projects	-	-	-
Completed PG research projects	01	-	03
Completed UG research projects	01	01	-
Publications	International	01	05
	National	06	02
Books	-	-	-
Chapters in books	-	-	-
Conference presentations	International	03	00
	National	02	02

Completed PG research projects:**2014**

S. No.	Title	Name of the student	Guide
1.	Evaluation of properties of tissue conditioner containing origanum oil as an antifungal additive	Dr. Akanksha Srivastava	Kishore G
2.	Properties of Dental stone with antimicrobial additives	Dr. Jaise Aalisa	Kishore G
3.	Comparative evaluation of the reparative shear bond strength of the composite res in cured with led and He-Cd laser	Dr. Tarun TA	Kishore G

2013

S. No.	Title	Name of the student	Guide
1.	No Admission		

2012

S. No.	Title	Name of the student	Guide
1.	Effect of curing cycles on the performance of Acrylic denture base resins	Dr. Suveetha Ganeshan	Nagaraja UP

Details of Publications:**2014**

1. Taru Rao, Nagaraj Upadhya. Effect of 37% phosphoric acid on the in-vitro shear strength between nickel chromium alloys and luting cements-An SEM Study. *International Journal of Advanced Research* (2014), Volume 2, Issue 5, 1187-1192
2. Nandish Bantarahalli Thopegowda, Kamalakanth Shenoy, Ravishankar Kiaakkar Shankaranarayana, Kukkila Jayaprakash, Kishore Ginjupalli, Shama Bhat Vaddya, Sudeendra Prabhu. Evaluation of mechanical properties of recasted dental base metal alloys for considering their reusability in dentistry and engineering field. *Archives of Medicine and Health Sciences*, 2(2), 2014, 178-183
3. Koteswara Rao Pachava, Kamalakanth Shenoy K, Chittaranjan B, Kishore Ginjupalli. Comparative antifungal efficacy of denture soft liners with Clotrimazole: An in vitro study. *Indian J Dent Adv* 2014; 6(3): 1593-1595.
4. Kukkila Jayaprakash, Bantarahalli Thopegowda Nandish, Harish Kumar Shetty K, A Nityananda Shetty, Shama Bhat Voddy, Sudeendra Prabhu, Kishore Ginjupalli. Impact of Storage Environments on the Dimensional Stability of Irreversible Hydrocolloid Alginate Impression used in Dentistry. *International Journal of Health and Rehabilitation Sciences*, 2014, 3(1):24-29
5. Kukkila Jayaprakash, P Nagaraja Upadhya, Bantarahalli Thopegowda Nandish, A Nityananda Shetty, K Harish Kumar Shetty, Kishore Ginjupalli, Shama Bhat Voddy, Sudeendra Prabhu. Impact of Water Quality and Water Powder Ratio on the Properties of Type 4 - Die Stones (Gypsum Products) used in Dentistry. *International Journal of Health and Rehabilitation Sciences*, 2014, 3(2), 75-81.
6. Kishore Ginjupalli, Ranjith Kumar Averineni, Mahalinga Bhat K. & Udupa N. Preparation and characterization of biodegradable scaffolds of poly(lactide-co-glycolide) 50:50 and hydroxyapatite for dental applications. *Composite Interfaces*, 2014, 21(1):31-44.
7. Nagaraja Upadhya P. Development of novel glass ionomer cement based on polyacrylic acid-A review. *The dentcare*. Vol 1, issue 1, 2014 page: 8-16.

2013

1. Puttur Laxmish Mallya, Shashi Rashmi Acharya, Vasudev Ballal, Kishore Ginjupalli, M. Kundabala, Manuel Thomas. Profilometric study to compare the effectiveness of various finishing and polishing techniques on different restorative glass ionomer cements. *Journal of Interdisciplinary Dentistry*. 2013; 3(2):86-90.

2. N.V. Ballal, A. Tweeny, J.C. Baumgartner, K. Ginjupalli and V. Saraswathi. Effect of Maleic Acid and Ethylenediaminetetraacetic Acid on the Shear Bond Strength of RealSeal SE Sealer to Root Canal Dentin. *Eur. J. Prosthodont. Rest. Dent.* 2013; 21(4): 152-156.
3. Ginjupalli Kishore, Armugam Karthik, Shavi Venkat Gopal, Averineni Ranjith Kumar, Mahalingam Bhat, N Udupa. Development of RP-HPLC method for simultaneous estimation of lactic acid and glycolic acid. *Der Pharma Chemica*, 2013, 5(4): 335-340.
4. Nandish Bantarahalli Thopegowda, Kamalakanth Shenoy, Ravishankar Kiaakkar Shankarnarayana, Jayaprakash Kukkila, Shama Bhat Vaddya, Kishore Gingipalli. Recycling of Materials used in Dentistry with Reference to its Economical and Environmental Aspects. *International Journal of Health and Rehabilitation Sciences*, 2013; 2(3), 140-145.
5. Akanksha Srivastava, Kishore Ginjupalli, Nagaraja Upadhya P. Evaluation of the properties of a tissue conditioner containing origanum oil as an antifungal additive. *Journal of prosthetic dentistry*, 2013, 110:313-319.
6. Arul Amalan, Kishore Ginjupalli, Nagaraja Upadhya P. Evaluation of properties of irreversible hydrocolloid impression materials mixed with disinfectant liquids. *Dental Research Journal*, 2013, 10(1):65-73.
7. Rama Krishna Alla, Suresh Sajjan, Venkat Ramaraju Alluri, Kishore Ginjupalli, Nagaraja Upadhya P. Influence of fiber reinforcement on the properties of denture base resins. *Journal of biomaterials and nanobiotechnology*, 4, 91-97, 2013.

2012

1. Kishore Ginjupalli, Nagaraja Upadhya P, Ramakrishna Alla, Nandish B.T. Evaluation of cohesive and adhesive strength of dental materials. *Manipal Odontoscope*, 2012;4:47-52
2. Akanksha Srivastava, Jalise Aaisa, Tarun Kumar TA, Kishore Ginjupalli, Nagaraja Upadhya P. Alginates: A review of compositional aspects of dental applications. *Trends in biomaterials and artificial organs*.2012; 26:31-36.

Details of Conference presentations:

2014

1. Kishore Ginjupalli delivered a guest lecture entitled “Testing methodologies for the characterization of dental materials” at Spectrum 14, a continuing dental professional

- program held by Dept of conservative dentistry and endodontics, Manipal college of dental sciences, Manipal university at Manipal held on 24th October 2014.
2. Kishore Ginjupalli delivered a talk entitled “Preparation and Evaluation of PLGA 50:50 and β -TCP scaffolds with internal acidic microclimate controlling additives” at International symposium on advanced polymeric materials held from 13th-16th May 2014 at Kuala Lumpur, Malaysia
 3. Abhishek Bhagat presented a paper entitled “Impression techniques for Implants - A review” at the FDI Annual World Dental Congress 2014 held from September 11th to 14th 2014 at NCR New Delhi
 4. Abhishek Bhagat presented a paper entitled “Titanium metals and its problems” at the 67th IDC conference held from February 21th to 23rd 2014 at Hyderabad
 5. Nagaraja Upadhyaya P presented a poster entitled “Evaluation of properties of experimental glass ionomer luting cements” at International conference on advanced functional materials 2014 organized by CSIR-National institute for interdisciplinary science and technology from 19th to 21st February 2014 held at Thiruvananthapuram, Kerala, India.

2013

1. Kishore Ginjupalli presented a poster entitled “Preparation and Characterization of PLGA 85:15 and Nano Hydroxyapatite Scaffolds for Dental Applications” at National conference on challenges in biomaterials research held from 23rd to 24th December 2013 at Vellore Institute of Technology, Vellore, Tamilnadu, India.
2. Abhishek Bhagat presented a paper entitled “Effect of quality of water on Alginate ” at the 41th KSD conference held from November 22nd to 24th 2013 at Madikeri, Karnataka, India

2012

1. Abhishek Bhagat presented a paper entitled “Review of Maxillofacial prosthesis Materials” at 40th Karnataka State Dental Conference held from 30th Nov 2012 to 2nd Dec 2012 at B.C. Road, Mangalore.
2. Kishore Ginjupalli delivered a invited talk entitled “Preparation and Characterization of Biodegradable Scaffolds with Microclimate Controlling Additives for Dental Applications” at International Conference on natural polymers – 2012 held from 26th to 28th October 2012 at Mahatma Gandhi University, Kottayam, Kerala, India.
3. Kishore Ginjupalli presented a poster entitled “Preparation and Characterization of PLGA 85:15 and Nano Hydroxyapatite Scaffolds for Dental Applications” at

- International Conference on natural polymers – 2012 held from 26th to 28th October 2012 at Mahatma Gandhi University, Kottayam, Kerala, India.
4. Kishore Ginpupalli presented a poster entitled “Preparation and evaluation of PLA and β -TCP scaffolds for dental applications” at International Conference on Biomaterials, Implant Devices, Tissue Engineering – 2012 held from 6th to 8th January 2012 at Rajalakshmi Engineering college, Chennai, Tamilnadu.
 5. Nagaraja Upadhya presented a paper entitled “Development of calcium fluoroaluminosilicate glasses of glass ionomer cement for luting applications at International Conference on natural polymers – 2012 held from 26th to 28th October 2012 at Mahatma Gandhi University, Kottayam, Kerala, India.
 6. Nagaraja Upadhya presented a paper entitled “Processing and characterization of calcium fluoroalumino based glass ionomer cements for luting applications” at International Conference on Biomaterials, Implant Devices, Tissue Engineering – 2012 held from 6th to 8th January 2012 at Rajalakshmi Engineering college, Chennai, Tamilnadu.
 7. Nagaraja Upadhya presented a poster entitled “Microwave melting of ion leachable glasses of glass polyalkenoate cement International Conference on natural polymers – 2012 held from 26th to 28th October 2012 at Mahatma Gandhi University, Kottayam, Kerala, India.

12. Placement record of the past students and the contribution of the department to aid student placements

S. No	Year of completion of postgraduate course	Name of the Postgraduate	Institution where employed
1	2013	Suveetha Ganeshan	No information
2	2012	Akanksha Srivatsava	Saraswati Dental College, Lucknow, Uttar Pradesh
3	2012	Jalise Aiasa	Manipal Acunova, Manipal, Karnataka
4	2012	Tarun T A	Private practice, Mumbai

13. Plan of action of the department for the next five years

- To develop the materials testing laboratory
- To carry out collaborative and interdisciplinary research

1. **Name of the Department:** Manipal College of Nursing Manipal

2. **Year of establishment:** 30th August 1990

3. **Is the Department part of a School/Faculty of the university?**

Yes. A constituent Institution of the Manipal University.

4. **Names of programmes / Courses offered (UG, PG, MPhil, PhD, Integrated Masters; Integrated PhD, etc.)**

#	Programme Level	Name of the Course	Duration (Years)
1.	Under graduate	BSc Nursing	4
2.		P.B.B.Sc Nursing	2
3.	Post graduate	MSc (Nursing)	2
4.	MPhil- Part Time	M.Phil (Nursing)	2
5.	PhD	-	Minimum 3 years Maximum 5 years
6.	Post Basic Diploma	Cardiothoracic Nursing Critical Care Nursing Psychiatric/ Mental Health Nursing Emergency and Disaster Nursing Neonatal Nursing Neuroscience Nursing Nurse Practitioner in Midwifery Oncology Nursing Operation Room Nursing Orthopedic and Rehabilitation	1

5. **Interdisciplinary courses and departments involved -**

- Open electives on Medical Emergency and first aid is being offered for 6th Semester MIT students. The course offers 57 hours of theory with 3 hours of examinations.. This course will prepare students to be prepared to identify medical emergencies and perform basic life support measures. Focused areas are Respiratory, Gastro-intestinal, musculoskeletal, dental, ear, nose, throat, renal, nervous, hematological, endocrine systems and paediatric emergencies, psychiatric emergencies and obstetrical emergencies. Practical hours are allotted for Basic life support, bandaging etc. Classes are delivered by faculty from the specialized field of respective nursing departments.
- Short courses on Professional development & etiquettes, Life style modification, complementary & alternative therapy and Fine arts. These three short course programs are offered for any aspiring students of Manipal University with a requirement of 30 hours (1 credit). The program aims to provide holistic view to one's views and practice in life. (2015 onwards)

- Classes for Bachelor of Physiotherapy in Basics of Nursing and First Aid (25 hours).

6. Courses in collaboration with other universities, industries, foreign institutions, etc.

Collaboration with Ngee Ann Polytechnic, Singapore for Overseas Immersion Programme w.e.f. 2008.

7. Details of programmes / courses discontinued, if any, with reasons

Nil

8. Annual/ Semester/Choice Based Credit System

- Annual (As per Indian Nursing Council regulations)

9. Participation of the department in the courses offered by other departments

- Medical emergency and First aid classes for technical course students of Manipal University(6th Semester)
- Faculty participation in Guidance and counselling program run by Manipal University Manipal (Psychiatric nursing dept.)
- Faculty participation in ACLS program for Manipal University (Medical surgical Nursing Dept.)
- Project advisor for MU – FILLIPE Fellowship programme
- Faculty participation in Bioethics Certificate course

10. Number of teaching posts sanctioned and filled

(Professors/Associate Professors/Assistant Professors) as on 31.12.2014

Designations	Sanctioned	Filled
Professor & Dean	01	01
Professor & Associate Dean	01	01
Professors	11	05
Associate Professors	07	06
Assistant Professors-Sr. Scale	15	16
Assistant Professors		09
Lecturers	23	14
Assistant Lecturers		01
Total	58	53

Note: Regulatory body (INC) requirement is 1:10 faculty student ratio. Current student strength is 469 only.

**11. Faculty profile with name, qualification, designation and specialization
(DSc/DLitt/
PhD/MPhil, etc. as on 31.12.2014**

Department of Medical Surgical Nursing:

Désignation	Number of faculty members
Professor & Head	01
Associate Professor	02
Assistant Professor-Sr. Scale	04
Assistant Professor	02
Lecturer	04

#	Faculty Name	Qualification	Designation	Specialization	Total Teaching Experience in years	Teaching experience	Clinical experience
						After PG Course	
1.	Dr. Elsa Sanatombi Devi	P. C. B. Sc.(N) M. Sc. (N), Ph. D (N) MBA (Health Care Services) Certificate in Counseling & Psychology	Professor & Head	Medical Surgical Nursing	11	11	02
2.	Mrs. Daisy Josphine Lobo	P.C. B. Sc.(N), M. Sc.(N), M. Phil.(N)	Assoc. Prof.	Medical Surgical Nursing	09	09	10
3.	Dr. Jyothi Chakrabarty	B. Sc.(N) M. Sc.(N) Ph. D(N)	Assoc. Prof.	Medical Surgical Nursing	08	08	06
4.	Mrs. Melita Sheilini	P. C. B. Sc. (N) M. Sc.(N)	Asst. Prof. - Senior Scale	Medical Surgical Nursing	08	07	02
5.	Mrs. Leena Sequira	P. C. B. Sc. (N) M. Sc. (N)	Asst. Prof. - Senior Scale	Medical Surgical Nursing	07	06	10
6.	Mrs. Latha T	P. C. B. Sc. (N) M. Sc. (N)	Asst. Prof. - Senior Scale	Medical Surgical Nursing	06	06	07
7.	Mrs. Soumya Christabel	B. Sc. (N) M. Sc.(N)	Asst. Prof. - Senior Scale	Medical Surgical Nursing	06	06	01
8.	Mrs. Simi Rachel Thomas	B. Sc. (N) M. Sc. (N)	Asst. Prof.	Medical Surgical Nursing	04	04	00
9.	Mrs. Janet Prameela D' Souza	P. C. B. Sc. (N) M. Sc. (N) Diploma in Specialization of Cardiothoracic Nursing	Asst. Prof.	Medical Surgical Nursing	05	04	01
10.	Mrs. Prima Jenevive Jyothi D' Souza	P. C. B. Sc.(N) M. Sc. (N)	Lecturer	Medical Surgical Nursing	05	02	07
11.	Mr. Anil Raj A	B. Sc. (N) M. Sc. (N)	Lecturer	Medical Surgical Nursing	02	02	01
12.	Mrs. Shalini G Nayak	P. C. B. Sc. (N) M. Sc. (N)	Lecturer	Medical Surgical Nursing	01	01	09
13.	Mrs. Magdalene Patsy	B. Sc. (N) M. Sc. (N)	Lecturer	Medical Surgical Nursing	<01	<01	01

Department of Community Health Nursing:

Designation	Number of faculty members
Associate Professor and Head	01
Assistant Professor - Senior Scale	02
Assistant Professor	02
Lecturer	02

#	Faculty Name	Qualification	Designation	Specialization	Total Teaching Experience in years	Teaching experience	Clinical experience
						After PG Course	
1	Dr. Shashidhara Y N	B Sc(N) MSc(N), MSc (Ecology and Environment) Ph. D (N)	Assoc. Prof. and Head	Community Health Nursing	09	08	02
2	Mrs Ansuya	P. C. B. Sc. (N) M. Sc. (N)	Asst. Prof. -Senior Scale	Community Health Nursing	07	07	10
3	Mrs Malathi G Nayak	P. C. B. Sc.(N) M. Sc.(N)	Asst. Prof. -Senior Scale	Community Health Nursing	06	06	14
4	Mr. Lingaraju A R	B.Sc(N) M.Sc (N)	Asst. Prof.	Community Health Nursing	04	04	01
5	Mrs. Manjula	P. C. B. Sc. (N) M. Sc. (N)	Asst. Prof.	Community Health Nursing	05	04	10
6	Mr. Nidhin Thomas	B.Sc(N) M.Sc(N)	Lecturer	Community Health Nursing	02	02	01
7	Mrs. Reshma	B.Sc(N), M.Sc(N)	Lecturer	Community Health Nursing	02	<01	00

Department of Paediatric Nursing:

Designation	Number of faculty members
Professor and Dean	01
Professor and Head	01
Professor	01
Assistant Professor -Senior Scale	05
Lecturer	01

#	Faculty Name	Qualification	Designation	Specialization	Total Teaching Experience in years	Teaching experience	Clinical experience
						After PG Course	
1.	Dr. Anice George	BSc (N) MSc (N) MPhil (N), PhD(N)	Dean, Professor, Pediatric Nursing Director, Nursing Manipal University	Paediatric Nursing	28	27	05
2.	Dr.Mamatha S Pai	BSc (N)MSc (N) MPhil (N) Ph D (N)	Professor & Head	Paediatric Nursing	17	16	00
3.	Dr.Baby S Nayak	B Sc (N)M Sc (N) M Phil (N) Ph.D (N)	Professor	Paediatric Nursing	14	14	00
4.	Mrs. Sangeetha Priyadarshini	B Sc(N)M S(N)	Asst. Prof. -Senior Scale	Paediatric Nursing	09	09	00
5.	Mrs. Anjalind' Souza	B S(N) M Sc(N)	Asst. Prof. -Senior Scale	Paediatric Nursing	12	08	00
6.	Mrs. E Binu Margaret	B Sc(N),M S(N) MA (Sociology)	Asst. Prof. -Senior Scale	Paediatric Nursing	10	08	00
7.	Mrs. Sheela Shetty	B Sc(N),M Sc(N)	Asst. Prof. -Senior Scale	Paediatric Nursing	06	06	00
8.	Mrs.Yashoda S	P. C. B. Sc(N) M. Sc(N)	Asst. Prof. -Senior Scale	Paediatric Nursing	06	06	15
9.	Ms. Nisha P V	B Sc (N), M Sc (N)	Lecturer	Paediatric Nursing	<01	<01	01

Department of OBG Nursing:

Designation	Number of faculty members
Associate Dean, Professor and Head	01
Associate Professor	01
Assistant Professor (Senior Scale)	03
Assistant Professor	02
Lecturer	01

#	Faculty Name	Qualification	Designation	Specialization	Total Teaching Experience in years	Teaching experience	Clinical experience
						After PG Course	
1.	Dr.Judith Angelitta Noronha	B Sc (N) M Sc (N) M Phil (N) PhD (N)	Associate Dean Professor & Head	OBG Nursing	19	17	01
2.	Dr. Sonia R B D' Souza	B Sc (N) M Sc (N) MA,(Sociology) MPhil (Sociology) Ph D (N)	Assoc. Prof.	OBG Nursing	09	08	01
3.	Mrs. Maria Pais	P C B Sc, (N) M Sc (N) M.B.A (Health Care	Asst. Prof. - Senior Scale	OBG Nursing	07	07	06

		Services)					
4.	Mrs. Anusuya	P C B Sc (N) M Sc (N)	Asst. Prof. - Senior Scale	OBG Nursing	06	06	05
5.	Mrs. Sushmitha Ramona Karkada	B Sc (N)M Sc (N)	Asst. Prof. - Senior Scale	OBG Nursing	06	06	01
6.	Mrs. Sweety Jousline Fernandes	P C B Sc (N), M Sc (N)	Asst. Prof.	OBG Nursing	05	04	02
7.	Mrs. Pratibha	P C B Sc (N), M Sc (N)	Asst. Prof.	OBG Nursing	04	03	08
8.	Mrs Shobha	P C B Sc (N), M Sc (N)	Lecturer	OBG Nursing	04	02	05

Department of Psychiatric Nursing

Designation	Number of faculty members
Professor and Head	01
Associate Professor	01
Assistant Professor (Senior Scale)	02
Assistant Professor	02
Lecturer	02

#	Faculty Name	Qualifica-tion	Designa-tion	Specializa-tion	Total Teaching Experi-ence in years	Teaching experien- ce After PG Course	Clinical experience
1.	Dr.Tessy Treesa Jose	B Sc (N) M Sc (N) Ph D (N)	Professor and Head	Psychiatric Nursing	18	17	03
2.	Dr.Blessy Prabha Valsaraj	B Sc (N) M Sc (N) Ph D (N)	Assoc. Prof.	Psychiatric Nursing	14	11	00
3.	Mrs.Asha K Nayak	B Sc (N) M Sc (N) MA (Sociology)	Asst. Prof. - Senior Scale	Psychiatric Nursing	07	07	00
4.	Mrs. Shalini	P C B Sc (N), M Sc (N)	Asst. Prof. - Senior Scale	Psychiatric Nursing	06	06	12
5.	Mr. Biju Soman	B Sc (N) M Sc (N)	Asst. Prof.	Psychiatric Nursing	14	05	00
6.	Mrs. Savitha	P C B Sc (N), M Sc (N)	Asst. Prof.	Psychiatric Nursing	05	04	10
7.	Mr. Renjulal Y	B Sc (N) M Sc (N) M Phil (N)	Lecturer	Psychiatric Nursing	02	02	<01
8.	Mrs. Anjali K G	B Sc (N) M Sc (N)	Lecturer	Psychiatric Nursing	02	01	00

Department of Fundamentals of Nursing:

Designation	Number of faculty members
Professor and Head	01
Associate Professor	01
Assistant Professor	01
Lecturer	04
Assistant Lecturer	01

#	Faculty Name	Qualification	Designation	Specialization	Total Teaching Experience in years	Teaching experience	Clinical experience
						After PG Course	
1.	Dr Linu Sara George	B Sc (N) M Sc (N) Ph.D (N) MS (Counselling and Psychotherapy)	Professor and Head	Psychiatric Nursing	16	14	00
2.	Mrs Sulochana B	P C B Sc (N) M Sc (N), MBA	Assoc. Prof.	Medical Surgical Nursing	08	08	08
3.	Ms Lakra Alma Juliet Francis	B Sc (N) M Sc (N)	Asst. Prof.	OBG Nursing	03	03	01
4.	Mrs. Charlet Jasmine Vaz	B Sc (N) M Sc (N)	Lecturer	Medical Surgical Nursing	05	03	08
5.	Mr. Jomon C U	B Sc (N) M Sc (N)	Lecturer	Medical Surgical Nursing	03	03	01
6.	Mrs. Twinkle Dan Pothiyil	B Sc (N) M Sc (N)	Lecturer	Paediatric Nursing	01	01	01
7.	Mrs. Laveena Anitha Barboza	P C B Sc (N), M Sc (N)	Lecturer	OBG Nursing	<01	<01	08
8.	Mrs Soumya Alex	B Sc (N)	Assistant Lecturer	-	06	00	00

12. List of senior Visiting Fellows, faculty, adjunct faculty, emeritus professors

Adjunct Visiting Professors to MCON, Manipal:

Name	Designation	Place
Dr (Ms) Basanti Majumdar (PhD)	Professor	Mc. Master University Faculty of Health Sciences School of Nursing 1200 Main Street West HSC 3N 28 D, Hamilton, Ontario, L8N3Z5 Tel. No.: 905 6896740 (R) 905 5259140 (O) Ext.: 22726 E-mail: majumdar@mcmaster.ca Residence: Post Box: 126, Water Down, Ontario, Canada LOR2HO, Mobile: 09674604192

Dr. Elissa Ladd	Associate Professor	MGH Institute of Health Professions 36 First Avenue Charlestown Navy Yard Boston, MA 02129 Résidence: 250 1st Ave, Boston, MA 02129, U.S.A Ph: (508) 287- 0585 E-mail: eladd@mghihp.edu
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Major Contribution to the Department: Dr (Ms) Basanti Majumdar (Ph.D)

Year	Contribution
2013	<ul style="list-style-type: none"> Took sessions for PhD scholars and teaching faculty on ‘Participatory Action Research Proposal’.
2014	<ul style="list-style-type: none"> First recipient of the Endowment Chair titled : Dr. T.M.A.Pai Endowment Chair in Participatory Action Research. She gave a lecture on “Participatory Action Research” Guiding faculty to undertake three research project- Knowledge and attitude of Nurses on HIV/ AIDS, Knowledge and attitude of type II diabetes mellitus patients, qualitative study among migrant population.

Major Contribution to the Department: Dr. ElissaLadd

Year	Contribution
2012	Dr. Elisa Ladd, the Full bright Nehru Post Doctoral research fellow was the guest of honor for the International Nurses’ Day 2012 held on 12 th May 2012 ‘Closing the Gap: From Evidence to Action’. In her address she portrayed Florence Nightingale as a scientist who first developed a Pie chart to describe the significance of data gathered. Delivered lecture for Post Graduate students in Nursing Research.
2013	Not visited
2014	<ul style="list-style-type: none"> Took session on ‘Advanced Practice Nurse (APN)’ to all teaching faculty of MCON & MSON Manipal, Research Scholars & PG students.

13. Percentage of classes taken by temporary faculty – programme-wise information – NIL

14. Programme-wise student teacher ratio – 10:1 (current ratio is 8:1)

15. Number of academic support staff (technical) and administrative staff: sanctioned and filled

Non-teaching staff status:

Designations	Sanctioned	Filled
Junior Management Executive	01	01
Executive –M1	01	01
Senior Clerk	02	02
Clerk – I	01	01

Clerks	04	04
Lab Assistant	01	01
General Duty Worker – I	01	01
General Duty Worker	01	01
Senior House Keeping Staff	01	01
House Keeping Staff - II	02	02
House Keeping Staff	02	02
Lift Operator	01	01
Security	02	02
Total	20	20

16. Research thrust areas recognized by funding agencies

New born care, Cancer, Hemophilia, HIV/AIDS, Child abuse, Violence, Geriatric, Systematic reviews in childhood obesity, Child Safety.

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies and grants received project-wise.

Faculty	Dept	Project title	Funding agency	National/ international	Total grants received
Sonia RB D' Souza	OBG nursing	Effectiveness of Indian classical instrumental music therapy on developmental responses of preterm infants admitted to a tertiary level Neonatal Intensive Care Unit (NICU), KMC, Manipal'	ICMR	National	6,65,700.00
Mrs Jyothi RK	Medical Surgical Nursing	Effectiveness of pranayama on cancer related fatigue among patients with breast cancer undergoing radiation therapy in Saibaba Cancer Centre, KMC, Manipal'	ICMR	National	4,20,240.00

Sulochana B	Medical Surgical Nursing	Identification, diagnosis and education and empowerment of people with bleeding disorder in South India'	IDEAA by Novo Noredisk Haemophilia Foundation Andreasstrasse 15 CH-8050 Zurich Switzerland	International	1,00,00,000.00
Dr. Anice George	MCON	"Capacity Building for Nurse Educators to conduct multidisciplinary research in geriatric area"	ICMR, India	National	55,00,000.00
Mrs. Yashoda	child health nursing	Effectiveness of development care positioning aids on physiological parameters and health outcome of preterm infants admitted in Neonatal unit of KH Manipa	Philips Electronics India Limited, Bangalore	National	1,00,000.00
Mrs. Anusuya	Community Health Nursing	Knowledge & Practice on safety measures among fishermen of Udupi District	Fish Marketing Federation, Udupi and S.K. District	National	10,000.00
Mrs. Sushmitha	OBG nursing	Effectiveness of breathing exercise on outcome of labour	St. Johns Research Institute & St Johns Medical College in collaboration with Maternal Health Task Force at Harvard School of Public Health Boston,	international	3,00,000.00

			USA		
Mrs. Latha T	Medical Surgical Nursing	Conference on IFIC- HISICON2015 at New Delhi	IFIC	International	550 USDx62= 34100.00
Total					1,70,30,040.00

c) Total grants received: 1,70,30,040.00

Department	Number of ongoing research project (National)
Medical Surgical Nursing	04
Community Health Nursing	03
Child Health Nursing	03
Maternity Nursing	02
Mental Health Nursing	03
Fundamentals of Nursing	01

18. Inter-institutional collaborative projects and grants received

1. All India collaboration: INC GFATM – strengthening institutional capacity and training of nurses on HIV/ AIDS and ART. Received Rs. 3,26,89,300/- (till May 2015).
2. International collaborative research – ‘Rationalized recommendation of medication by nurses for self and others – a pilot study’ by Elsa Sanatombi Devi and Dr Elissa Ladd (Full bright Research Scholar, University of Boston). Received 20000.00
3. Ministry of Health and Family Welfare, Government of India has sanctioned grant for the following Nursing Staff Development programmes as detailed below:

#	Particulars	Grants Received	Total Grants Received
1	Department of Psychiatric Nursing: Organized Workshop on: Educational Technology: 24-30 January 2011	Rs.1,65,300/-	
2	Department of Medical Surgical	Rs.1,65,300/-	

	Nursing: Organized Workshop on: Care in Emergency (Role of a Nurse): 14-20 February 2011.		
3	Department of Pediatric Nursing: Organized Workshop on: Management Techniques: 28 February – 06 March 2011	Rs.1,65,300/-	Rs.6,61,200/-
4	Department of Community Health Nursing: Organized workshop on: Human Relations in Healthcare: 21-27 March 2011	Rs.1,65,300/-	

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, etc.; total grants received.

NIL

20. Research facility / centre

State recognition - NIL

National recognition- NIL

International recognition – NIL

21. Special research laboratories sponsored by / created by industry or corporate bodies – NIL

22. Publications:

Number of papers published in peer reviewed journals (national / international)

Journal Publications:

Last 5 years (2010-2014):

Type of publication		2010	2011	2012	2013	2014
Completed PhD research projects		-	03	02	-	05
Completed PG research projects		38	34	45	45	48
Publications	International	14	9	19	29	44
	National	13	4	14	37	31
Conference presentations	International	01	13	14	14	31
	National	58	67	12	12	06

Year 2010

#	Publications
1	Anice George. An exploratory survey on stress among adolescent girls. International Journal of Bio Sciences, Psychiatry and Technology. 2010; 2: 10-5 (<i>International – Indexed</i>).
2	Anice George, Erna Judith Roach, Maxie Andrade. Perceptions of health care consumers, deliverers and nurse educators on nurses, nursing practice and nursing education system. Prism's Nursing Practice. 2010; 5:43-48. (<i>National-Indexed</i>).
3	Suja Karkada. Factors influencing anemia among anemic adolescent girls - A qualitative analysis. Nightingale Nursing Times. 2010; 6:27-30. (National – Non-Indexed).
4	Tessy Treesa Jose: Psychiatric Nurse's role in psychosocial rehabilitation. The Official Journal of Trained Nurses' Association of India-Kerala Branch. 2010; 5:16-23. (National – Non Indexed).
5	Baby S Nayak: Knowledge and attitude of adolescents on HIV/AIDS. Nightingale Nursing Times. 2010; 6:Page No: 24- 25 (National – Non-Indexed).
6	Baby S Nayak Comparison of life style practices of obese and non-obese children as expressed by mothers in selected schools of Dakshina Kannada District. Asian Journal of Cardiovascular Nursing. 2010; 18:7-9. (International Journal – Indexed)
7	Baby S Nayak Palliative Care needs of children with HIV/AIDS: Implications for Nursing. Nightingale Nursing Times. 2010; 6:24-27. (National – Non-Indexed).
8	Baby S Nayak, HV Bhat. A study to evaluate the effectiveness of multi-component intervention of lifestyle practices, body fat and self esteem of obese/overweight school children in selected English medium schools of Udupi district, Karnataka. International Journal of Nursing Education. 2010; 2:9-12. (International Journal – Indexed).
9	Mayengbam Benita Devi, Erna Judith Roach. Concept mapping: An effective teaching and evaluation strategy for nursing students. Nightingale Nursing Times. 2010; 5:17-20. (National – Non-Indexed).
10	SadhanaDebnath, Erna Judith Roach, Anjeline D' Souza: Effectiveness of a learning package on respiratory care of children on mechanical ventilator. Asian Journal of Cardiovascular Nursing; 18(1); January 2010; 3-8. (International-Indexed).
11	Ansuya: Occupational health problems and job satisfaction among fisherman. Nightingale Nursing Times; 6(5); August 2010; (National – Non-Indexed).
12	Eva Chris Karkada, Judith Angelitta Noronha, Sonia RB D' Souza Preparing primi gravid women for childbirth: Behavioral responses to labour pain and outcome of labour. International Journal of Nursing Education. 2010; 2:15-17. (International Journal – Indexed).
13	Malathi, Suja Karkada, Ansuya. A study on the awareness of utilization of reproductive and child health (RCH) services in the selected villages of Udupi District, Karnataka. International Journal of Nursing Education. 2010; 2:28-30. (International Journal – Indexed).
14	Maxie Andrade: 1) Alcoholism: It manifestations and related nursing diagnoses. Prism's Nursing Practice. 2010; 5:27-33. (<i>National-Indexed</i>). 2) Community based nursing: A challenge to health care providers. Prism's Nursing Practice. 2010; 5:101-104. (<i>National-Indexed</i>).

15	<p>Elsa Sanatombi Devi, Shreemathi S Mayya, Bairy KL, Manu Mohan, Anjali A, Aswathy M, Jophy J, Luan S, Manu M, Neethu J, Shalabha MV, Shiyad NM, Vikas N.</p> <p>Knowledge of cardiac emergency drugs and its application in clinical practice among undergraduate students of a College of Nursing in Karnataka. International Journal of Nursing Education. 2010; 2:10-12. (<i>International Journal – Indexed</i>)</p>
16	<p>Elsa Sanatombi Devi.</p> <p>Nursing students' perception of effective teaching methods in learning pharmacology. Nightingale Nursing Times. 2010; 6:45-49. (<i>National Journal – Non-indexed</i>) (Registered with Registrar of Newspapers of India RNI No.: DELENG/2005/1521, postal Regn. No.: DL (E)-20/5171/09-11 dated 5th and 16th.</p>
17	<p>Elsa Sanatombi Devi, Ashok Rao, S Mayya, Bairy KL.</p> <p>Perception and attitude towards work-life balance among allied and nursing health care professionals. International Journal of Nursing Education. 2010; 2:13-14. (<i>International Journal – Indexed</i>).</p>
18	<p>Elsa Sanatombi Devi, S Mayya, Bairy KL, Anice George, Manu Mohan, Bobby Sindhu, Krishnaendhu, Aparna, Selma, Reshma, Sheila, D' Souza, Melita S, Latha T.</p> <p>A comparative analysis of the outcome of two teaching-learning approaches adopted for teaching pharmacology to undergraduate nursing students. International Journal of Nursing Education. 2010; 2:48-51. (<i>International Journal – Indexed</i>).</p>
19	<p>Elsa Sanatombi Devi, S Mayya, Bairy KL, Ashok Rao.</p> <p>Self medication among baccalaureate nursing students. Nitte Nursing Journal. 2010; 2:11-12. (<i>National – Non indexed</i>)</p>
20	<p>Daisy Josphine Lobo.</p> <p>Application of Roy's adaptation model. Nightingale Nursing Times. 2010; 6:61-64. (<i>National-Non Indexed</i>)</p>
21	<p>Pragya Sharma, Elsa Sanatombi Devi, Latha T, Ratna Prakash, SreemathiMayya.</p> <p>Efficacy of an interactive session on nursing students' perception of assertiveness in clinical milieu. International Journal of Nursing Education. 2010; 2:35-36. (<i>International Journal – Indexed</i>).</p>
22	<p>Kaini Cecilia, Elsa Sanatombi Devi, JyothiChakrabarty.</p> <p>Assessing the risk of deep vein thrombosis with a view to develop a protocol on its management and prevention. Asian Journal of Cardiovascular Nursing. 2010; 18:2-6. (<i>International Journal – Indexed</i>).</p>
23	<p>Krishnendu AK, Elsa Sanatombi Devi, Malathi K, Rao VRK.</p> <p>A study to assess the effectiveness of interpretive exercises in improving the interpretive ability of basic BSc nursing students on selected radio-diagnostic images in a College of Nursing in Karnataka. International Journal of Nursing Education. 2010; 2:7-9. (<i>International Journal – Indexed</i>).</p>
24	<p>Sangeetha Priyadarshini, Erna Judith Roach.</p> <p>Effectiveness of an educational programme on epilepsy care and home management for mothers. International Journal of Nursing Education. 2010; 2:42-47. (<i>International Journal – Indexed</i>).</p>
25	<p>Jyothi RK, Baby S Nayak.</p> <p>A case-control study of dietary habits, physical activity and risk for abdominal obesity among working women. Calicut Medical Journal. 2010; 8:1-5. (<i>National – Indexed</i>).</p>
26	<p>Reshma Rozalin Noronha, Shrisha, Maria Pais.</p>

	Creating awareness for prevention of Osteoporosi among rural women. Nightingale Nursing Times. 2010; 6:62-64 (National – Non Indexed)
27	Eva Chris Karkada, Judith Angelitta Noronha, Sonia RB D' Souza. An evaluative study to determine the effectiveness of childbirth preparation class in terms of behavioural responses during first stage of labour and outcome of labour among primigravid women in selected hospitals of South India. The Malaysian Journal of Nursing. Online Journal November 2010; 1-10. (International Journal- Non indexed).

Year: 2011

#	Particulars
1	Anice George, Erna Judith Roach, Maxie Andrade. Nursing education; opportunities and challenges. The Nursing Journal of India. 2011; CII:136-139. (National Journal – Indexed).
2	Anice George Jain, Renu G, Preethy D' Souza. A study to examine the relationship of stress and dysmenorrhoea among adolescent girls. International Journal of Bioengineering, Neurosciences and Technology. 2011; 1:37-40. (International Journal-Indexed).
3	Anice George Jain, Renu G, Preethy D' Souza, RaghdaShukri. Personal and professional networking: A way forward in achieving quality nursing care. International Journal of Nursing Education. 2011; 3:1-3. (International Journal-Indexed).
4	Suja Karkada, AparnaBhaduri, Anice George, SaralaSethi. Risk factors for anemia among adolescent girls. International Journal of Nursing Education. 2011; 3:51-55. (International Journal-Indexed).
5	Baby S Nayak, H Vinod Bhat. Prevalence of overweight/obesity among school children in Karnataka, South India. International Journal of Public Health Research, Special issues 2011; Page No: 180-184 (International Journal-Indexed).
6	Baby S Nayak, Anice George. Factors influencing worm infestation among children. Nightingale Nursing Times. 2011; 6:12, Page No: 13, 14 & 43 (National – Non-Indexed).
7	Baby S Nayak, Suja Karkada. Traditional beliefs and practices on newborn care. Nightingale Nursing Times. 2011; 7:12-14. (National – Non-Indexed).
8	Suja Karkada, Baby S Nayak, Malathi. Awareness of palliative care among diploma nursing students. Indian Journal of Palliative Care. 2011; 17:20-23. (National-Indexed).
9	Baby S Nayak. Television viewing and health behavior of children in South India. The Nursing Journal of India. 2011; CII:84-85. (National Journal-Indexed)
10	Baby S Nayak, Vinod Bhat. Physical activity factors for childhood overweight and obesity. I-manager's Journal of Nursing. 2011; 1:6-10. (International Journal – Non indexed)
11	Siji VM, Tessy Treesa Jose, Linu Sara George. Perceived bio-psychosocial problems and coping strategies adopted by the post menopausal women among the age group of 45-55 years. International Journal of Nursing Education. 2011; 3:118-120. (International Journal-Indexed).
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January to December 2012

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1	Shrestha Sandhya; Jose Tessy Treesa; Nayak Asha: A Correlational Study on Depressive Symptoms and Social Support among Widows in a selected Women's Organization of Pokhara, Nepal. International Journal of Nursing Education; 4(1); Jan-June 2012; 77-78 (<i>International-Indexed</i>).
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3	<p>Mrs. Maxie Andrade:</p> <p>1) Verbal and Numerical Aptitude of Graduate Nursing student at entry level GRA – Global Research Analysis * 138. Volume :2 Issue : 3 March 2013 ISSN No. 2277-8160 – International Indexed</p> <p>2)</p>
4	<p>Gishel Nisha D’Souza, Mrs. Elsa Sanatombi Devi, Melita Sheilini:</p> <p>Communication Pattern, attitude towards importance of communication and factors affecting communication among Nursing Graduates working in Cardiac Units.</p> <p>International Journal of Nursing Care, January-June, 2013, Vol. 1, No.1. (International – Indexed)</p>
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57	Melita Pereira; Ajimol Sebastian; Sandra Ashalatha; Latha T; Bharathi : Body Mechanics and Perceived Physical Health Problems among Computer Users International Journal of Health Sciences & Research. Vol. 3, Issue 11; November 2013 – International Indexed
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Chapters in Books: Nil

Books published with ISBN with details of publishers – Nil

23. Details of patents and income generated – Nil

24. Areas of consultancy and income generated

INC - GFATM -7 Project on HIV/AIDS & TB

The INC-GFATM Project on Strengthening Institutional Capacity for Nursing Training on HIV/AIDS & TB in India under GFATM 7 project contributes to this strategy. This project is executed in coordination with National AIDS Control Organization and Central TB Division. The project component being implemented through the Indian Nursing Council focuses on strengthening institutional capacity for nursing training on HIV/AIDS &TB in India. The principal Recipient for this programme is the Indian Nursing Council.

Manipal College of Nursing Manipal, Manipal University, is selected as one of the Sub Sub Recipient for this project. MCON.Manipal is covering beautiful 14 Karnataka districts. Geographically Karnataka has three principle zones called coastal strip, Western Ghat and Deccan Plateu and deccanplateu is consists of large area in Karnataka. Under GFATM Project Maniapl College of Nursing, Manipal’s coverage area has representation from all above three principle zones of Karnataka i.e Shivamoga, Kodagu, Chikmaglur, Hassan Dakshina Kannada, Udupi, Gadag, Uttara Kannada, Haveri, Koppala, Belgaum, Dharwad, Bellary and Davanagere likewise we tried to have participants from all regions in this year from both private and public sector.

Following are the training details till Dec 2014

Number of Nurses trained on HIV/AIDS & ART : 2029

Number of ANMs trained on HIV/AIDS & STI : 905

Number of Nurses trained on TB : 263

Number of ANMs trained on TB : 119

Number of Nursing Administrators trained : 262

There are Seven faculty from Manipal College of Nursing had undergone special training about HIV/AIDS & ART under this project to train staff nurses and 5 faculty were trainers for training on Tuberculosis. Supportive supervision of the staff nurses' is the part of this project which fosters a collaborative approach to strengthen staff nurse's performance on care support and treatment for PLHIVs. Through this way Manipal College of Nursing has become a part of NACP III, IV and RNTCP and trying to set an example for Public Private Partnership through this process. It is trying its level best to contribute towards the strengthening of public health and combat against present day's most stigmatized infection HIV/AIDS and biggest health problem of India TB at locally, nationally and globally.

Total Amount received till Dec 2015: Rs 2,69,05,300/-

ICMR-DHR FUNDED PROJECT on “Capacity building for nurse educators to conduct multidisciplinary research in geriatric area”

The principal investigator for the project is Dr Anice George, Dean, Manipal College of Nursing Manipal with all professors and HoDs' as co investigators. The project is of five years duration with first year for the preparation of Training module on Geriatric Health Research followed by training of trainers workshop, for the next four years there will be training workshops for nurse educators on “how to conduct multidisciplinary research in Geriatric care area”. For each year we have divided the entire nursing colleges of India in to four different zones (North, east, west and south) and each zone will be covered every year. A total of 120 nurse educators divided in four groups will be trained. Thirty nurse educators will be in one group and will attend the workshop for three weeks duration. ICMR-DHR have sanctioned a total amount of rupees 55laks towards this project accomplishment.

Nursing Research Methodology Workshop

- The Manipal college of Nursing initiated the Nursing research methodology workshop for Post graduate Nursing students of Karnataka. From 24th to 26th September 2013, PG students (16) were deputed by various institutions for the workshop. The amount generated: Rs 24000.
- The same workshop was conducted again from 25th to 27th February 2014 on Nursing research Methodology workshop was conducted for 14 PG students. The amount generated: 21000/

- Workshop on systematic review was organized for the faculty of MCON to sensitize the faculty on conducting systematic review.

25. Faculty selected nationally/ internationally to visit other laboratories in India and abroad

- Dr. Anice George visited Hochschule, Bremen University, Germany.
- Dr. Baby S Nayak visited Middlesex University, United Kingdom as a part of exchange programme
- Mrs. Sulochana B has received an International Hemophilia Training Fellowship sponsored by World Federation of Hemophilia, Australia

26. Faculty serving in

National committees b) International committees c) Editorial Boards d) any other (please specify)

1) Dr. Anice George

- Member of the Sub-Group on Human Resources for Health under Working Group on Progress and Performance of National Rural Health Mission (NRHM) and Suggestions for Twelfth Five Year Plan (2012-17)-Ministry of Health and Family Welfare.
- Member of peer review committee of Nursing Journal of India (2011 onwards)
- Editorial Advisory board of Journal of Continuing Nursing Education, published at College of Nursing, CMC Vellore.
- Peer reviewer in the Nitte Nursing Journal, published from Nitte College of Nursing Mangalore.
- External expert member in the PhD committee (behavioural science), of NIMHANS Bangalore for three years from 28th Jan 2012.
- Executive editor of Manipal Journal of Nursing and Health Sciences, Manipal University
- Peer reviewer of Journal of Nursing Sciences of Rajiv Gandhi University of Health Sciences
- Referee for review of articles for Muller Journal of Medical Sciences and Research
- Editorial expert for Indian Journal of Nursing Studies
- Member of PhD (Nursing) committee of Indira Gandhi National Open University (IGNOU), New Delhi
- Expert member of PhD Nursing selection committee, Kerala University of Health Sciences, Kerala
- Member of Board of studies in Pediatric Nursing, Yenepoya University, Mangalore, Nitte University

- Member of Steering committee of UNESCO chair in Bioethics, Manipal University
- Member of B.Sc Nursing Syllabus Revision committee, 2004 INC.

2). Dr. Judith Noronha

- Appointed as the member of Editorial Board for International Journal of Nursing Education.
- Karnataka Chapter Secretary of Society of Midwives, India (SOMI)
- Editorial Board member of Manipal Journal of Nursing and Health Sciences, Manipal University
- Reviewer of KLE University Health Science Journal
- Reviewer in Indian Journal of Health Sciences
- Reviewer in Journal of Obstetrics and Gynaecology, published by Informa Health care
- Reviewer in Annals of Medical and Health Sciences Research

2). Dr. Erna Judith Roach

- Was Assessor in NAAC up to March 2014

3) Dr. Baby S Nayak

- Confirmed member of the Editorial Board of i-manager's Journal on Nursing on continuous term from February 2011 to December 2014.
- Appointed as the member of STM Journals' Editorial Board (Journal of Nursing Science & Practice)
- Editor-in- chief of Manipal Journal of Nursing and Health Sciences, Manipal University

4) Ms. Elsa Sanatombi Devi:

- Nominated as the Incharge of Community Services and member of Executive Committee according to the resolution of the Annual General Body meeting held on January 13, 2010 of the Association of Community Pharmacists of India (ACPI), Manipal College of Pharmaceutical Sciences, Karnataka, India.
- National editorial board member as well as executive member of Society for wound Care and Research, Manipal India.
- Associate Editor of Manipal Journal of Nursing and Health Sciences, Manipal University

5) Dr. Mamatha S Pai

- Editorial Board Member of Manipal Journal of Nursing and Health Sciences, Manipal University.

6) Dr. Linu Sara George

- Editorial Board Member of Manipal Journal of Nursing and Health Sciences, Manipal University.
 - Editorial Advisory Board member of International Journal of Nursing Education,
 - Editorial Advisory Board member of Nurse Researcher - International Journal of Research methodology in Nursing and Health care
- 7) Dr. Shashidhara Y.N
- Editorial Board Member of Manipal Journal of Nursing and Health Sciences, Manipal University.
- 8) Dr. Tessy Treesa Jose
- Editorial Board Member of Manipal Journal of Nursing and Health Sciences, Manipal University.
 - Editorial member in International Journal of Psychiatric Nursing
- 9) Dr. Blessy P Valsaraj
- Associate Editor of Manipal Journal of Nursing and Health Sciences, Manipal University
- 10) Dr. Sonia R.B D'Souza
- Associate Editor of Manipal Journal of Nursing and Health Sciences, Manipal University
- 11) Dr. Jyothi Chakrabarthi
- Editorial Board Member of Manipal Journal of Nursing and Health Sciences, Manipal University.
- 12) Mrs. Daisy Josephine Lobo
- Instructor in American Heart Association,
 - Editorial Board member of International Journal of Nursing Education
 - Reviewer in STM Journal
- 13) Mrs. Latha T Bhat
- Editorial Board member of Indian Journal of nursing Care,
 - Advisory member in Society for wound care
- 14) Mrs. Sulochana B
- Reviewer of Asia Pacific Journal of Oncology Nursing

27. Faculty recharging strategies

- Institution organizes three days Faculty Development Programme (FDP) every year.
- College Continuing Nursing Education (CNE) every month
- Department Continuing Nursing Education (CNE) every month
- Support for faculty to participate in workshop and Conferences.
- Department and Individual projects by the faculty

Yearly Awards for faculty

- Outstanding Research Award
- Most Accomplished Faculty Award
- Good Teacher Award
- Maximum number of presentations
- Best Published Research paper Award
- Maximum publication award

28. Student projects

Percentage of students who have done in-house projects including inter-departmental projects

Every PG student (M.Sc nursing and M.Phil nursing) carry out a research project as part of their curriculum requirement

PBBSc students carry out projects in a group of 3 students/ group.

UG Students are motivated to carryout individual projects

Research project by M.Sc Nursing students

Sl. No	Year	Number of research projects
1	2010	29
2	2011	29
3	2012	40
4	2013	40
5	2014	38

Number of research project by M.Phil Nursing students

Sl. No	Year	Number of research projects
1	2010	8
2	2011	5
3	2012	5
4	2013	0
5	2014	8

Ph.D studies by faculty (2010 - 2014)

1. A study of compliance of anemic adolescent high school girls (AHSG) to iron supplementation and nutritional education and to find the effectiveness of these on scholastic performance, hematological parameters and BMI in selected schools of Udupi district.- **Dr. Suja Karkada**
2. A study of the factors influencing drug compliance among population with chronic diseases in selected areas of Udupi district- **Dr. M. Navaneetha**
3. A study of prevalence and risk factors of childhood overweight/obesity and effectiveness of a multicomponent intervention on lifestyle practices, body fat and self-esteem of overweight/obese children in selected English medium schools of Udupi District.- **Dr. Baby S Nayak**
4. An evaluative study on Quality of life and impact of an educational package on Childhood Bronchial Asthma for Mothers of Asthmatic Children in Selected Manipal University Hospitals, Karnataka State- **Dr. Erna Judith Roach**
5. Effect of Psycho Educative intervention on adherence to treatment among persons with bipolar affective disorder (BPAD). – **Dr. Linu Sara George**
6. Quality of Life and Psychosocial variables of Nurses working in selected hospitals of Udupi and Mangalore (South Canara) Districts- **Dr. Tessy Treesa Jose**
7. A comparative analysis of the outcome of two teaching- learning approaches adopted for teaching pharmacology, in terms of undergraduate nursing students' clinical competency in selected educational institutions of Karnataka State- **Dr. Elsa Sanatombi Devi**
8. Effectiveness of Pranayama on Cancer related fatigue among patients with breast cancer undergoing radiation therapy in Sai Baba Cancer Centre, Kasturba Hospital.- **Dr. Jyothi R K**
9. A study on therapeutic compliance personality traits social support quality of life and psychiatric morbidity among chronic renal failure patients undergoing haemodialysis in a tertiary care hospital of Udupi district.- **Dr. Blessy Prabha Valsaraj**
10. An awareness and attitude regarding Nursing Research and its utilization among Nurse Educators and Staff Nurses' of selected Institutions of Bangalore.- **Dr. Shashidhara Y N**
11. Effectiveness of Indian Classical Music Therapy on developmental responses of Preterm Infants admitted to a Tertiary level Neonatal Intensive Care Unit (NICU) of a selected hospital, Udupi District.- **Dr. Sonia R B D' Souza**

12. Development and psychometric evaluation of the tool: Aptitude towards Nursing.-
Dr. Maxie Andrade
13. Development and Evaluation of evidence based practice programme among nurses' in the academic and clinical settings of Manipal University.- **Dr. Preethy D'Souza**

Percentage of students doing projects in collaboration with other universities / industry / institute – nil

29. Awards / recognitions received at the national and international level by

- Faculty
- Doctoral / post doctoral fellows
- Students

Faculty Awards for Paper Presentations at the Conferences/Workshops/Symposiums:

1. Dr. Anice George

- International institute of education and management New Delhi Awarded the Glory of Excellence award for outstanding achievement in the field of Education on March 2015
- Maximum publication award 2014 by Manipal College of Nursing Manipal.

2. Dr. Judith A Noronha

- Distinguished alumni Award, Fr. Muller's College of Nursing, November 2012.
- Distinguished Alumni Award, Manipal University, December 2010

3. Mrs. Sonia R B Souza: Awarded Best Paper Presentation.

- Regional Conference on Recent Trends in MCH Care organized by Alumni Association, PSG College of Nursing, Coimbatore during October 14-15, 2010., Topic: Efficacy of 'Nesting' on Cardio-Respiratory Stability of Preterm Infants.
- International conference on transcultural nursing organized by Manipal College of Nursing Manipal on 12/11/2011, Topic: An Explorative study on sociocultural taboos and misconceptions regarding food conceptions during pregnancy among tribal Women Karnataka.

4. Mrs. Jyothi R K: Stood first in the Scientific Paper Presentation competition ,

- Workshop organized by St. Ann's College of Nursing, Mulki, Mangalore on 'Empowering Nursing Professionals – Bridging Theory, Research & Practice' during January 5-6, 2010, Paper topic: Application of Conceptual Framework in Research.

- **Awarded Best paper Presentation**, International Conference on Transcultural Nursing organized by MCON, Manipal; Mangalore & Bangalore during November 09-11, 2011 held at SyndicateBank Golden Jubilee Auditorium, Manipal.

Topic: Effectiveness of Pranayama on cancer related fatigue among breast cancer patients receiving radiotherapy.

5. **Mrs. Sheela Shetty: Best Paper Award**

- National Conference on Strengthening Health Research Capacity of Nurses – The Need for Evidence Based Nursing Practice organized by KLE University's Institute of Nursing Sciences, Belgaum during March 5-6, 2010. Topic: Effectiveness of self-instructional module on administration of paediatric medications among the staff nurses.
- International conference on Transcultural Nursing organized on 9-11 November 2011 by MCON Manipal Topic: Maternal beliefs and practices related to feeding and height status of children

4. **Dr. Erna Judith Roach: Awarded 1st Prize: Best Oral Presenter.**

- USM International Nursing Conference 2011 organized by Nursing Programme, School of Health Sciences, Health Campus, Universiti Sains Malaysia held during June 14-15, 2011, Topic: An evaluative study on quality life and impact of an educational package on childhood bronchial asthma for months of asthmatic children

5. **Mrs. Latha T: Awarded Best Paper Award in the National Conference.**

- National Conference on 'Redesigning Clinical Teaching – Role of a Clinical Teacher' organized by MIMS College of Nursing, Calicut held during January 4-5, 2011 at MIMS Hospital Auditorium, Calicut, Topic: Interpretive Evaluation in Nursing Education.

6. **Ms. Preethy Jawahar: Awarded Best Paper Presentation**

- International Conference on Transcultural Nursing organized by MCON, Manipal; Mangalore & Bangalore during November 09-11, 2011 held at SyndicateBank Golden Jubilee Auditorium, Manipal, Topic: Perception on death and dying among nursing students..

7. **Mr. Vishnu Renjith:**

- **Secured First Place in the event:** Event Scientific Paper Presentation-Healthcon conducted by the Department of Nursing for the Inter-Collegiate event 'Gardenia Bat & Bol-2011 held on March 24, 2011 at Garden City College, Bangalore, Topic: Bio-psychosocial wellbeing of elderly.

- **Best paper Award:** 12th National Oncology Nursing Conference organized by Oncology Nurses Association of India, Tata Memorial Hospital, Mumbai held during August 26-28, 2010 at Tata Memorial Hospital, Mumbai.

8. Mrs. Leena Sequira

- **Secured third prize** for the paper presentation on “a survey on risk assessment of renal failure among hypertensive and diabetics in udupi district, India at 2nd USM international Nursing Conference was organized on 17th & 18th August 2014, organized by Nursing programme school of health sciences health campus, USM.Malaysia
- **Secured First prize** for the paper presentation on “A study to assess the reference range of estimated Glomerular Filtration Rate (eGFR) in Healthy South Indian Males –and identify clients with Chronic Renal Failure (stage I and above) with hypertension and diabetes or both - A pilot study” at Epidemiology of chronic diseases –nursing research perspective was organized on Oct 25th - 27th 2013 by Nursing Research Society of India and Manikala Topawala Institute of Nursing. Gujarat .
- **Best Paper** on : Nurses role in taking care of a client undergoing haemodialysis- a case study at National level conference on “Clinical Governance in Nursing – the key to excellence in patient care on Nov 24-25 2014 by organized by Madras Medical Mission, Madras

Awards for Poster Presentations at the Conferences/Workshops/Symposiums:

1. Dr. Kasturi R Adiga

- Non Communicable disease workshop was organized by Manipal University and University of Alabama Birmingham USA, on 13th and 14th February 2011, Topic: Effectiveness on PTP in improving knowledge on lead poisoning among primary school children: **Awarded II Prize**

2. Dr. Judith Angelitta Noronha

- First international patient safety conference was organized by Sultan Qaboos University Sultanate of Oman on 31st January to 2nd February 2011, Topic : Patient safety : A shared responsibility of patient care. **Awarded best Poster**

3. Mrs. Sreedevi C:

- **Best Poster Award** during the International Conference on Challenges in Clinical Nursing Research organized by Government College of Nursing, Thiruvananthapuram during January 9-10, 2010.

6. Dr. Anice George:

National Conference on Redesigning Clinical Teaching – Role of a Clinical Teacher organized by MIMS College of Nursing, Calicut during January 4-5,

2011, Topic: Care Plan concept Map: An innovative strategy for clinical teaching to improve critical thinking. **Best Poster Award**

5. Mrs. Latha T:

- Dept. of Child Health Nursing, MCON, Manipal & Dept. of Paediatrics, KMC, Manipal jointly organized World Breastfeeding Week-2011 on August 03, 2011 at KH, Manipal. Theme: Talk to me: Breastfeeding-A 3D Experience., Topic: Talk to me: Breastfeeding-1 3D Experience. **Secured 1st prize.**

6. Mr. Vishnu Renjith & Dr. Anice George:

- National Conference on Redesigning Clinical Teaching – Role of a Clinical Teacher organized by MIMS College of Nursing, Calicut during January 4-5, 2011., Topic: Clinical Teaching in a Teacher Student Practice Clinic. **Best Poster Award**

6. Mr. Vishnu Renjith:

- National Conference on Redesigning Clinical Teaching – Role of a Clinical Teacher organized by MIMS College of Nursing, Calicut during January 4-5, 2011, Topic: Care Plan concept Mapping. **Best Poster Award.**

7. Mrs. Sangeetha P

- 2nd International Conference and 7th National Annual Conference of Society for Wound care CON organized on 11 to 13th October 2013 by JIPMER, Pondicherry Topic: The incidence and demographics of child abuse.

30. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

Year	Seminar/Conferences/Workshops	No. of Participants	No. of resource persons	Source of funding
2010	National conference on “ Palliative Care Nursing”	313	04 (National -03 & International -01)	Local Sponsors
2010	Regional workshop on “Emergency Nursing”	53	09	-
2011	International conference on “Transcultural Nursing”	364 (National - 354 & International- 10)	09 (National -04 & International -05)	Local Sponsors
2012	National Conference on Forensic Nursing	184	06	Local Sponsors

2014	International perspectives on aging: Evidence to guide clinical practice	400	04	advantAGE Seniors Consulting LLP, Bangalore
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Eminent personalities who attended the conference

A) National Conference on Palliative Care Nursing 2010:

Dr. Rajasekharan P Warriar Vice Chancellor, MU, Manipal	Dr. Prabha Adhikari Professor, KMC Mangalore
Dr. Naveen S Salins Palliative Medicine Consultant KH, Manipal	Dr. (Sr). Celine Payyappilly Director, Holistic Health Centre, Pune
Ms. Gilly Burns Director, Cancer Relief Fund Lecturer & Clinical Specialist in Palliative Care Nursing, UK	Dr. Balu Kolar Final PG Scholar SDM College & Hospital of Ayurveda Udyavara
Dr. Mohammed Rafik Medical Superintendent SDM Yoga & Nature Cure, Parika	Ms. Molly Hemm Asso. Professor Amrita College of Nursing, Kerala

B) 2010 - Regional workshop on "Emergency Nursing" 2010

Mrs. Anitha C Rao, Canara College of Nursing, Kundapur	Dr. Tom Devasia, Associate Prof. Dept. of Cardiology, KMC, Manipal
Ms. Soumya Johnson, Assoc. prof. Dept of Respiratory Therapy, MCOAHS	Mr. Veerabhadra Swamy, Lecturer, Dept. of Psychiatric Nursing, Nitte Usha Institute of Nursing Sciences, Mangalore
Lt.Col. Nirmala Robertz, Prof. and HoD Dept. of Child Health Nursing, Nitte Usha Institute of Nursing Sciences, Mangalore	

C) Transcultural Nursing 2011

Prof Jane Williams Dean and Pro Vice Chancellor School of Health and Social Sciences Middle Sex University London	Dr. Suvarna Nalapat Retd Prof and HOD Pathology Govt Medical College Calicut, Kerala
Dr. K Lalitha Professor & Head of Nursing Department of Nursing NIMHANS Bangalore	Dr. Sundaram Associate Professor School of Medicine, James Cook University, Townsville, Australia
Dr. Sue Dyson Principal Lecturer Head of Nursing and Midwifery Research De Montfort University London	Capt. Ajitha Nair Chief of Nursing Fortis Hospital Mohali New Delhi

Mr. Ismail Lecturer School of Health Sciences Ngee Ann Polytechnic Singapore	Dr . Irena Papadopoulos Founder and Head of the Research Centre for Transcultural Studies in Health, Middlesex University UK
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D) National Conference on Forensic Nursing - 2012

Mr. Prasanna Kumar O Reddy Associate Professor Govt College of Nursing, Fort Bangalore	Dr. Roy K George Professor & Principal Baby Memorial College of Nursing Kozhikode
Dr. VikramPalimar Associate Professor Dept of Forensic Medicine Kasturba Medical College, Manipal	Prof. Shirley David Deputy Dean CON CMC Vellore
Dr. PrashanthaBhagavath Associate Professor Dept of Forensic Medicine KMC Manipal	Dr. Ambarish B Principal Correspondent Deccan Chronicle Bangalore

31. Code of ethics for research followed by the departments

- In the institution level, Institutional Research Committee (IRC) members reviews the research proposal and give the necessary approval.
- Wherever required ethical clearance are obtained from Institutional Ethical Committee (IEC) of Manipal University or Kasturba Hospital.
- Written informed consent from the participants
- Permission will be obtained from concerned authorities.

32. Student profile course-wise: (2014-15)

Name of the Course (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
UG	238	19	105	Results awaited	
PG	50	03	20	Results awaited	
M.Phil	10	03	07	Results awaited	
Ph.D *	-	-	-	-	

*Did not call for structured Ph.D in Nursing.

33. Diversity of students (for the period 2014-15)

Name of the Course (refer to question no. 4)	% of students from the same university (in number)	% of students from other universities within the State (in number)	% of students from universities outside the State (in number)	% of students from other countries (in number)
UG	-	157 (36.52%)	241 (56.04%)	32 (7.44%)
PG	19 (39.58%)	11 (22.92%)	18 (37.5%)	-
M.Phil (N)	10 (58.82%)	02 (11.76%)	05 (29.41%)	-
Ph.D (structured)	02 (33.33%)	03 (50%)	01 (16.66%)	-

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise. NA

35. Student progression

Student Progression	2010 - % of Progression	2011 - % of Progression	2012 - % of Progression	2013 - % of Progression	2014 - % of Progression
UG to PG*	17%	19%	5%	9.18%	8.88%
PG to M.Phil.*	10%	14%	8%	15%	-
PG to Ph.D.	20%	-	-	-	5.26%
Ph.D. to Post-Doctoral	-	-	-	-	-
Employed	Around 80% students were placed in Kasturba Hospital immediately after their graduation.				
<ul style="list-style-type: none"> ▪ Campus selection ▪ Other than campus recruitment 			54%	72%	63%
			46%	Abroad 28%	Abroad 37%

Note: The above data is pertaining to only those students who joined MCON Manipal for their higher studies.

36. Diversity of staff (As on 31.12.2014)

Percentage of faculty who are graduates of the same university	B.Sc/PBB.Sc
from other universities within the State	26 faculty, 49%
from universities from other States	16 faculty, 30%
from universities outside the country	11 faculty, 21%
	nil

37. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period : 10

No. of faculty Awarded Ph.D. From 2010 to 2014

Sl.No.	Name	Year
1.	Dr. Suja Karkada	2010
2.	Dr. Baby S Nayak	2011
3.	Dr. Erna Judith Roach	2011
4.	Dr. Linu Sara George	2011
5.	Dr. Tessy Treesa Jose	2012
6.	Dr. Elsa Sanatombi Devi	2012
7.	Dr. Blessy Prabha Valsaraj	2014
8.	Dr. Jyothi R K	2014
9.	Dr. Sonia R B D'Souza	2014
10.	Dr. Shashidhara Y N	2014

38. Present details of infrastructural facilities with regard to

a) Library

- Total area of the library (in Sq. Mts.)-13950
- Total seating capacity-1300
- Working hours (on working days, on holidays, before examination, during examination, during vacation)
 - On all days : 8.30am-11.30pm
 - On Ganesh Chaturthi } 8.30 am to 4.30 pm
 - VijayaDashami,Deepavali }
- Layout of the library
- Individual reading carrels-All reading halls have individual study cubicles
- Lounge area for browsing and relaxed reading- available
- IT zone for accessing e-resources- available
- Clear and prominent display of floor plan- displayed
- Adequate sign boards- available
- Fire alarm- installed
- Access to differently-abled users – available
- Mode of access to collection – Open Access System

Floor Plan

The Health Sciences Library is stretching on 5 levels. The organization of the various levels is given below:

Level – I:

Senior Librarian office, help desk, security desk, property counter, notice boards, group study area, circulation (issue and return) section, reference counter, EPAC user terminals,

internet kiosks, new arrivals section, reading hall, books related to Nursing Sciences, Pharmaceutical Sciences and Allied Health Sciences and photocopying section.

Level – II:

Librarian (Senior) office, fax section, reference counter, internet kiosks, new arrivals section, reading hall and books related to Medical Sciences and Dental Sciences and notice board.

Level – III:

Librarian (Senior) office, computer lab, CD and online database section, reference counter, new arrivals section, reading hall, reference books related to Medical Sciences and Dental Sciences, current periodicals, photocopying section, EPAC user terminals, internet kiosks, notice boards, display of faculty publications and private study area.

Level – IV:

Reading hall, back volumes of journals related to Medical Sciences, WHO publications, reference counter, internet kiosks, photocopying section, e-learning centre, audio - visual room, news papers and magazine section.

Level – V:

Reading hall, back volumes of journals related to Dental Sciences, Nursing Sciences, Pharmaceutical Sciences and Allied Health Sciences, reference counter, dissertations, books on Yoga and Ayurveda and old editions of books.

Department and institutional library is available for ready reference in the college

Internet facilities for staff and students –

Each faculty is provided with laptop with internet facility.

PG students can purchase laptops at subsidized rate

b) Computer and internet facility are available students at central library.

c) Total number of class rooms - 10

d) Class rooms with ICT facility- 7

e) Students' laboratories - 4 Nursing specialty labs, nutrition lab and basic science lab at KMC

f) Research laboratories – nil

39. List of doctoral, post-doctoral students and Research Associates

a) From the host university

Full time – 06

Part time - 15

b) From other universities - Nil

List of faculty who have registered Ph.D. as on 31.12.2014

Sl.No.	Host university part time	Host university Full time	Other University
	Name	Name	Name
1	Mrs. Daisy Josphine Lobo	Mr. Nageshwar	Nil
2	Mrs. Maria Pais	Mr. Aldrin Vas	
3	Mrs. Leena Sequira	Mr. Ramesh C	
4	Mrs. Malathi G Nayak	Ms. Shejila C H	
5	Mrs. Sulochana B	Mr. Vishnu Renjith	
6	Mrs. Latha T	Ms. Renu G	
7	Mrs. Binu E Margaret		
8	Mrs. Sushmitha Ramona Karkada		
9	Mrs. Sangeetha Priyadarshini		
10	Mrs. Melita Sheilini		
11	Mrs. Yashoda S		
13	Mrs. Anjalin D'Souza		
14	Mrs. Ansuya (Community Health Nursing)		
15	Mrs. Soumya Christable		

40. Number of post graduate students getting financial assistance from the university.

Year	No. of students (PG)	Amount in Rupees
2009-10	03	40,600/-
2010-11	04	48,800/-
2011-12	06	2,03,500/-
2012 - 2013	Nil	
2013 – 2014	Nil	

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

- For INC GFATM project, need assessment was done by INC, where the MCON also participated in assessing the existing knowledge and attitude of nurses on HIV/AIDS.
- For starting PB DIPLOMA programme it was felt as a need for specialized nurses to provide specialized nursing care services in the hospitals settings.
- In the Middle East, there is an increased recognition of and demand for nurses who are specialized in different clinical specialities. PB diploma programme was started for foreign students in the year 2014 as there was demand from Sultanate of Oman to train their nurses in Neuroscience nursing, Oncology nursing, Operation Room nursing and Cardiac nursing. One batch (29) of students from Oman graduated in the respective areas in 2015.
- As there were increasing demand from international institutions to specify the number of hours of instructions on geriatric nursing, Geriatric nursing course was introduced in the existing curriculum of undergraduate program.

- To keep abreast with changing trend of evidence based practice, Evidence based practice was introduced in the existing undergraduate and post graduate curriculum. In M.phil Nursing programme, evidence based practice was introduced as course.

42. Does the department obtain feedback from

a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

Yes .

- Reports are given by concerned subject coordinators during the monthly faculty and weekly department meetings. Wherever required modification in the teaching learning process is discussed in curriculum committee meetings, and decisions are taken.
- Feedback is discussed at institutional Management Review Meeting and at University level. Regular discussion on feedback is carried out in the department meeting as well as faculty meeting.
- Remedial measures are taken based on the root cause

b. Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Yes.

- Annual feedback from the students is obtained, discussed in the departmental and faculty meeting.
- Feedback is discussed in the faculty meeting and at institutional Management Review Meeting and at University level.
- Remedial measures are taken based on the root cause

c. Alumni and employers on the programmes offered and how does the department utilize the feedback? Please complete

- Annual feedback from the alumni and parents is obtained, discussed in the departmental and faculty meeting
- Feedback is discussed at institutional Management Review Meeting and at University level.
- Feedback is taken from alumni members during alumni meet.

43. List the distinguished alumni of the department (maximum 10)

Dr. Anice George Dean, MCON, Manipal	Dr. Judith Noronha Professor and Associate Dean, MCON, Manipal
Dr. Larissa Martha Sams Principal, Laxmi Memorial College of Nursing,	Dr. LathaVenkatesan Principal, Apollo College of Nursing, Chennai

Balmatta, Mangalore.	
Dr Suja Karkada, Assistant Professor, Sultan Qaboos University Oman	Dr A Jayasudha, Associate Professor, Female College of Applied Medical Sciences, King Khalid University, Ministry of Higher Education, Kingdom of Saudi Arabia
Mrs. Santy Sajan PhD-C Catholic University of America, Washington D.C. USA	Prof. Vijaya M Udumala, Professor & Principal, JMJ College of Nursing, Sanathnagar
Dr Asha P Shetty, Principal, Yenapoya Nursing College, Deralakatte, Mangalore	Dr Simi Jesto Joseph, Nurse Practitioner, GI Solutions, Chicago, IL
Dr Valsamma Joseph, Principal, Govt. College of Nursing, Medical College P.O, Mg Kavu, Thrissur, Kerala	Mrs. Mary A Karkada Clinical Nurse III, Neonatal Intensive Care Unit, Washington Hospital centre, Washington D.C USA

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

- Student Nurses Association conducts workshop/ seminar every year to enrich the students with advances in nursing profession.
- All the graduates are made to undergo six days training session on INC – GFATM on HIV/ AIDS and Tuberculosis.
- Basic science subjects and few other subjects like English, Statistics etc. are taught by the experts from other constituent units of MU.
- Students are motivated to participate/ present papers in regional/ national conferences/ workshops etc.
- Total number of students who presented the papers from 2010 – 2014 are : 49
- Opportunity is provided to 15 academically excellent students every year to participate in expedition programme of Ngee Ann Polytechnic, Singapore.
- Students are provided with financial support to present papers at national conferences/ workshops, financial support was provided to 14 UG and PG students and 2 PhD scholars(structured)
- Financial support is also provided to the students in the form of scholarship. The detail is given in the table below

Student Scholarships

Scholarship	No of Students	Amount
Merit Cum Means 80 % and above	61 (2013 onwards)	2,820,000
SAGE scholarship	16 (2009 onwards)	487,800
Staff Children	58 (2009 onwards)	4,267,100

Others	8 (2013 onwards)	225,250
Konkani Scholarship	351 (2009 onwards)	7,210,523
PhD Scholarship	6 students X 7 lakh apx.	1,754,000
TOTAL		16,764,673

45. List the teaching methods adopted by the faculty for different programmes.

- Lecture
- Discussion
- Demonstration
- Simulation
- Brain storming sessions
- Field visits
- Projects
- Evidence Based Practice
- Problem Based Learning

Different clinical teaching methods such as:

- Critical thinking
- Clinical reasoning
- Pre and post clinical conferences at clinical area
- Nursing rounds
- Concept mapping
- Role modeling
- Interpretive exercises
- Reflective learning

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

- Through three sessional examinations and university examination
- Through assignments
- Ongoing clinical evaluation

- Model practical examination
- Evaluation criteria for formative and summative evaluation based on students learning objectives.
- Result analysis of university examination.

47. Highlight the participation of students and faculty in extension activities.

- The students of MCON have SNA (Student Nurses Association) as a unit of TNAI (Trained Nurses Association of India) that functions regularly and students participate in all the activities organized in the country.
- Students have a health and social welfare committee through which social service activities are organized regularly.
- Nursing students and faculty members are members of Voluntary Service Organization of Manipal University.
- Each department organizes an average of 4 to 5 outreach programme as a part of their curriculum; which includes special camps, school health programmes, awareness programmes, and national day celebrations every year.
- Faculty and student are actively involved in conducting regular health education in the clinical setting, community and school like, lactation counselling, psychoeducation, breast feeding, diabetes clinic, hemophilia etc.
- Faculty and students are actively involved in Blood donation camps, Eye Camp, Dental camp etc.
- Monthly two Morbidity clinics is conducted by Community Health Nursing department at Athrady and Marne Villages. Approximately 480 people per year were the beneficiaries of the clinic.

48. Give details of “beyond syllabus scholarly activities” of the department.

- Students are participating in conferences, seminar, workshops and outreach programme
- Opportunity is provided for the students to participate in outreach programmes, morbidity clinic, camps, pulse polio programme, blood donation camp, intercollegiate and inter university programmes.
- Students participate in state level and national level student nurses association activities.

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

- Manipal College of Nursing, Manipal is recognized by Indian Nursing Council, New Delhi and Karnataka State Nursing Council for all the educational programmes.
- Nursing degrees awarded by Manipal College of Nursing, is recognised by Singapore Nursing Board with three other nursing colleges in India, 2014.
- Manipal College of Nursing, Manipal is ranked 3rd among top nursing institutes in India, as ranked by Week (Hansa Survey 2012).
- Manipal College of Nursing Manipal, is ISO certified with ISO 9001:2008 and ISO 14001:2004

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

- Each department of the college conducts atleast one primary research study per year or atleast one systematic review
- It is mandatory for M.Sc Nursing and M.phil Nursing students to conduct one research study
- Faculty are conducting collaborative research in collaboration with other department/ institution of the Manipal University.
- Institution has launched a Journal titled Manipal Journal of Nursing and health sciences, with the aim to promote excellence in research and healthcare with vision to advance knowledge for practice, education, research and administration in healthcare.
- Institution received ICMR DHR funded project on “ capacity building for nurse educators on Geriatric health care research”, the outcome of this project will add on to the existing knowledge base of geriatric care.

51. Future plans of the department.

- To be the centre of excellence in nursing education, practice and research
- Adopting Electronic Family Folders for the adopted villages
- Increase the number of research publications in national and international indexed journal with high impact factors
- Apply and obtain grants for research studies
- Short courses on Professional development & etiquettes, Life style modification, complementary & alternative therapy and Fine arts
- Indexing the journal – Manipal Journal of Nursing and Health Sciences in national and international data bases
- Publishing nursing text books

52. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strengths

1. Supportive administration
2. Offering all higher education programmes in Nursing
3. Good infrastructure with all amenities
4. Excellent Library facilities
5. Conducive working environment
6. Qualified and committed faculty members
7. International reputation,
8. 80% placement of graduates within 03 months from the announcement of results
9. Launched institutional journal
10. Opportunities and financial support for participating in international/national conferences/seminars as delegates/presenters/resource persons
11. 95% adherence to academic master plan
12. Collaboration with international universities
13. Faculty development opportunities
14. Campus recruitment
15. Multidisciplinary Educational Campus
16. Good clinical resources for hands on experience

Weaknesses

1. Inadequate exchange programmes for faculty and students
2. Inadequate funded research projects
3. Lack of evidence based clinical nursing practices

Opportunities

1. Expertise, services and grants to increase self directed income
2. Organizing collaborative conferences
3. Multidisciplinary research
4. Request from publishers for authoring and editing text books

5. Evidence based clinical practice
6. To be one among the top five colleges of nursing nationally and one among the top 100 nursing colleges internationally.

Challenges

1. Increasing number of nursing colleges in the state and country
2. Competitive courses in health care
3. Change in professional rules
4. Decline in admission rate of postgraduation programme.
5. Reduction in the scope for post graduate employment
6. Newer allied health courses with lesser course duration.

1. **Name of the Department** : **Manipal College of Pharmaceutical Sciences**

2. **Year of establishment** : 1963

3. **Is the Department part of a School/Faculty of the University?**

Yes, a Constituent Institute of Manipal University

4. **Names of Programmes / Courses offered (UG, PG, MPhil, PhD, Integrated Masters; Integrated PhD, etc.) :**

#	Name of the Course
1	D Pharm
2	B Pharm
3	Pharm D
4	M Pharm
4a	Pharmaceutics
4b	Pharmaceutical Chemistry
4c	Pharmacology
4d	Pharmacognosy
4e	Pharmaceutical Marketing
4f	Pharmaceutical Administration
4g	Pharmacy Practice
4h	Pharmaceutical Quality Assurance
4i	Pharmaceutical Biotechnology
4j	Drug Regulatory Affairs
5	Pharm D Post Baccalaureate
6	Ph D

5. **Interdisciplinary courses and departments involved :**

Integrated MBA with SOM, MU

6. **Courses in collaboration with other universities, industries, foreign institutions, etc.**

Yes, with Napier Edinburgh University, MSc courses

7. **Details of programmes / courses discontinued, if any, with reasons:**

No

8. Annual/ Semester/Choice Based Credit System :

Annual (As per PCI norms)

9. Participation of the department in the courses offered by other departments:

NIL

10. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)

	Sanctioned	Filled
Professor	15	15
Associate Professor	25	25
Reader	1	1
Assistant Professor – Selection Grade	6	6
Assistant Professor – Senior Scale (PhD)	15	15
Assistant Professor	10	10

11. Faculty profile with name, qualification, designation and specialisation (DSc/DLitt/ PhD/MPhil, etc.) (As on 31 Dec 2014)

#	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of PhD students guided
1	Dr M Sreenivasa Reddy	M Pharm Ph D	Vice Principal & Professor	Pharmaceutics	22	Completed-4 Ongoing-5
2	Dr K B Koteswara	B Sc, M Pharm Ph D	Professor & Head	Pharmaceutics	22	Ongoing-1
3	Dr Mahalaxmi Rathnanand	M Pharm Ph D	Assoc. Prof.	Pharmaceutics	20	-
4	Dr Shaila Angela Lewis	M Pharm Ph D	Assoc. Prof.	Pharmaceutics	12	Ongoing-2
5	Dr Srinivas Mutalik	M Pharm Ph D	Assoc. Prof.	Pharmaceutics	09	Ongoing-3
6	Dr Usha Yogendra Nayak	M Pharm Ph D	Asst. Prof. Senior Scale.	Pharmaceutics	05	-
7	Mr Girish Pai	M Pharm	Asst. Prof.	Pharmaceutics	05	-

#	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of PhD students guided
	K		Senior Scale			
8	Dr Anup Naha	M Pharm Ph D	Asst. Prof. Senior Scale	Pharmaceutics	08	-
9	Dr Vamshi Krishna T	M Pharm Ph D	Asst. Prof. Senior Scale	Pharmaceutics	06	-
10	Mr Lalit Kumar	M Pharm	Asst. Prof.	Pharmaceutics	05	-
11	Dr G Gautham Shenoy	M Pharm Ph D	Professor and Head	Pharmaceutical Chemistry	23	Completed-2 Ongoing-4
12	Dr B S Jayashree	M Pharm Ph D	Professor	Pharmaceutical Chemistry	27	Completed-1 Ongoing-3
13	Mr P V R Chowdary	M Pharm	Reader	Pharmaceutical Chemistry	33	-
14	Dr Suvarna G Kini	M Pharm PhD	Assoc. Prof.	Pharmaceutical Chemistry	23	Ongoing-2
15	Dr Jessy Elizabeth Mathew	M Pharm Ph D	Assoc. Prof.	Pharmaceutical Chemistry	24	-
16	Dr Varadaraj Bhat G.	M Pharm Ph D	Assoc. Prof.	Pharmaceutical Chemistry	16	-
17	Dr KVijaya Bhasker	M Pharm Ph D	Asst. Prof. Selection Grade	Pharmaceutical Chemistry	17	-
18	Mr G K Sudhakar	M Sc	Asst. Prof. Selection Grade	Pharmaceutical Chemistry	22	-
19	Dr Alex Joseph	M Pharm Ph D	Assoc. Prof.	Pharmaceutical Chemistry	14	-
20	Dr R S Jeyaprakash	M Pharm Ph D	Asst. Prof. Selection Grade	Pharmaceutical Chemistry	12	-
21	Mr Aravinda Pai	M Pharm	Asst. Prof.	Pharmaceutical Chemistry	06	-
22	Mrs Ruchi Verma	M Pharm	Asst. Prof.	Pharmaceutical Chemistry	05	-
23	Dr C S Shreedhara	B Sc, M Pharm Ph D	Professor	Pharmacognosy	31	Ongoing-4
24	Dr M	M Pharm	Professor	Pharmacognosy	21	Ongoing-2

#	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of PhD students guided
	Manjunatha Setty	Ph D	and Head			
25	Dr H N Aswatha Ram	M Pharm Ph D	Assoc. Prof.	Pharmacognosy	19	-
26	Dr Chandrashekar K S	M Pharm Ph D	Assoc. Prof.	Pharmacognosy	17	Ongoing-1
27	Dr Richard Lobo	M Pharm Ph D	Assoc. Prof.	Pharmacognosy	10	-
28	Dr. Saleemulla Khan	M Pharm Ph D	Asst. Prof. Selection Grade	Pharmacognosy	12	-
29	Mr Vasudev R Pai	M Pharm	Asst. Prof.	Pharmacognosy	06	-
30	Dr C Mallikarjuna Rao	M Pharm Ph D	Principal & Professor	Pharmacology	29	Completed-8 Ongoing-4
31	Dr N Gopalan Kutty	M Sc Ph D	Professor	Pharmacology	39	Completed-4 Ongoing-2
32	Dr Sreedhara Ranganath Pai K	M Pharm Ph D	Professor and Head	Pharmacology	18	Completed-1 Ongoing-6
33	Dr Nandakumar K	M Pharm Ph D	Assoc. Prof.	Pharmacology	10	Ongoing-2
34	Dr Rekha Raghuvver Shenoy	M Pharm Ph D	Assoc. Prof.	Pharmacology	11	-
35	Dr Yogendra Nayak	M Pharm Ph D	Assoc. Prof.	Pharmacology	12	-
36	Dr Jayesh Mudgal	M Pharm Ph D	Asst. Prof. Senior Scale	Pharmacology	06	-
37	Dr Nitesh Kumar	M Pharm Ph D	Asst. Prof. Senior Scale	Pharmacology	05	-
38	Mr Madhavan Nampoothiri G	M Pharm	Asst. Prof.	Pharmacology	06	-
39	Dr Anoop Kishore	M Pharm Ph D	Asst. Prof. Senior Scale	Pharmacology	07	-
40	Dr M K Unnikrishnan	M Pharm Ph D	Professor and Head	Pharmacy Practice	29	Completed-5 Ongoing-5

#	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of PhD students guided
41	Dr Sreedharan	M Pharm Ph D	Assoc. Prof.	Pharmacy Practice	18	-
42	Dr. Leelavathy D Acharya	M Pharm Ph D	Assoc. Prof.	Pharmacy Practice	16	-
43	Dr Vijayanarayana K	M Pharm	Assoc. Prof.	Pharmacy Practice	15	-
44	Dr Surulivel Rajan M	M Pharm Ph D	Assoc. Prof.	Pharmacy Practice	13	-
45	Dr Rajesh R	M Pharm Ph D	Asst. Prof. Selection Grade	Pharmacy Practice	11	-
46	Dr Rajesh V	M Pharm Ph D	Asst. Prof. Senior Scale	Pharmacy Practice	09	-
47	Mr Sonal Sekhar M	M Pharm	Asst. Prof. Senior Scale	Pharmacy Practice	08	-
48	Dr Girish Thunga P	M Pharm Ph D	Asst. Prof. Senior Scale	Pharmacy Practice	06	-
49	Mr Kanav Khera	M Pharm	Asst. Prof.	Pharmacy Practice	05	-
50	Mr Prasanna Kumar	M Pharm	Asst. Prof. Senior Scale	Pharmacy Practice	07	-
51	Mr Suhaj A	M Pharm	Asst. Prof. Senior Scale	Pharmacy Practice	07	-
52	Mr John Preshanth Kumar P	M Pharm	Asst. Prof.	Pharmacy Practice	03	-
53	Dr N Udupa	M Pharm Ph D	Professor	Pharmacy Management	39	Completed- 26 Ongoing-6
54	Dr Anantha Nagappa Naik	M Pharm Ph D	Professor	Pharmacy Management	31	Completed-3 Ongoing-6
55	Dr D Sreedhar	M Pharm Ph D	Assoc. Prof. and Head	Pharmacy Management	12	-
56	Dr Manthan D Janodia	M Pharm Ph D	Assoc. Prof.	Pharmacy Management	11	-

#	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of PhD students guided
57	Dr Virendra Siddharam Ligade	M Pharm Ph D	Asst. Prof. Selection Grade	Pharmacy Management	12	-
58	Mr Pradeep M Muragundi	M Pharm	Asst. Prof. Senior Scale	Pharmacy Management	10	-
59	Dr Krishnamurthy Bhat	M Pharm Ph D	Professor and Head	Pharmaceutical Quality Assurance	17	Ongoing-2
60	Dr S G Vasantharaju	M Pharm Ph D	Assoc. Prof.	Pharmaceutical Quality Assurance	20	-
61	Dr Jagadish P C	M Pharm Ph D	Assoc. Prof.	Pharmaceutical Quality Assurance	13	-
62	Dr Sudheer Moorkoth	M Pharm Ph D	Assoc. Prof.	Pharmaceutical Quality Assurance	11	-
63	Dr Prashant B Musmade	M Pharm Ph D	Assoc. Prof.	Pharmaceutical Quality Assurance	10	-
64	Dr Syed Sajjad Hussien	M Pharm Ph D	Asst. Prof.	Pharmaceutical Quality Assurance	07	-
65	Mr Muddukrishna B S	M Pharm	Asst. Prof.	Pharmaceutical Quality Assurance	05	-
66	Mr Swapnil J Dengale	M Pharm	Asst. Prof.	Pharmaceutical Quality Assurance	03	-
67	Dr J Venkata Rao	M Pharm PGDIMPG DHRM PhD	Professor and Head	Pharmaceutical Biotechnology	33	Ongoing-3
68	Dr V M Subrahmanyam	B Pharm M Tech (BioTech) Ph D	Professor	Pharmaceutical Biotechnology	17	Ongoing-3
69	Dr Raghu Chandrashekar	M Pharm Ph D	Assoc. Prof.	Pharmaceutical Biotechnology	07	-
70	Dr Jesil Mathew A	M Pharm Ph D	Assoc. Prof.	Pharmaceutical Biotechnology	13	-
71	Mr Venkatesh	M Pharm	Asst. Prof.	Pharmaceutical	07	-

#	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of PhD students guided
	Kamath B		Senior Scale	Biotechnology		
72	Mrs Angela Treasa Alex	M Pharm	Asst. Prof	Pharmaceutical Biotechnology	05	-

12. List of senior Visiting Fellows, faculty, adjunct faculty, emeritus professors

#	Name of the Faculty	Qualification	Department	Current Status
1.	Dr K G Rajendran	M Sc Ph D	Pharmacy Management	Head, Medical Affairs, Eric Lifesciences, 21-31 New York Tower –A, Opp Muktidham Temple, Near Thaltej Cross Road, SG Highway, Ahmedabad - 380054
2.	Mr Dhiraj Kumar Chopra	M P harm MBA (Mkt)	Pharmacy Management	Regional Manager (Western India) Biopharmaceutical Division, Millipore India Private Limited, 701, Madison Building, Hiranandani Estate, Patlipada, Ghodbunder Road, Thane (West) 400607, Maharashtra.
3.	Mr K Kiran Shankar	M Pharm	Pharm. Management	Vice President, Sagar Pharmaceuticals Herbal Healthcare Division, Bangalore Pharmaceuticals and Research laboratories Pvt. Ltd., Registered office – 45/2, 9 th Block Jayanagar, Bangalore – 560069
4.	Dr G Jagadeesh	MS (Pharmacology) Ph D (Pharmacology)	Pharmacology	Expert Pharmacologist Division of Cardio-Renal Drug Products, Center for Drug Evaluation & Research Food and Drug Administration, HFD-1105600 Fishers Lane Rockville, MD 20857
5.	Dr Sreejayan	M Pharm Ph D	Pharmaceutical Chemistry	Assistant Professor College of Health Sciences, School of Pharmacy, Dept.3375, 1000 E.University Avenue, Laramie, WY 82071
6.	Dr Mahesh D Burande	M Pharm, DBM, MDBA(Marketing)	Pharmacy Management	Director Bilcare Research Academy, Adbeez/IPER, Off. No. 17, IDEAL chambers, Paud Road, Pune – 38

7.	Dr P D Gupta	Graduation PhD	Pharm. Biotechnology	Research Advisor 833, Churukon ka Rasta, Jaipur – 302003
8.	Dr K R Premnath Shenoy	M Pharm PhD	Pharm. Quality Assurance	Director, Regulatory Affairs M/S. AstraZeneca Pharma India Ltd. Avishkar, Hebbal Raod Kirloskar Business Park Bangalore – 560 024
9.	Mr R Singaravelan	M Pharm	Pharm. Quality Assurance	Head-Regulatory Affairs in Strides Acolab Ltd, Bangalore
10.	Dr Dinesh B Shenoy	M Pharm Ph D	Pharmaceutics	Senior General Manager Formulation Development Services Mylan Laboratories Ltd 1-1-151/1, Sairam Towers, 4 th Floor Secunderabad - 500003
11.	Dr D B Anantha Narayana	Ph D	Pharmacogno sy	Head – Herbal Research Hindustan Unilever Ltd Research Centre, 64 Whitefield, Bangalore – 560066
12.	Dr Himadri Sen	B Pharm, M.Sc Pharmacy) PhD (Pharmacy)	Pharmacy Management	President –R&D (Generics, NDDS) & Global Quality Ranbaxy Research Laboratories 20, Sector – 18, Gurgaon – 122 001, Haryana
13.	Ms Varsha Mehta	Pharm D FCCP MS	Pharmacy Practice	Clinical Associate Professor Pharmacy, Pediatrics and Communicable Diseases Clinical Pharmacist Neonatal Critical Care University of Michigan
14.	Dr B Sripathi Rao	B Pharm M Pharm Ph D, LL.B	Pharmaceutic al Quality Assurance	Retired Drug Controller for the state of Karnataka #675, 2 nd Main Road 4 th Cross Road Domlur, Bangalore – 5600071
15.	Dr Sib Chakrabarti	B Pharm M Pharm PhD	Pharmaceutics	Recognized Pharmaceutical Scientist 333 East 79 th Street, Apt. 10X New York, NY 1007
16.	Prof S K Kulkarni	M Pharm Ph. D FAMS FNASci	Pharmacology	Director Bombay College of Pharmacy Kalina, Santacruz (East), Mumbai- 400098
17.	Dr Deepak M	M Pharm Ph D	Pharmacogno sy	Senior Manager – R&D Centre Natural Remedies Pvt. Ltd Veerasandra Industrial Area, Hosur Road ,Bangalore – 560 100
18.	Dr M N A Rao	B Pharm M Pharm	Pharmaceutic al Chemistry	General Manager R & D, Divis Laboratories Ltd

		Ph D		C-34, Sanathnagar, Hyderabad – 500018
19.	Mr Uma Nandan Mishra	M Sc Pharm	Pharmaceutics	Executive Vice President Akums Drugs & Pharmaceuticals Ltd, 47, 48 Sector-6A, IIE, BHEL Ranipur, Haridwar (UK), 249403
20.	Prof. Gregory Peterson	B Pharm, PhD, MBA, FSHP, FACp, MPS, AACPA	Pharmacy Practice	Professor of Pharmacy & Head of School Unit of Medication Outcomes Research & Education School of Pharmacy Faculty of Health Sciences University of Tasmania; Australia
21.	Dr Timothy F Chen	B Pharm, DipHPharm, PhD, MPS, MSHP	Pharmacy Practice	Associate Professor Faculty of Pharmacy N511, Pharmacy & Bank Building A15, The University of Sydney NSW 2006 Australia
22.	Dr Amit S Patel	M Sc, PhD	Pharmacy Management	Managing Director Medical Marketing Economics, LLC, 1200 Jefferson Avenue, Suite 200, Oxford, MS 38677
23.	Dr Hieu T Tran	Post-Doctoral Fellowship Pharm. D	Pharmacy Practice	Founding Dean & Professor College of Pharmacy, Sullivan University, 2100 Gardiner Lane Sullivan University West Campus Louisville, K Y 40205
24.	Dr Gopalakrishna Pillai	M Sc PhD	Pharmaceutics	Professor, Department of Pharmaceutical Sciences Director, Office of Research and CENTERA, College of Pharmacy, Sullivan University, 2100 Gardiner Lane, Louisville, K Y 40205
25.	Dr Kotamballi N Chidambara Murthy	M Pharm PhD	Pharmacology	Sr. Research Scientist Triesta R & D, Health Care Global Hospital, #8, P.Kalinga Rao Road Sudhamanagara, Bangalore-560027
26.	Dr Amit Khanna	M Pharm PhD	Pharmaceutical Quality Assurance	India Unit Head, Global Regulatory Novartis Healthcare Pvt. Ltd. Building #6, Raheja Mindspace Hitec City, Madhapur/Hyderabad Rangareddy Distt.500081, A.P
27.	Dr Gopal C Kundu	M Sc (Chemistry) PhD	Pharmaceutical Biotechnology	Scientist-F National Center for Cell Science NCCS Complex Ganeshkhind, Pune-411 007 Maharashtra, India
28.	Mr Aurobindo Roy	M Sc (Biochem)	Pharmaceutical Biotechnology	Flat-10, A1-A-Sopan Baug Panchavati Area Pashan Road, Pune-411008
29.	Dr Gopal Muralidharan	PhD	Pharmacy Practice	Founder, CEO, Director Dakshah Biosciences Pvt Ltd,

				Bangalore
30.	Dr Ranjeny Thomas	MBBS FRACP MD	Pharmaceutics	Head, Autoimmunity Cluster, UQ Diamantina Institute Level 4 R-Wing, Building 1, Princess Alexandra Hospital, Brisbane, QLD, 4102, Australia
31.	Dr P P Sood	M Sc PhD	Pharmaceutic al Biotechnolog y	Editor-in-Chief, J.Cell Tissue Res., Elect J. Environ. Sci.,Elect.J.Pharmacol. Therapy, Emeritus Scientist (UGC), New Delhi
32.	Dr Harendra S Parekh	B Sc (Pharm) PhD	Pharmaceutics	Program Director, University of Queensland (UQ), School of Pharmacy, Pharmacy Australia Centre of Excellence, Brisbane, QLD 4072, Australia
33.	Dr Julius Anthony Vaz	M.D Dip. Pharm. Med	Pharmacology	Global Program Medical Director (Critical Care) Novartis Healthcare Pvt Ltd, Building No 6, Raheja Mindspace HITEC City, Madhapur, Hyderabad - 500 081
34.	Dr G N Singh	PhD MBA (UK)	Pharmaceutic al Quality Assurance	Secretary cum Scientific Director Indian Pharmacopocia Commission – Ghaziabad, Ministry of Health & Family Welfare, Govt of India
35.	Mr Kal Chatto	M.S. Pharmacy Administratio n	Pharmacy Management	Co-Founder Acunova Life Sciences Inc.2625 Townsgate Road, Suite 330, Westlake, CA 91302

13. Percentage of classes taken by temporary faculty – programme-wise information :

There are no temporary faculty at MCOPS

14. Programme-wise Student Teacher Ratio:

10:1

15. Number of academic support staff (technical) and administrative staff: sanctioned and filled : 64 (As on 31 Dec 2014)

Sl #	Designation	Total
1	Senior Executive	01
2	Junior Finance Executive	-
3	Senior Clerk	02
4	Clerk-II	02
5	Clerk-I	03

7	Senior Technician	03
8	Lab Technician-II	06
9	Lab Technician-I	04
10	Glass Blower	-
11	Senior General Duty Worker	-
12	General Duty Worker-II	04
13	General Duty Worker-I	15
14	Senior House Keeping Staff	02
15	House Keeping Staff-II	05
16	House Keeping Staff-I	17
Total		64

16. Research thrust areas recognized by funding agencies

Nanoparticulate drug delivery, Novel drug delivery systems, Metabolic disorders, Ecology and sustainable development, anti-TB drug discovery, Analytical and Bio-analytical method development, Pharmacoeconomics, IPR related issues and Cancer biology.

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies and grants received project-wise.

2012

Sl. No	Name of the Research Project	Name of the funding agency	Principal Investigator	Amount approved
1	Acute & Sub-acute toxicity studies of finished products	Cholayil Pvt Ltd Chennai	Dr C Mallikarjuna Rao Pharmacology	Rs.2.25 lakhs
2	_Preparation & Evaluation of nano particulate Sunscreens containing Plant based polyphenols	_Dept of Biotechnology New Delhi	Dr Srinivas Mutalik Dept. Of Pharmaceutics	Rs 27.17 lakhs
3	Design & development of nano particulate syatems for the treatmant of brain cancer by way of nasal route	Depa of BiotechnologyNew Delhi	Dr N UdupaMCOPS	Rs.3.52 lakhs
4	Intravenous test drug administation in rats	_Manipal Acunaova LtdManipal	Dr C Mallikarjun Rao Dept. Of Pharmacology	Rs 0.98 lakhs

5	Synthesis & Screening of newer analogues of triazoles an anti-infective agents	ICMR, New Delhi	Dr Gautham Shenoy Dept of Ph. Chemistry	Rs.3.52 lakhs
6	Study the anti-cancer effect of indigenous medicinal plants bearing sesquiterpene lactones in human epithelial cancer stem cells	Dept of Biotchnology New Delhi	Dr N Udupa MCOPS	Rs.13.39 lakhs
7	Investigation of the modulation of insulin signaling pathways by novel thiazolidin-4-one derivatives and their Implications in metabolic disorders.	Science & Engineering Research Board New Delhi	Mr Anoop Kishore Dept. Of Pharmacology	Rs 12.62 lakhs
8	Design of diphenyl ether derivetivestargeting mycobactirial enoyl acyl Carrer protien reductase	ICMR New Delhi	Dr Gautham Shenoy Ph Chemistry	Rs.23.88 Lakhs -
9	Effect of turmeric extracts on Inflammatory edema and biomarkers Of inflammations in animal models	Arjuna Natural Extracts Alwaye	Dr C Mallikarjuna Rao Pharmacology	Rs.4.42 lakhs
10	Bone Morrow Derived Stem cellconditioned Media Based Anti-Wrinkle Serum	Stemputics Pvt Ltd Manipal	Dr N Udupa MCOPS	Rs.1.80 lakhs
11	Comparitive Evaluation of the Micronized Formulation of Fusidic Acid	Share of Research With KMC , Manipal	Dr Prashanth Ph Quality Assurance	Rs.2.10 lakhs
12	Pharmaceutical & patient care Research in Metabolic Syndrome	DST New Delhi	Dr Unnikrishanan Dept of Pharmacy Practice	Rs.15.38 lakh
13	Muticentric study on pharmacogeticsof schizopfhrenia drug therapeutic	ICMR , New Delhi	Dr N Udupa Principal	Rs.7.92 lakh
14	Equipment cost for Research Activities	DST- FIST New Delhi	Dr K M Bhat Dept Of Ph Quality	Rs.62.50 lakh

15	GPAT scholarship	AICTE New delhi	Principal	Rs.117.12 lakh
16	WOSA	DST NewDelhi	Mrs B Meenashi Vanathi	2,210,000.00
17	INSPIRE Fellowship	DST NewDelhi	Dr Mallikarjuna Rao	529,600.00
18	Effect of turmeric extracts on inflammatory edema and biomarkers of inflammations in animal models	Arjuna Natural Extracts Alwaye	Dr Mallikarjuna Rao	442,000.00
19	Comparative Evaluation of the Micronized Formulation of Fusidic Acid	Share of Research with KMC , Manipal	Dr Prashanth	210,000.00
20	GPAT scholarship	AICTE New delhi	Principal	Rs. 140.16 lakhs
21	Pharmaceutical & patient care Research in Metabolic Syndrome	DST NewDelhi	Dr Unnikrishanan M K	Rs. 15.38 lakhs
22	Conference	CCRAS, New Delhi	Dr N Udupa	36,500.00
23	Travel Grant	(DBT),New Delhi	Sonal Sekhar M	50,000.00
24	Fellowship	FIP	Dr Sreedharan Nair	500 euros
25	Fellowship	FIP	Mr Prasanna Kumar K	500 euros

2013

SL No	Principal Investigator	Funding Agency	Nature of the Grant	Amount (Rs)
1	Dr N Udupa	ICMR , NewDelhi	Multicentric study on pharmacogenetics of schizophrenia drug therapeutics	594,628.00
2	Dr K M Bhat	DST- FIST, New Delhi	Equipment cost for Research Activities	6,250,000.00
3	MCOPS	AICTE	PG Scholarship	11,712,000.00
4	Dr Manthan Janodia	UGC	Post Doctoral Research	1,196,624.00
5	Dr N Udupa	DST, New Delhi	INSPIRE Fellowship	226,698.00
6	Dr N Udupa	ICMR	Seminar Grant	

				40,000.00
7	Dr N Udupa	DST, New Delhi	INSPIRE Fellowship	279,200.00
8	Dr Mallikarjuna Rao Chamallamudi	Chennai	Cholayil Pvt Ltd	383,000.00
9	Mr Prateek Jain	CSIR	Foreign Travel Grant	
10	Dr N Udupa	AICTE	Faculty Development Programme	620,000.00
11	Dr N Udupa	Stempeutics Research Pvt Ltd., Manipal	Marrow derived Stem Cell conditioned media based Anti-wrinkle serum	200,000.00
12	Dr N Udupa	AICTE	Entrepreneurship Development Cell	600,000.00
13	Dr B S Jayashree	AICTE	Research Promotion Scheme(RPS)	520,000.00
14	Dr Mallikarjuna Rao Chamallamudi	AICTE	Research Promotion Scheme(RPS)	1,150,000.00
15	Mr Om Prakash Ranjan	ICMR	Travel Grant	100,000.00
16	Dr Sreenivasa Reddy M	AICTE	Research Promotional Scheme(RPS)	1,586,667.00
17	Mr Om Prakash Ranjan	CSIR	Foreign Travel Grant	Full Air Fare
18	Mr Prateek Jain	CSIR	Foreign Travel Grant	Full Air Fare
19	Dr Sreenivasa Reddy M	AICTE	Preparation and Charectarization of water soluble Nanoparticles using supercritical fluid technology	1,700,000.00
20	Dr Sreenivasa Reddy M	AICTE	Seminar Grant	200,000.00
21	Dr Mallikarjuna Rao Chamallamudi	AICTE	Seminar Grant	200,000.00
22	Mr Lalit Kumar	AICTE		400,000.00
23	Dr Richard Lobo	SERB	OYS Scheme	1,850,000.00
24	Mr Anoop Kishore	SERB	OYS Scheme	200,000.00
25	Mr Prateek Jain	ICMR	Travel Grant	100,000.00

26	Dr Mallikarjuna Rao Chamallamudi	AICTE	MODROB	1,040,000.00
27	Mr Sonal Sekhar M	Centre for International Co-operation in Science(CICS), Chennai	CINSA-CSIR-BRNS/DAE-CICS Joint Travel Fellowship	30,000.00
28	Mr Rajesh R	ICAR	Travel Grant	1200 US Dollar
29	Mr Rajesh R	FIP	Fellowship	500 euro
30	Mr Rajesh V	FIP	Fellowship	500 euro
31	Mr Suhaj A	FIP	Fellowship	500 euro
32	Mr Sonal Sekhar M	FIP	Fellowship	500 euro

2014

Sl. No	Name of the Research Project	Name of the funding agency	Principal Investigator	Amount approved
1.	Screening of milk samples for the isolation of cholesterol oxidase producing lactobacillus species	VGST	Mr G Aditya Kiran	Rs 28, 000.00
2.	Acute & Chronic toxicity study of finished formulation CPL/IB0413	Cholalyil Private Limited	Dr Nanda Kumar	Rs 5,65,775.00
3.	Design preparation and evaluation of water soluble nanoparticles	Vision Group on Science & Technology	Mr Lalith Kumar	Rs 6,00,000.00
4.	Development & Evaluation of Gastro-retentive dosage forms of a plant extract	Arjuna Natural Extracts Ltd	Dr Srinivas Mutalik	Rs 2,08,000.00
5.	Development & Evaluation of Topical Formulations	Sequent Research Ltd Laboratory	Dr Srinivas Mutalik	Rs 3,22,000.00
6.	Pharmaceutical & Patient care Research in Metabolic Syndrome	DBT, New Delhi	Dr M K Unnikrishnan	Rs 26,85,000.00
7.	AICTE	AICTE, New Delhi	Dr Rekha Shenoy	Rs 50,000.00
8.	Effect of Turmeric extracts on inflammatory edema & biomarkers of inflammation in animal models	Arjuna Natural Extracts Ltd Kerala	Dr Anoop Kishore	Rs 3,78,609.00

9.	Formulation & Evaluation of lacidipine nano drug delivery systems	AICTE, New Delhi	Dr Shaila A Lewis	Rs 10,58,824.00
10.	Evaluating the effect of test formulations on cardiac output on isolated rat heart experiment	M/s Enovate Biolife Pvt Ltd, Mumbai	Dr Nandakumar	Rs 81,800.00
11.	Acute & Chronic Toxicity studies of CPL/IB0413, a finished product of Cholayil Pvt Ltd	Cholayil Pvt Ltd (Nitesh)	Dr C Mallikarjuna Rao	Rs 86,086.00
12.	Evaluation of Inhibitory activity of test formulations by COM CRYSTAL-BINDING ASSAY in Vero cell lines	M/s Enovate Biolife Pvt Ltd (Nanda Kumar)	Dr C Mallikarjuna Rao	Rs 51,402.00
13.	Development of topical formulations (analysis of 94 formulations)	M/s Sequent Research Ltd	Dr Srinivas Mutalik	Rs 3,80,000.00
14.	Pre-clinical evaluation of EB-ER 01/EB-ER-02/EB-ER-03 ergogenic anti-fatigue activity	M/s Enovate Biolife Pvt Ltd (Nanda Kumar)	Dr C Mallikarjuna Rao	-
15.	Acute toxicity studies of finished product of VLCC Healthcare Ltd	M/s VLCC Healthcare Ltd (Nitesh)	Dr C Mallikarjuna Rao	Rs 25,820.33
16.	Genetic vaccine delivery systems for targeting dendritic cells through surface modified multifunctional microparticles	DST, New Delhi	Mrs B Meenashi Vanathi	Rs 22,10,000.00
17.	Evaluation of cytotoxic & Hepatoprotective activity of test compounds obtained from Bharati College of Pharmacy, Mandya	Bharati College of Pharmacy, Mandya (Nanda Kumar)	Dr C Mallikarjuna Rao	Rs 21,124.00
18.	Evaluation of cytotoxicity activity of test compounds obtained from Mangalore Univ	Mangalore University, Mangalore (Nitesh)	Dr C Mallikarjuna Rao	Rs 7,000.00
19.	Evaluation of cytotoxicity and cell analysis of some	GRD (PG) IMT Pharmacy, Dehradun (Nitesh)	Dr C Mallikarjuna Rao	Rs 15,000.00

	herbal products of GRD (PG) IMT Pharmacy, Dehradun			
20.	Evaluation of Cytotoxicity analysis of some samples of DIT faculty of Pharmacy, Dehradun	DIT faculty of Pharmacy, Dehradun (Nitesh)	Dr C Mallikarjuna Rao	Rs 20,224.00
21.	Evaluation of test formulations EB-CJ-01/ EB-CJ-02 on Mineralization in human osteoblast cell lines	Enovate Biolife, Mumbai (Nanda Kumar)	Dr C Mallikarjuna Rao	Rs 1,32,585.00
22.	Development of topical formulations	Sequent Research Ltd Lab, Mangalore	Dr Srinivas Mutalik	Rs 2,31,462.00
23.	Continuous Process for economic production of effervescent preparations of aminoacids and other supplements Phase-1	BIRAC, New Delhi	Dr Srinivas Mutalik	Rs 2,10,000.00
24.	Development of dandrimeric sunscreens containing polyphenols	DST, New Delhi	Dr Srinivas Mutalik	Rs 19,22,000.00
25.	Evaluation of Heezon (E-MA-H) on cAMP & cGMP levels in corpus cavernous tissue	Enovate Biolife Pvt Ltd, Mumbai (Nanda Kumar)	Dr C Mallikarjuna Rao	Rs 2,87,192.00
26.	Qualitative analysis of drug formulation by LC-MS-MS	Getwel Pharmaceuticals Gurgaon	Dr Krishnamurthy M Bhat	Rs 36,708.00
27.	Development of topical formulations (including analysis of 26 formulation)	Sequent Research Ltd Laboratory, Mangalore	Dr Srinivas Mutalik	Rs 10,35,710.00
28.	Evaluation of aphrodisiac activity of Safed Musli extract U00SCB5040813, a finished product of Zodiac Pharma	Zodiac Pharma, Chittor Dist, AP (Nitesh)	Dr C Mallikarjuna Rao	Rs 59,832.00
29.	Acute Toxicity Studies of Finished Product of VLCC Health Care Ltd	VLCC Personal care Limited, Gurgaon	Dr C Mallikarjuna Rao	Rs 28,118.00
30.	Study the anti-cancer effects of indigenous medicinal plants bearing sesquiterpene lactones in human epithelial cancer stem	DBT, New Delhi	Dr N Udupa	Rs 28,17,000.00

	cells			
31.	Evaluation of Inhibitory activity of test formulations by COM CRYSTAL-BINDING ASSAY in vitro cell lines	M/s Ennovate Biolife Pvt Ltd (Nanda)	Dr C Mallikarjuna Rao	Rs 57,755.00
32.	Isolation & Characterization of phytoconstituents from macrosolin parasiticus (L.) Danser & evaluation of their in vitro cytotoxic activity on various cancer cell lines"	SERB, New Delhi	Dr Richard Lobo	Rs 18,50,000.00
33.	Investigation of the modulation of insulin signaling pathways by novel thiazolidin 4 one derivatives their implications in metabolic disorders	SERB, New Delhi	Dr Anoop Kishore	Rs 12,62,000.00
34.	Design, Synthesis and evaluation of diphenyl ether based pyridine derivatives as Antitubercular agents"	DBT, New Delhi	Ms Ruchi Verma	Rs 4,00,000.00
35.	Design, Synthesis and evaluation of diphenyl ether based pyridine derivatives as Anti-tubercular agents	DBT, New Delhi	Dr Usha Y Nayak	Rs 5,10,000.00
36.	Evaluation of Heezon (E-MA-H) on cAMP & cGMP levels in corpus cavernous tissue	Enovate Biolife Pvt Ltd, Mumbai	Dr C Mallikarjuna Rao	Rs 2,87,192.00
37.	Evaluating the effect of test formulations on cardiac output on isolated rat heart experiment	M/s Enovate Biolife Pvt Ltd, Mumbai	Dr K Nandakumar	Rs 81,800.00
38.	"Evaluation of Chलयil formations for anti-aging, anti stress, hematinic and immunomodulatory activities"	Chलयil Pvt Ltd	Dr C Mallikarjuna Rao	Rs 5,38,148.00
39.	Evaluation of cytotoxicity studies of test compounds	Yenapoya Medical College, Mangalore	Dr C Mallikarjuna Rao	Rs 1,700.00

	obtained from mangalore			
40.	Evaluation of cytotoxicity studies of test compounds obtained from mangalore	Mangalore University	Dr C Mallikarjuna Rao	Rs 2,700.00
41.	Evaluation of cytotoxicity studies of test compounds obtained from mangalor	Anant V Bhamdarkar, Goa College of Pharmacy, Goa	Dr C Mallikarjuna Rao	Rs 5,055.00
42.	Research Project entitled: "Development of liposomal formulations containing inhibitory drugs"	University of Queensland, Australia	Dr Sreenivas Mutalik	AUD 18840
43.	Crusade against neoplasia and challenges in targeting tumor-specific nuclear machinery during January 21 – 23, 2014	AICTE, New Delhi Seminar/ Workshop Grant	Dr C Mallikarjuna Rao	Rs 1,00,000.00
44.	Nanomedicines: Risk and Benefit Ratio during January 24-25, 2014	AICTE, New Delhi Seminar/ Workshop Grant	Dr Sreenivasa Reddy	Rs 1,99,726.00
45.	Quality Improvement Programme	AICTE, New Delhi Seminar/ Workshop Grant	Principal	Rs 1,03,16,291.00
46.	Travel Grant	Science & Engineering Research Board SERB, New Delhi	Mr Syed Sajjd Hussen	Rs 88,819.00
47.	Travel grant	Government of India, Ministry of Science & Technology, Department of Biotechnology, New Delhi	Mr Prateek Jain	Rs 44,400.00
48.	Travel Grant	DBT-CTEP Management Cell, The Energy and Resources Institute, New Delhi	Ms Pallavi Krishna Shetty	Rs 44,288.00
49.	Travel Grant	Science & Engineering Research Board SERB, New Delhi	Mr Neetinkumar D Reddy	Rs 24,602.00
50.	Travel Grant	Science & Engineering Research Board, New Delhi (SERB)	Jagani Hitesh Vitthal	Rs 48,899.00
51.	Travel Grant	Council of Scientific & Industrial Research,	Mr Prateek Jain	Rs 37,829.00

		New Delhi (CSIR)		
52.	Air fare, Visa fare and registration fee to attend International conference	ICMR - Impact of Patient Education on health-related quality of life of Diabetic Foot Ulcer Patients-A Randomised controlled Study in the 5 th FIP-PSWC held during April 13-16, 2014 in Melbourne, Australia	Mr Sonal Sekhar	Rs 1,00,000.00
53.	Antimicrobial Stewardship Observership program at Tufts Medical Center , Boston ,USA	FIP Pharmabridge	Mr John Preshanth KP	Rs. 38,000.00
54.	UGC, New Delhi	300 Raman Post Doctoral Fellowship	Dr Manthan D Janodia	Rs 23,03,264.00
55.	Government of India Ministry of Science & Technology, DST	Fellowship for students pursuing full-time doctoral (Phd) Program	Ms Shoja M H	Rs 7,87,698.00
56.	UGC, New Delhi	JRF in Science, Humanities & Social Sciences	Mr Asim Priyendu	Rs 2,07,000.00
57.	DST, New Delhi	DST /Inspire Fellowship	Mr Prateek Jain	Rs 2,57,600.00
58.	DST, New Delhi	DST / Inspire Fellowship	Mr Devkar Raviraj Anand	Rs 2,57,600.00
59.	DST, New Delhi	DST/Inspire Fellowship	Ms Managuli Renuka Suresh	Rs 2,57,600.00
60.	DST, New Delhi	DST/Inspire Fellowship	Ms Atuya M	Rs 2,84,000.00

18. Inter-institutional collaborative projects and grants received

- a) **All India collaboration:** Research collaboration/MOU with a) Dr. Annapoorni Rangarajan, Department of Molecular Reproduction, Development and Genetics, Indian Institute of Science, Bangalore-560012. b) Dr Indira Priyadarshini of BARC, Mumbai.
- b) **International:** MMDRC/European studies project on ecology; Bristol Labs, UK project; Queensland University, Australia; University of Wyoming, USA. Molecular Neurotherapy and Imaging Laboratory at Massachusetts General Hospital and affiliated to Harvard Medical School, Boston, MA, USA (“MNIL”) represented by its Director Dr. Khalid Shah.

The general purpose of this MOU is to facilitate academic and research cooperation between the parties hereunder based upon the principles of mutual benefit, joint

educational and research activities, Exchange of visiting scholars and faculty for the purpose of conducting research. Extend invitations for attending scholarly and technical meetings as well as national and international conferences. (refereQ.No 19 for details of grants received)

*** between/among different departments /schools of the university and departments**

Departments within MCOPS share resources freely. Research scholars admitted in some departments are often allotted labs in other departments for carrying out benchwork. Resources such as distilled water, facilities like spectroscopy, tissue culture experiments etc. are routinely shared between departments.

*** collaboration with national/international institutes / industries.**

Several reputed national and international institutions are collaborating with MCOPS. A cursory glance at the authors' affiliation in the various publications and patents would illustrate this point. The following national and international institutions have been engaged in collaborative research with MCOPS

1. Bhabha Atomic Research Centre, Mumbai
2. Indian Institute of Science, Bangalore
3. University of Hyderabad
4. Centre for Cellular and Molecular Biology, Hyderabad
5. Wyoming State University, Laramie, USA
6. University of Southern Queensland, Australia
7. University of Brighton, UK
8. Napier University, UK
9. Massachusetts General Hospital and affiliated to Harvard Medical School, Boston, MA, USA ("MNIL")

Further, the following industries are affiliated to Manipal University in various joint research programmes

1. Ranbaxy Labs
2. US Vitamins
3. Bristol Labs, UK

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, etc.; total grants received. : 2013-14

SI No	Name of the funding agency	Name of the Research Project	Amount(RS.)
1.	Vision Group on Science & Technology	Screening of milk samples for the isolation of cholesterol oxidase producing lactobacillus species	28, 000.00
2.	Vision Group on Science & Technology	Design preparation and evaluation of water soluble nanoparticles	6,00,000.00
3.	DBT, New Delhi	Pharmaceutical & Patient care Research in Metabolic Syndrome	26,85,000.00
4.	AICTE, New Delhi	AICTE	50,000.00
5.	AICTE, New Delhi	Formulation & Evaluation of lacidipine nano drug delivery systems	10,58,824.00
6.	DST, New Delhi	Genetic vaccine delivery systems for targeting dendritic cells through surface modified multifunctional microparticles	22,10,000.00
7.	BIRAC, New Delhi	Continuous Process for economic production of effervescent preparations of aminoacids and other supplements Phase-1	2,10,000.00
8.	DST, New Delhi	Development of dandrimeric sunscreens containing polyphenols	19,22,000.00
9.	DBT, New Delhi	Study the anti-cancer effects of indigenous medicinal plants bearing sesquiterpene lactones in human epithelial cancer stem cells	28,17,000.00
10.	DBT, New Delhi	Design, Synthesis and evaluation of diphenyl ether based pyridine derivatives as Antitubercular agents"	4,00,000.00
11.	DBT, New Delhi	Design, Synthesis and evaluation of diphenyl ether based pyridine derivatives as Anti-tubercular agents	5,10,000.00
12.	Enovate Biolife Pvt Ltd, Mumbai	Evaluation of Heezon (E-MA-H) on cAMP & cGMP levels in corpus cavernous tissue	2,87,192.00
13.	M/s Enovate Biolife Pvt Ltd, Mumbai	Evaluating the effect of test formulations on cardiac output on isolated rat heart experiment	81,800.00
14.	AICTE, New Delhi Seminar/ Workshop Grant	Crusade against neoplasia and challenges in targeting tumor-specific nuclear machinery during January 21 – 23, 2014	1,00,000.00
15.	AICTE, New Delhi Seminar/ Workshop Grant	Nanomedicines: Risk and Benefit Ratio during January 24-25, 2014	1,99,726.00

16.	AICTE, New Delhi Seminar/ Workshop Grant	Quality Improvement Programme	1,03,16,291.00
17.	Science & Engineering Research Board SERB, New Delhi	Travel Grant	88,819.00
18.	Government of India, Ministry of Science & Technology, Department of Biotechnology, New Delhi	Travel grant	44,400.00
19.	DBT-CTEP Management Cell, The Energy and Resources Institute, New Delhi	Travel Grant	44,288.00
20.	Science & Engineering Research Board SERB, New Delhi	Travel Grant	24,602.00
21.	Science & Engineering Research Board, New Delhi (SERB)	Travel Grant	48,899.00
22.	Council of Scientific & Industrial Research, New Delhi (CSIR)	Travel Grant	37,829.00
23.	ICMR - Impact of Patient Education on health-related quality of life of Diabetic Foot Ulcer Patients-A Randomised controlled Study in the 5 th FIP-PSWC held during April 13-16, 2014 in Melbourne, Australia	Air fare, Visa fare and registration fee to attend International conference	1,00,000.00
24.	FIP Pharmabridge	Antimicrobial Stewardship Observership program at Tufts Medical Center , Boston ,USA	38,000.00
25.	300 Raman Post Doctoral Fellowship	UGC, New Delhi	23,03,264.00
26.	Fellowship for students pursuing full-time doctoral (Phd) Program	Government of India Ministry of Science & Technology, DST	7,87,698.00
27.	JRF in Science, Humanities & Social Sciences	UGC, New Delhi	2,07,000.00
28.	DST /Inspire Fellowship	DST, New Delhi	2,57,600.00
29.	DST / Inspire Fellowship	DST, New Delhi	2,57,600.00
30.	DST/Inspire Fellowship	DST, New Delhi	2,57,600.00
31.	DST/Inspire Fellowship	DST, New Delhi	2,84,000.00

2012-13

Sl No	Name of the funding agency	Name of the Research Project	Amount (RS.)
1.	ICMR , New Delhi	Muticentric study on pharmacogetics IPC Annual Commemoration Symposium	Rs.7.92 lakh
2.	DST- FIST, New Delhi	Development of new chemical entities for metabolic disorders and tropical diseases – funded by DST- FIST, New Delh	Rs.62.50 lakh
3	Cholayil Pvt Ltd, Chennai	Acute and Chronic toxicity studies of CPL/ IB0413, a finished product of Cholayil Pvt Ltd	Rs.3.83 lakh
4	Dept of Biotchnology, New Delhi	Study the anti-cancer effect of indigenous medicinal plants bearing sesquiterpene lactones in human epithelial cancer stem cells	Rs. 13.39 lakhs
5	Stempeutics Research Pvt Ltd, Manipal	Marrow derived Stem Cell conditioned media based Anti-wrinkle serum	Rs 2.00 lakhs
6	AICTE, New Delhi	Entrepreneurship Development Cell	Rs.6.00 lakhs
7	AICTE, New Delhi	Preparation and Charectarization of water soluble Nanoparticles using supercritical fluid technology	Rs 17.00 lakhs
8	AICTE, New Delhi	Evaluation of Glycosmis Pentapylla Dc for Histone Deacetylase Inhibition	Rs.11.50 lakhs
9	AICTE, New Delhi	Design and Synthesis of Novel Flavopiridol Analogues as useful Anticer Agents	Rs 5.20 lakhs
10	SERB, New Delhi	Isolation & Characterization of Phytoconstituent from Macrosolin paraciticus Danser and evaluation of their in vitro cytotoxicactivity on various cancer cell lines	Rs.18.50 Lakhs
11	Cholayil Pvt Ltd	Aute and Chronic Toxicity Study of CPL/IBO413	Rs.1.07 lakhs
12	Enovate Pvt Ltd	Evaluation of test formulations EB-CJ-01/02 on mineralization/ calcium deposition in human osteoblast cell lines	Rs.1.50 lakhs
13	AICTE, New Delhi	Development & Evaluation of Liposomal Carrier Systems of Hepato- protective Agents to Target the Liver	Rs.13.00 lakhs
14	Enovate Biolife Ltd, Mumbai	Preclinical Evaluation of E-ER-01/02/03 for Anxiolytic and antifatigue activity Anticer Agents	Rs .0.36 lakhs
15	SERB, New Delhi	Development of novel quercetin analogues intended for selective HDAC-8 inhibition as beneficiel anti cancer agents	Rs.22.18 lakhs
16	SERB, New Delhi	Novel non ulcerogenic small molecules chemical synthesis and biological efficacy in chronic inflammatory disorders	Rs .18.80 lakhs
17	ICMR, New Delhi	Chloroquine(CQ)	Rs.1.50 lakhs
18	AICTE, New Delhi	Career Award for Young Teachers	Rs.1.50 lakhs

19	Enovate Biolife Pvt. Ltd	Evaluation of test formulations E-B-CJ-01/ EB-CJ-02 on mineralization in human osteoblast cell lines & Evaluation of test formulations on mineralization/ calcium deposition in human osteoblast cell lines	262,929.00
20	Government of India, Ministry of Science & Technology, Department of Biotechnology	Preparation and evaluation of nano particulate sunscreens containing plant based polyphenols	2,417,000.00
21	Duphat-2013, Dubai (March 2013)- Travel Grant	DBT (Not Aailed) & Manipal University	Rs 25,000/-
22	Duphat-2013, Dubai (March 2013) - Travel Grant	DST and DBT (Not Aailed)	Rs 23,229/-
23	AAPS National Biotechnology conference, San Diego, California, USA (May 2013) - Travel Grant	DST, DBT, CSIR (Not Aailed)	
24	73 rd FIP World Congress, Dublin, Ireland (September 2013) - Travel Grant	DBT and CSIR (Not Aailed)	Rs 1,28,000/-
25	3 rd World Conference on Cancer Science and Therapy, Double Tree by Hilton, San Francisco, California, USA (October 2013) - Travel Grant	Dr N Udupa Travel Grant	Rs 3,000/-
26	AAPS Annual Meeting and Exposition, San Antonio, Texas, USA (November 2013) - Travel Grant	Indian Council of Medical Research (ICMR)	Rs 1,00,000/-
27	Nanotoday2013, Singapore (December 2013) - Travel Grant	Manipal University	Rs 25,000/-
28	Nanotoday2013, Singapore (December 2013) - Travel Grant	DST, New Delhi	Rs 49,000/-
29	Screening of milk samples for isolation of cholesterol oxidase producing tacobacillus species- Travel Grant	VGST - Spice	Rs 30,000/-
30	Fellowship Grant : Dr Manthan D Janodia, Department of Pharmacy Management has received a fellowship grant of Rs 11 lakhs to visit	USA under 300 Roman Fellows for Post Doctoral Studies in USA under Indo-US 21st Century Knowledge initiative for a period of one year from August 2013.	Rs. 11.00 lakhs

2011-12

Sl No	Name of the funding agency	Name of the Research Project	Amount(RS.)
1	DST,DBT, New Delhi	Design & Development Of Nanoparticulate System For The Treatment Of Brain Cancer By Way Nasal Route	777,000.00
2	DST, GOVT. OF INDIA	Development Of Novel Drug Carriers For Effective Treatment Of Cancer By Way Of Targetting	1,000,000.00
3	ICMR, New Delhi	Design Of Diphenyl Ether Derivatives Targeting Mycobacterial Enoyl Acyl Carrier Protien Reductase	392,854.00
4	ICMR, New Delhi	Design Of Diphenyl Ether Derivatives Targeting Mycobacterial Enoyl Acyl Carrier Protien Reductase (2nd Yr.)	793,060.00
5	DST, DBT, New Delhi	Preparation And Evaluation Of Nano Particulate Sunscreens Containing Plant Based Polyphenols	1,758,000.00
6	DST, New Delhi (Indo-Queensland)	Pharmaceutical & Patient Care Research In Metabolic Syndrome	1,538,000.00
7	ICMR, New Delhi	Multicentric Study On Pharmacogenetics Of Schizophrenia Drug Therapeutic	396,000.00
8	AICTE , New Delhi	Development And Evaluation Of Herbal Dietary Supplement For The Management Of Diabetes Mellitus	517,500.00
9	CHOLAYIL PVT LTD	Acute And Sub Acute Toxicity Of Finished Formulation From Cholayil Pvt Ltd	61,910.00
10	AICTE , PG Scholarship	GATE	11,232,000.00
11	RPS, AICTE	Dr. N Gopalan Kutty	1,375,000.00
12	AICTE, MODROBS	Dr. N Udupa	880,000.00
13	AICTE, RPS	Dr Saleemulla Khan	517,500.00
14	DST, INSPIRE (JRF-P)	Ms Geetha Mathew	
15	DST, INSPIRE (JRF-P)	Ms Atulya M	

2010-2011

SL NO	Name of funding agency	Name of the grant	Co-ordinator	Amount sanctioned (Rs)
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1	DST - Dept. of Biotechnology	Design & Development Of Nanoparticulate System For The Treatment Of Brain Cancer By Way Nasal Route	Dr N Udupa Biotechnology Dept.	852,000.00
2	DST, Govt. of India	Development Of Novel Drug Carriers For Effective Treatment Of Cancer By Way Of Targetting	Dr N Udupa Pharmaceutics	1,862,000.00
3	Indus Biotech PVT Ltd, Pune	Evaluation of Ind 02 For Its Protective Effect Against Carboplatin Induced	Dr C Mallikarjun Rao, Pharmacology Dept	250,688.50
4	DST, Govt. of India	Study The Anti Cancer Effects Of Indigenous Medicinal Plants Bearing Sesquiterpene Lactones In Human Epithelial Cancer Stem Cells	Dr. N Udupa	2,617,000.00
5	AICTE, New Delhi	Angularly Fused Heterocycles: Molecular Modeling & Screening Dihydrofolate Reductase (DHFR) And Thymidylate Synthase (TS)Inhiditator For Potential Tumor Targeting	S D Vachala Pharma Chemistry	850,000.00
6	AICTE, New Delhi	Role Of Phytochemicals In Oral Anticancer Therapy - A Perspective From Effective Drug Deliver	Dr Shriram Patak, Quality Assurance	900,000.00
7	AICTE, New Delhi	Staff Development Programme	Dr. N Udupa	200000
8	AICTE, New Delhi	Travel Grant	Dr Manthan D Janodia	60260
9	AICTE, New Delhi	MODROBS	Dr. N Udupa	1500000
10	AICTE, New Delhi	RPS	Dr Shriram M Pathak	900000
11	AICTE, New Delhi	RPS	Ms S D Vachala	850000
12	AICTE, New Delhi	MODROBS	Dr B S Jayashree	1500000

20. Research facility / centre with : state recognition, national recognition, international recognition : Nil

21. Special research laboratories sponsored by / created by industry or corporate bodies

- DST-FIST Lab: The instrument available in the DST-FIST lab:-, LCMS, HPLC, Autoanalyser, Inverted microscope, UV spectrophotometer, PCR, Digital Polygraph Extruder and spheroidizer, Microtome, Lyophiliser Microfluidizer,
- MCOPS has been awarded aRs 1.3 Crore DST research grant in collaboration with the US Vitamins Ltd, Mumbai for the development of biodegradable sustained release formulations.
- AICTE-NCP grant for research laboratory.

22. Research output in last three years

		2010	2011	2012	2013	2014
Completed funded research projects		06	08	22	24	19
Completed non-funded research projects		108	103	105	113	123
Completed PhD research projects		13	9	11	11	14
Completed PG research projects		108	103	105	113	123
Completed UG research projects		NA	NA	NA	29	24
Publications	International	56	56	43	104	72
	National	84	61	69	46	31
Books		0	1	2	1	3
Chapters in books		3	11	1	2	3
Conference presentations	International	22	86	60	71	52
	National	41	38	20	49	53

Publications

* **Number of papers published in peer reviewed journals (national / international)**

#	Year	No. of Papers published
1	2014	103
2	2013	150
3	2012	112
4	2011	117
5	2010	140

Publications in 2014 (Total Publications 103)

1. M Sonal Sekhar, MK Unnikrishnan, K Vijayanarayana, Gabriel Sunil Rodrigues, Chiranjay Mukhopadhyay.

- Topical application/formulation of probiotics: Will it be a novel treatment approach for diabetic foot ulcer?
- Medical Hypotheses. 2014, 82, 86-88.
2. Jayesh Mudgal, Vasantharaju S Gowdra, Geetha Mathew, Pawan G Nayak, Nitin D Reddy, Neelesh Namdeo, Ravilla R Kumar, Chaitanya Kantamaneni, Mallikarjuna R Chamallamudi, Gopalan K Nampurath.
Remedial effects of novel 2,3 - disubstituted thiazolidin - 4-ones in chemical mediated inflammation.
Chemico-Biological Interactions. 2014, 210, 34-42.
 3. Girish Pai K and M Sreenivasa Reddy.
Formulation and Evaluation of Extended Release Ocular Inserts prepared from Synthetic and Natural Biodegradable - Biocompatible Polymers.
Research Journal of Pharmaceutical and Technology; January 2014, 7(1), 48 - 51.
 4. Phani Krishna Kondamudi, Hemalatha Kovelamudi, Geetha Mathew, Pawan G Nayak, Mallikarjuna C Rao and Rekha R Shenoy.
Investigation of Sesamol on Myeloperoxidase and Colon Morphology in Acetic Acid - Induced Inflammatory Bowel Disorder in Albino Rats.
The Scientific World Journal, Jan 2014, 1-7.
 5. Muddukrishna BS, Krishnamurthy Bhat and Gautham G Shenoy.
Preparation and Solid State Characterization of Paclitaxel Cocrystals.
Research Journal of Pharmaceutics & Technology, Jan 2014, 7(1); 64-69.
 6. Raghu Jetti, Raghuveer CV, Mallikarjuna Rao C, Somayaji SN, Prakash Babu B.
Neuroprotective Effect of Ascorbic acid and Ginkgo biloba against Fluoride caused Neurotoxicity
.IOSR Journal of Environmental Sciences, Toxicology and Food Technology, Feb 2014, Vol: 8(1); 30-36.
 7. M Atulya, A Jesil Mathew, J Venkata Rao, C Mallikarjuna Rao.
Influence of milk components in establishing biofilm mediated bacterial mastitis infections in cattle: A fractional factorial approach.
Research in Veterinary Science. 2014, 96(1), 25-27.
 8. Vamshi Krishna T, M Sreenivasa Reddy.
Formulation and Evaluation Of enteric coated pellets of Rifampicin and Isoniazid with improved Rifampicin Stability.
Asian Journal of Pharmaceutical and Clinical Research. 2014; 7(1), 154-156.
 9. Kranti P Musmade, M Trilok, Swapnil J Dengale, Krishnamurthy Bhat, M.S Reddy, Prashant B Musmade and N Udupa.

- Development and Validation of Liquid Chromatographic Method for Estimation of Naringin in Nanoformulation.
Journal of Pharmaceutics, 2014.
10. Prashanth Kumawat, Jagadish PC, Muddukrishna & Krishnamurthy Bhat.
Development and Validation of Stability Indicating HPLC Method for Clotrimazole Lozenges Formulation. International
Journal of Pharmacy and Pharmaceutical Sciences. 2014, 6(1), 126-129.
11. Verma R, Das M, Mohamed Saleem TS, Kumar L, Gauthaman K.
Protective effect of catechin from black tea in an in-vitro model of myocardial ischemic reperfusion injury. 1-6.
Journal of Pharmacy Research, 2014, 8(1),
12. Vamshi Krishna T, M Sreenivasa Reddy.
Formulation and Evaluation of Multiparticulate systems of Rifampicin and Isoniazid with improved rifampicin stability. International
Journal of Pharmacy and Pharmaceutical Sciences. 2014; 6(2), 386-388.
13. Maulick Chopra, Usha Y Nayak, Aravind Kumar Gurram, M Sreenivasa Reddy and KB Koteswara
Formulation, Characterization and In Vivo Evaluation of Self Nanoemulsifying Drug Delivery System for Oral Delivery of Valsartan.
Current Nanosciences. 2014, 10(2), 263-270.14.
14. Pramod B Kumar, Suvarna G Kini and Muhammad Mubeen.
Synthesis, Antimicrobial and Docking studies of novel benzotriazole Derivatives.
International Journal of Pharma and Bio Sciences, April 2014, 5(2), 35-42.
15. Daniel Dhayabaran, Ebinezar Jeyaseeli Florance, Krishnadas Nandakumar, Alagarsamy Shanmugarathinam. Ayarivan Puratchikody
Anticonvulsant activity of fraction isolated from ethanolic extract of heartwood of Cedrus deodara.
Journal of Natural Medicine (2014) 68:310–315.
16. Vamshi Krishna T, M Sreenivasa Reddy.
Isocratic High Performance Liquid Chromatographic (HPLC) Determination of Rifampicin in Presence of Isoniazid. Research
Journal of Pharmacy and Technology, 7(3), March 2014, 328-331.
17. Vamshi Krishna T, Lalit Kumar, M Sreenivasa Reddy, Muddukrishna B S, and Girish Pai K.
Process Deviations in Pharmaceutical Industry: Various Types, Handling Procedure and Systems. Research
Journal of Pharmacy Technology, March 2014, 7(3), 340-342.

18. Jayashree BS, KawadeShishir, Venkatechalam H.
Anticancer Evaluation of some of the novel Iminoflavones.
Research Journal of Chemistry and Environment. January 2014, Vol 18(1), 32-40.
19. Prachi Sharma, MK Unnikrishnan and Abhishek Sharma.
Sexual violence in India: addressing gaps between policy and implementation.
Health Policy and Planning, 2014, 1-4.
20. Geetha Mathew, Magith Thambi, MK Unnikrishnan.
A multimodal Darwinian strategy for alleviating the atherosclerosis pandemic. Medical Hypotheses, 2014, 82(2); 159-162.
21. Bhagat Singh, Ganesh V Sangle, Jeya Murugan, Rinku Umrani, Subhasis Roy, Onkar Kulkarni, Arvind Semwal, MK Unnikrishnan and Mukul Jain.
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17. Manjeshwar Shrinath Baliga, Ponemone Venkatesh, Shantala Bellary, Manjeshwar Poonam Baliga-Rao, Karkala Sreedhara Ranganath Pai, Ravindranath Shanbhag,

Meda Nagaraja Setty, Herbal Medicine: A Cancer Chemopreventive and Therapeutic Perspective, (Chapter 32. Ultraviolet Radiation-induced Skin Damage and Carcinogenesis: Preclinical Efficacy of Camellia sinensis (Tea), Ed: Rajesh Arora. Jaypee Brothers Medical Publishers (P) Ltd., 2010, Page No 486-512. ISBN: 978-81-8448-841-

18. Manjeshwar Shrinath Baliga, Harshith P Bhat, Denzil Corda Johnson, Ankit Paresh Mehta, Shaun Mathew Kandathil Karkala Sreedhara Ranganath Pai, Chamalamudi Mallikarjuna Rao, Rajesh Arora., Herbal Medicine: A Cancer Chemopreventive and Therapeutic Perspective (Chapter 38. Ayurvedic Rasayana Drug Triphala as a Novel Anticancer, Chemopreventive and Radioprotective Agent: Mechanistic Insights)Ed: Rajesh Arora. Jaypee Brothers Medical Publishers (P) Ltd, 2010, Page No 599-615. ISBN: 978-81-8448-841-8.

- **Edited Books:**

1. Nanotechnology in health Care,(Chapter 31 Nanotechnology Application in Cancer), Dr. P.D. Gupta and Dr. N.Udupa, S.P.Publications, Jaipur, 2011, ,ISBN: 978-93-80018-02-1.

- **Books with ISBN with details of publishers:**

1. Dr N Udupa & Dr M Sreenivasa Reddy, (2014) An Insight into Industrial Pharmacy, Prism Books Pvt. Ltd., ISBN: 978-81-7286-740-9.
2. Dr N Udupa & Dr Srinivas Mutalik, (2014) Recent Trends in Novel Drug Delivery, Prism Books Pvt. Ltd.,ISBN: 978-81-7286-742-3.
3. Dr N Udupa & Dr A N Nagappa, (2014) Fundamentals of Pharmaceutical Care, Prism Books Pvt. Ltd.,ISBN: 978-81-7286-741-6.
4. N Udupa 'Exploring Nanotechnology in Healthcare, (2013) Manipal University Press, ISBN 978-93-82460-11-4
5. Concepts in Chronopharmacology, Edited by Dr N Udupa and Dr P D Gupta, Shyam Prakashan Publishers, Jaipur, India (ISBN: 978-93-80018096)
6. Nanotechnology in Healthcare, Edited by Dr P D Gupta and Dr N Udupa, Shyam Prakashan Publishers, Jaipur, India. ISBN: 978-93-80018-02-1.
7. Pharmaceuticals, Cosmeceuticals and Nutraceuticals – An overview of Regulations, Edited by Dr N Udupa and Harvinder Popli, ISBN 978-81-88739-83-7, 1st Edition December 2010, Published by Career Publications, Nashik, Maharashtra

- **Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)** : 1046 Publications (Scopus)

- **Impact Factor – range / average** : range: 1 to 7

- **h-index** : 44

23. Details of patents and income generated

Patents

1. An improved process for the preparation of flavonoids from ocimum sanctum (Krishna Tulsi) (Pathirisseri Umadevi, Adikesavan Ganasoundari and Keloth Kaitheri Srinivasan - Document No. 184300)
2. “Transdermal drug delivery device containing oral antidiabetic drug” (Product patent) document No. 207023)
3. “Biodegradable polymeric composition for the treatment of diabetes mellitus (Product patent) (patent No. 214342)”
4. “Mucoadhesive Buccal Composition containing nicotine useful for smoking cessation and a process for its preparation” (221428 23-06-2008)
5. “Bioadhesive drug delivery system containing parasympathomimetic agent for the treatment of xerostomia” (Patent No. 222658 dated 20-08-2008)
6. Pharmaceutical composition useful for the treatment of diseases caused by viruses and a process for its preparation(Patent No. 222692 dated 23-06-2008)”
7. “Biodegradable polymeric composition useful in the treatment of periodontitis” (Patent No. 223664 dated 19/09/2008)
8. “Biodegradable polymeric monolithic film useful for the restoration of the periodontium(Patent No. 223665 dated 19/09/2008)”.

Patents Filed

1. Herbal Composition for improving anticancer activity, anti-inflammatory activity and protecting body from oxidative damage and the method of preparing the same.
2. Anti-inflammatory and analgesic activities of a non-ulcerogenic Novel synthetic molecule: 2-(4, 6-dihydroxy-2-mercaptophrindin-5-yl)-2-hydroxy-1H-1dene-1,3 (2H)-Dione (DMPI) (2300/CHE/2010 dated 11-08-2010).
3. Antiinflammatory and analgesic activities of a non-ulcerogenic novel synthetic molecule: 2(4, 6-dihydroxy-2-mercaptophrinidin-5-yl) -2-hydroxy-1H-1dene-1,3(2H)-dione (DMPI).
4. Timed-release compression-coated tablet composition for chronotherapy of hypertension.
5. “A Noveltargeted Drug Delivery Sytem for Revastigmine in Liposomes and Nano Particles Forms For The Treatment Of Alzheimer’s Disease”(Patent Application # 2541/DEL/2011 dated 5.9.2011)

6. A Novel Drug Delivery System for the effective treatment of hypertension.
7. Nanocrystals of naringin and its preparation (Appl No 1818/CHE/2014)

Income generated: Nil

24. Areas of consultancy and income generated

- Formulation development
- Analytical testing services
- Preclinical animal testing
- Community Pharmacy
- Poison information center
- Drug information center

Income generated: 2 lacs/ year (Appox)

25. Faculty selected nationally/ internationally to visit other laboratories in India and abroad

M K Unnikrishnan was awarded the JNCASR Visiting Fellowship for spending a three month term at Indian Institute of Science, Bangalore.

26. Faculty serving in

a) National committees:

- a) Dr. N Udupa is the member of National committee like Indian Pharmacopoeia Commission Ghaziabad, Ministry of Health & Family Welfare, Govt of India
- b) Dr. N Udupa: Executive Member, sub-committee constituted by PCI, New Delhi for the Pharm D programme
- c) Dr. N Udupa, Dr. C. Mallikarjuna Rao, Dr. J.V. Rao, Dr. Anantha Nagappa Naik Dr. Jayashree B.S. Dr. C.S. Shreedhara Dr. M.K Unnikrishnan and Dr. Chandrashekar K.S are the Inspectors of Pharmacy council of India.

b) International committees: Nil

c) Editorial Boards:

Many research papers have been published as a result of research facility at MCOPS. As a result many of our faculty members are recognized as editorial member of various research journals and reviewer for many national and international journals.

#	Name	Editorial board member	Reviewer
1	Dr N Udupa	Controlled Release Society, India Indian Journal Of Pharmaceutical Sciences	International Journal of Pharmaceutics, Drug Development and Industrial

#	Name	Editorial board member	Reviewer
		Indian Drugs Pharmag Indian Journal of Pharmaceutical Education and Research Pakistan Journal of Pharmaceutical Sciences Pharma Today. Pharma Link Pharma New Letter Current Trends in Education. Drug Lines Indian Journal of Hospital Pharmacy International Journal of Community Pharmacy	Pharmacy, Drug Delivery, Pharmaceutical Development and Technology, Journal of Microencapsulation, AAPS PharmSciTech, Journal of Ethnopharmacology, Journal of Pharmaceutical Sciences, Journal of Pharmacy and Pharmacology, European Journal of Pharmaceutics and Biopharmaceutics, Expert Opinions in Drug Delivery, Indian Journal of Pharmaceutical Sciences
2	Dr Srinivas Mutalik	Drug Invention Today (Executive editor) Journal of Pharmaceutics (Editorial board member) ISRN Pharmaceutics (Editorial board member) Journal of Chronotherapy and Drug Delivery (Editorial board member) The World Scientific Journal (Editorial board member)	Journal of Pharmaceutical Sciences Journal of Controlled Release, Pharmaceutical Research, International Journal of Pharmaceutics, Journal of Microencapsulation, Current Drug Delivery, AAPS PharmSciTech, Carbohydrate Polymers
3	Dr C Mallikarjuna Rao	Indian journal of Pharmaceutical Education and Research, Indian Journal of Pharmacology, International Journal of Community Pharmacy	Pharmaceutical Biology Indian Journal of Experimental Biology Indian Journal of Pharmacology
4	Dr Sreedhara Ranganath Pai K	International Journal of Community Pharmacy	Pharmaceutical Biology Indian Journal of Experimental Biology Indian Journal of Pharmacology

#	Name	Editorial board member	Reviewer
			Chinese journal of Integrated Medicine, Indian journal of Pharmaceutical Education and Research
5	Dr Anantha Nagappa Naik	Indian Journal of current pharmaceutical research Indian Journal of Pharmaceutical Education and Research	Indian Pharmaceutical Congress- Abstracts Reviewer. President of Association of community Pharmacist of India Reviewer for International Society for pharm-economics and Outcome research
6	Dr D Sreedhar	Journal of Education and Review, Thematic Journals, International Journal of Pharmaceutical and Allied Sciences Archives, International Journal of Community Medicine World Journal of Medicine and Medical Science	International Journal of Community Pharmacy, Indian Journal of Hospital Pharmacy Young Journal of Pharmacist, Health Affairs, International Journal of Educational Administration and Policy Studies, Value in Health, Science Journal of Business Management
7	Dr Raghu Chandrashekar	Evidence based Complementary and Alternative Medicine, Biological and Pharmaceutical Bulletin	
8	Dr Jesil Mathew A	Evidence based complementary and alternative medicine Guest Editor American Journal of Pharmacology and toxicology, Science Publications	
9	Dr N Sivagurunathan	African journal of Microbiology Research	
10	Dr M Manjunatha Setty	Editorial member for World research Journal of Medicinal and Aromatic Plants International Journal of Drug formulation and Research	

#	Name	Editorial board member	Reviewer
11	Dr Richard Lobo	BMC-CAM Pharmaceutical Crops	
12	Dr S G Vasantharaju	Member for the Journal Applied Biopharmaceutics and Pharmacokinetics.	
13	Mr Kanav Khera	Indian Journal of Hospital Pharmacy	
14	Mr John Preshanth Kumar P	Indian Journal of Hospital Pharmacy	
15	Dr B S Jayashree	International Journal of Community Pharmacy	
16	Dr Sreedharan	International Society for Pharmacoeconomics and out come Research (ISPOR) Kautilya's Society for Pharmacoeconomics and Outcome Research (KSPOR) Association of Community Pharmacy of India (ACPI)	
17	Mrs Leelavathy D Acharya	Indian Journal of Hospital Pharmacy(IJHP)	
18	Dr Surulivel Rajan M	Indian Journal of Hospital Pharmacy	
19	Mr Rajesh R	Indian Journal of Hospital Pharmacy	
20	Mr Sonal Sekhar M	Indian Journal of Hospital Pharmacy (Publication Committee Member) RIPER Drug and Poison Information Center (DPIC) Bulletin (Editorial advisory Board Member)	
21	Mrs Angela Treasa Alex		Reviewer-BioMed Central Complementary and Alternative Medicine
22	Dr Krishnamurthy Bhat		IJPER, Pharma Methods, Acta Chromatographia
23	Dr Prashant B Musmade		Analytical Chemistry Insights International Journal of

#	Name	Editorial board member	Reviewer
			Biomedical Sciences Archiv der Pharmazie Biochemical Sciences. International Journal of Health & Allied Sciences British Journal of Pharmaceutical Sciences
24	Dr Suvarna G Kini		European Journal of Medicinal Chemistry, Journal of Medicinal Chemistry and MCC
25	Dr Varadaraj Bhat G.		Phytotherapy research, National Academy Science Letters and IJPER

d) any other (please specify): BOS members of various universities, Scientific services committee of various pharmaceutical professional associations

- Dr. N Udupa, Dr.Srinivasa Reddy M and Dr. C Mallikarjuna Rao are the members of Scientific services committee of Indian Pharmaceutical Association
- The following are the BOS members of various universities.

Sl.No	Name	BOS Member
1.	Dr M Sreenivasa Reddy	KUHS, Thrissur, Kerala,
2.	Dr K B Koteswara	Kuvempu University, Shimoga
3.	Dr B S Jayashree	RGUHS, Bangalore, JSS University, Ooty
4.	Dr M Manjunatha Setty	RGUHS, Bangalore
5.	Dr C Mallikarjuna Rao	RGUHS, Bangalore, Sri Padmavathi Mahila Viswavidyalayam Tirupathi,
6.	Dr N Gopalan Kutty	Kuvempu University, Shimoga
7.	Dr Sreedhara Ranganath Pai K	Kuvempu University, Shimoga
8.	Dr M K Unnikrishnan	External Member, Board of Studies (UG) Rajiv Gandhi University of Health Sciences, Karnataka Member, Review Committee for monitoring progress of doctoral research at Nitte University (2012) Member PhD protocol review committee, Manipal University, Manipal (2011)
9.	Dr N Udupa	Director of Research (Health Sciences) Manipal University, Manipal. Board of Studies, Banaras Hindu University,

Sl.No	Name	BOS Member
		Board of Studies, Mangalore University, Mangalore Board of Studies, Rajiv Gandhi University, Bangalore Board of member Mysore University, Mysore Board of Member Kuvempu University, Shimoga
10.	Dr Krishnamurthy Bhat	RGUHS, Bangalore, Ahmadabad University, Ahmadabad
11.	Dr S G Vasantharaju	RGUHS, Bangalore
12.	Dr J Venkata Rao	M.G University, Kottayam, Kerala. Kalasalingam University, Krishnankoil, Tamilnadu

27. Faculty recharging strategies

Research incentives, financial assistance to attend conferences by Manipal University

28. Student projects

- percentage of students who have done in-house projects including inter-departmental projects: 70%
- percentage of students doing projects in collaboration with other universities / industry / institute: 30%

29. Awards / recognitions received at the national and international level by

- Faculty
- Doctoral / post doctoral fellows
- Students

2014

1. Mr Vamshi Krishna T, Department of Pharmaceutics Achieved second best oral presentation award for presenting “Formulation and evaluation of multiparticulate dosage forms of rifampicin and isoniazid with improved rifampicin stability” at “National Conference on Innovations and Trends in Pharmaceutical Sciences”, Nirmala College of Pharmacy, Mangalagiri, Guntur, Andhra Pradesh on March 29, 2014
2. Dr M K Unnikrishnan, Department of Pharmacy Practice was awarded with Cold Spring Harbor Laboratory fellowship (\$535.00 USD) for attending and presenting poster at the 79th Cold Spring Harbor Symposium on Quantitative Biology:

Cognition, Meetings & Courses Program, New York, U.S. during 28 May - 2 June, 2014

3. Dr Rekha Shenoy, Department of Pharmacology received the “Second Prize” in scientific poster presentation in NCADDD at Trichy in July 2014.
4. Dr K S Chandrashekar, Department of Pharmacognosy has won the 2nd prize in poster presentation at Vatayana – 2014, National seminar on Neuro – Degenerative Conditions and Nuero-Lesions held at Bangalore on August 15, 2014.
5. Dr Usha Y Nayak, Department of Pharmaceutics won first prize for poster preesantation in the International Conference on Innovations and Future Reseach Dimensions on Anobio Pharmaceutical Technology during Ocober 7- 8, 2014
6. Dr Usha Y Nayak, Department of Pharmaceutics awarded “First Prize in poster presentation” for the paper entitled ‘Development & evaluation of Risperidone liposomes for brain targeting’ in the TEQIP II & DBT sponsored International Conference on the Innovations & Future Research Dimensions on Nanobio Pharmaceutical Technology held at the Dept of Pharmaceutical Technology (Centre for Excellance in Nanobio Translational Research), Anna University, BIT Campus, Tiruchirapalli during October 7-8, 2014.
7. Dr Richard Lobo, Department of Pharmacognosy won the third prize for the poster presentation during the National Seminar on Medicinal Plants/Dravyaguna “Hastaamalaka 2014” organized by Muniyal Institute of Ayurveda Medical Sciences, Manipal held on November 12, 2014.
8. Dr Srinivas Mutalik, Department of Pharmaceutics attended as Keynote speaker in the 1st International conference on Pharmaceutics and Pharmaceutical sciences held at, Pullman Surabaya City Centre, Indonesia, during November 14 – 15, 2014.
9. Dr Jayesh Mudgal, Department of Pharmacology has been awarded First Prize for poster presentation in the 4th National Conference of the Society of Biological Scientists of India (SOBSI) held during November 18 – 20, 2014 at Yenepoya University, Mangalore.
10. Dr Prashanth B Musmade, Department of Pharmaceutical Quality Assurance won the frist prize for the poster presentation during scientific sessions of 19th Annual National Convention of Association of Pharmaceutical Teachers of India on “Emerging Trends in Pharmacy profession and education” held during November 28 – 30, 2014.
11. Dr Shaila A Lewis, Department of Pharmaceutics won the second prize for the poster presentation during scientific sessions of 19th Annual National Convention of Association of Pharmaceutical Teachers of India on “Emerging Trends in

Pharmacy profession and education” in the subject Pharmacology held during November 28 – 30, 2014.

12. Dr Shaila A Lewis, Department of Pharmaceutics bagged Best poster award for the poster entitled “Quercetin as CYP3A4 inhibitor for improved oral bioavailability of Felodipine” at APTICON 2014 on the theme “Emerging trends in Pharmacy profession and education” organized by Pune Region Pharmacy Institution and APTI on November 28-30, 2014 at Pune, Maharashtra.
13. Dr Usha Y Nayak, Department of Pharmaceutics awarded “First Prize in poster presentation” entitled, Nanotechnology in Anti-HIV Therapy, A poster competition for “AIDS FREE INDIA-HYPE or HOPE” event organized by community development committee, Manipal University Association of Pharmacy Students in Collaboration with ISPOR, MUSC, held on November 30, 2014 (World Aids Day).
14. Dr Anup Naha, Department of Pharmaceutics Appointed as Chief Coordinator of Manipal University Voluntary Service Organisation
15. Dr Jayesh Mudgal, Department of Pharmacology received “First Prize” in scientific poster presentation in the 4th National Conference of the Society of Biological Scientists of India (SOBSI) held duringm November 18 -20, 2014 at Yenepoya University, Mangalore.
16. Dr S G Vasantharaju, Deaprtment of Pharmaceutical Quality Assurance received Certificate of Appreciation from Dr P D Sethi Annual 2013 for the research paper
17. Dr S G Vasantharaju received Best Research Paper Award for year 2014 organised by Association of Pharmaceutical Teacher’s of India (APTI’s)
18. Dr Srinivas Mutalik, Department of Pharmaceutics has served as Poster Author in the Poster Walkway of Discovery at “6th Bangalore INDIA NANO – 2013”.
19. Dr K S Chandrashekar, Dr Girish Pai and Ms Daksha Gupta received certificate of Merit in Dr P D Sethi Annual Award 2013 for the paper entitled Invitro Antidiabetic activity of Pentacyclic Tritrapenoids and Fatty acid Esters from Bauhinia Purpurea.

2013

20. Dr Anup Naha, Department of Pharmaceutics has received Best Paper Award for the poster entitled Formulation and In vitro Evaluation of self-Nanoemulsifying Drug Delivery System (SNEDDS) of Gliclazide under professional poster in DUPHAT held in Dubai during March 10 - 12, 2013. The Paper was co-authored by Dr M Sreenivasa Reddy and Dr N Udupa.

21. Dr Anantha Nagappa Naik, Department of Pharmacy Management received APP Academic Excellence Award in 2nd APP Annual National Convention held on March 17, 2013 at Nasik.
22. Dr Saleemullah Khan, Department of Pharmacognosy was awarded the Inter Science Scholastic Award for the paper entitled “Isolation and characterization of oligomeric procyanidin-rich polyphenol fraction of Cinnamomum zeylanicum bark and its in vitro antidiabetic studies” for the category best presentation in the tract IJCPPT at the International Joint Conference on Control, Pharmacology and Pharmaceutical Technology held at Chandigarh on March 24, 2013.
23. Dr Krishnamurthy Bhat, Abilasha Gupta, ST Bhagawati, BS Muddukrishna, Jagadish PC of Department of Pharmaceutical Quality Assurance received Best Paper in Pharmaceutical Analysis for the article published in IJPER “Estimation of stavudine, lamivudine and nevirapine by Chemometric UV Spectroscopic Method” during APTI – 18th Annual National Convention, Rajahmundry, AP October 25 - 27, 2013.
24. Dr V M Subrahmanyam, Department of Pharmaceutical Biotechnology secured First prize for the Research Paper entitled “Curcumin loaded Nano-liposomes: optimization of formulation conditions using design of experiment” during APTI – 18th Annual National Convention, Rajahmundry, AP October 25 - 27, 2013.
25. Dr Srinivas Mutalik, Department of Pharmaceutics has been awarded with prestigious “Young Pharmacy Teacher of the Year 2013” award by Association of Pharmacy Teacher of India (APTI) in 18th APTI National Convention held at Rajahmundry, A P during October 25 - 27, 2013. Dr Mutalik has also received Award for Research Publication (ARP) by VGST (Vision Group on Science and Technology), Department of IT, BT and S&T, Government of Karnataka for the year 2012-13.
26. Dr Usha Y Nayak, Department of Pharmaceutics has received Second prize for the Poster entitled “Gastro Retentive Pulsative Release Lercanidipine HCL formulations : Development, Evaluation in Vivo Buoyancy and Pharmacokinetic study” during International Humboldt Kolleg on the Bench to Bedside Translational Research Potential Benefits of Interdisciplinary collaboration November 15 – 17, 2013.
27. Dr C S Shreedhara, Department of Pharmacognosy has received 1st place for the poster entitled “Preparation and nanoformulation of Tripala extract and evaluation of its in vitro antioxidant and cytotoxic potential” during the World Congress

organised by International Society for nature and Health Care Inc , USA during December 16 – 18, 2013.

28. Mr Madhavan Nampoothiri, Department of Pharmacology was selected as one of the winners for a travel grant in the category “Awards for investigators from developing countries in the amount of USD 1000 & free congress registration fee ” During XX World Congress on Parkinson’s Disease and Related Disorders, Geneva, Switzerland.
29. UGC has nominated Dr Manthan D Janodia, Department of Pharmacy Management to visit USA under 300 Roman Fellows for Post Doctoral Studies in USA under Indo-US 21st Century Knowledge initiative for a period of one year from August 2013.
30. Dr N Udupa, former Principal MCOPS and present Director of Research (health Sciences), Manipal University and Dr M K Unnikrishnan (Professor and Head, Department of Pharmacy Practice) were awarded the prestigious Dr T M A Pai Endowment Chair for their contribution to academics and research. Under this, meritorious postgraduate students will be able to pursue their doctoral studies.

2012

31. Dr. N.Udupa: Prof C J Shishoo Award in October 2012 for his research in pharmaceutical Sciences initiated by Association of Pharmaceutical Teachers of India (APTI), October 2012.
32. Dr. N.Udupa: Acharya P. C. Ray Gold Medal Award for great achievement and service to Profession of Pharmacy by Indian Pharmaceutical Association (IPA), November 2012.
33. Dr. N.Udupa: Schroff Memorial National Award for Contribution as a scientist and drug researcher by Indian Hospital Pharmacists Association (IHPA), December 2012.
34. Dr. M.K Unnikrishnan received, Teacher of the year award for Excellence in Teaching and Research 2012.
35. Dr. M.K Unnikrishnan received, Indian National Science Academy Travel Award for Attending and delivering an invited talk at the 16th Evolutionary Biology Meeting, Marseilles, France, 18th to 21st September 2012.
36. Dr. Shaila Angela Lewis, Associate Professor, Department of Pharmaceutics, MCOPS received the Best Poster Award for her poster entitled "Formulation and Evaluation of an Antidiabetic and Antihypertensive in a single dosage form" under category of professional poster in DUPHAT(Dubai International Pharmaceuticals

- & Technologies Conference & Exhibition)held in Dubai during March 12 -14, 2012.
37. International Society for Pharmacoeconomics and Outcomes Research (ISPOR) Outstanding Student Chapter Award - Third Best Student Chapter Globally to Manipal College of Pharmaceutical Sciences, Manipal University.
 38. Yogendra Nayak, Vijay Mor and M.K. Unnikrishnan: Indian Journal of Pharmaceutical Education and Research (IJPER) Best Research Paper published in 2011. Prof. B.M.Mithal Memorial Award for Pharmaceutical Education, October 2012.
 39. Chirag Dhingra, Sherin Babykutty, S.D. Vachala and K.S.R. Pai. In vitro evaluation of the apoptotic potential of novel pyrimidine analogs. Department of Pharmacology, Manipal College of Pharmaceutical Sciences, Manipal University, Manipal – 576104, Karnataka, India. Presented at 64th IPC, Chennai, December 7-9, 2012. Received 2nd Prize in poster presentation.
 40. Praveen KS, Y Rajesh, VM Subrahmanyam, J Venkata Rao. Screening Of Soil Samples For Isolation Of Cyclodextrin Glycosyltransferase Producing Microorganisms. Department of Pharmaceutical Biotechnology, Manipal College of Pharmaceutical Sciences, Manipal University, Manipal – 576104, Karnataka, India. Presented at 64th IPC, Chennai, December 7-9, 2012. Received 2nd Prize in poster presentation.
 41. Vachala SD. Docking, Synthesis and Biological Evaluation of some novel 5-substituted-1,3,4-thiadiazol-2-amines ad their Schiff base. Presented at Diabetes mellitus and Cancer (Dia-Can' 12), DBT-CSIR sponsored International Conference at Annamalai University from December 14-16, 2012.(Best Oral Presentation Award).
 42. Annual Best Research Paper Award in Pharmaceutical Sciences of Manipal University instituted by Dr N Udupa, Principal, MCOPS, Manipal for the year 2011-2 to Dr A. Ranjith Kumar.
 43. Jagtap D. “Studies on Optimization of production parameters for improving the yield of microbial secondary metabolite with microbicidal and cytotoxic activity.” Department of Pharmaceutical Biotechnology, MCOPS, Manipal. Best Paper selected for Oral presentation during 64th IPC, Chennai, December 7-9, 2012.
 44. Dr Srinivas Mutalik received Best M Pharm Dissertation Award: M. Pharm dissertation (Curcumin loaded nanoparticulate drug delivery system for the treatment of inflammatory bowel disease; Student: Neelam Suthar) has been received Ist Runner-up prize in “All India Level Rajnibhai V Patel Best M. Pharm.

Thesis Competition” conducted by Troikaa Pharmaceuticals Limited, Ahmedabad during 2012-13.

45. Dr Srinivas Mutalik received Award for Best Research Paper 2012-13; Awarded by Vision Group for Science and Technology (VGST), Department of Science and Technology, Government of Karnataka State, India.
46. Dr Srinivas Mutalik received Young Scientist Award in 5th ICMPHP (International Conference on Medicinal Plants and Herbal Products) conducted in Manipal from 25-27, January 2013.
47. Dr Srinivas Mutalik received Best Poster Award in 5th IAPST National Convention, held at Manipal on 5th Nov 2012.

2011

48. Dr. N Udupa received the Pharmacy Teacher of the year award for the year 2008-09 was conferred by 54th Indian Pharmaceutical Congress Trust, Pune in the month of June 2010.
49. Dr N Udupa, Principal and Professor, Department of Pharmacy Management received Prestigious 8th STARS Award of American Association of Government College of Pharmacy (Bengaluru) Alumni, New York, USA for “Excellence in Academic Research” for the year 2011.
50. Dr Udupa also received Talented Scientist Award in recognition of his outstanding contribution in the field of Pharmaceutical Sciences at International level during 3rd International Conference on Medicinal Plants and Herbal Products held at University of Colombo, Sri Lanka during December 19-21, 2011.
51. Dr. M.K Unnikrishnan received, Prof. B.M. Mithal Memorial Award for Best Paper published in IJPER 2011.
52. S N Manjula, QIP Research Scholar won the Best Poster Award in XLIV IPSCON- 2011 held at Kasturba Medical College, Manipal during December 19-21, 2011
53. The poster presented by Ms Sahiti D, Mr Rama Krishna of IV Pharm D students & Dr Ananthan Nagappa Naik, Professor, Department of Pharmacy Management has won the second prize in Community Pharmacy section of FIP 2011 held at Hyderabad during September 3 – 8, 2011.
54. Jyothsna M, M Pharm Part II student of MCOPS bagged the third prize at the final of the National Elocution Competition 2011 held during the 63rd Indian Pharmaceutical Congress at Bangalore on December 16, 2011. She also won the first prize in the Manipal University Elocution Competition on the topic,

“Preventing Substance Abuse in the Campus, a Way Forward”, held in October 2011. She also secured 14th position in the Pharmacy Talent Search Exam (PTSE) 2011 and qualified for the award of scholarship.

2010:

55. Dr. M.K Unnikrishnan received, Visiting Academic: University of Southern Queensland, Toowoomba, Queensland July 29th to September 23rd 2010.
56. Dr. M.K Unnikrishnan received, Visiting Scientist: Centre of Contemporary Studies, Indian Institute of Science, Bangalore, June 14th to June 19th, 2010.
57. Dr. M.K Unnikrishnan received, 2010 Sri Subbaya Teacher And Research Students (STARS) award for Excellence in Academic Research by Association of the American Govt College of Pharmacy (Bengaluru) Alumni, New York USA.
58. Three of our students Mr. Vidhan Chandra Roy, Mr. Upendra Pratap Singh and Mr. P. Vedavyas also attended the 69th International Congress of FIP held at Istanbul from September 03 to September 09, 2009. Mr. Vidhan presented his work that was related to pictograms. This work was appreciated for the publication by Indian Pharmacopoeia Commission is interested to include Mr. Vidhan’s work in Indian National Formulary.
59. Ms. Shyamali received Prof. M.L. Schroff Medal for having secured the highest grade in the final B.Pharm. Examination held in March 2009. The award was given to her during 62nd Indian Pharmaceutical Congress held in Manipal from December 17-19, 2010. The award includes Medal, Certificate & Cheque.
60. Mr. A. Karthik, PhD scholar from Manipal College of Pharmaceutical Sciences, Manipal Received 2010 ADDF Young Investigator scholarship awarded by the Alzheimer’s drug discovery foundation, United states. This scholarship was awarded during 4th Drug Discovery Neurodegeneration conference to be held at Houston, Texas on February 1-2, 2010. This scholarship recognizes the early achievements of young investigators.
61. Ms.Rama M, Pham.D. (PB) student, Dept of Pharmacy Practice won the best papers award for the paper entitled “Drug Utilization Pattern in Patients with renal Failure in Nephrology Unit of Tertiary care Hospital” in poster category in the Indian Pharmaceutical Association Convention 2010 was held in Chennai at Sri Ramachandra University from March 12-14, 2010.
62. First Prize for Poster Presentation at the “National Symposium on Immunology Today–Recent Developments in Health and Disease”, under the aegis of Indian

Immunology Society, held at the Department of Studies in Biochemistry, University of Mysore, Manasagangothri, Mysore, November 14th to 15th 2011.

- **Doctoral / post doctoral fellows**

2014

63. Ms R Revathi, Dr Suvarna G Kini, Dr K Sreedhara R Pai, Dr G Arun Kumar received “certificate of appreciation” in the category of Health Sciences, at Manipal University. Poster entitled "Design and Development of Novel Piperidone Derivatives as Potential Antitubercular and Anti-HIV Agents". Research Scholar Poster Presentations held on January 3, 2014
64. Ms Atulya M, Ms R Revathi R Rajappan and Mr Muthu Kumar A received “Certificate of Appreciation” in connection with the poster presentations held on January 3, 2014 in the category of Health Sciences.
65. Mr A Muthukumar Bagged ‘Best Presentation Award’ for making an oral presentation on ‘Fabrication and evaluation of 3D scaffold’ at ‘Manipal Research Colloquium’, Manipal, held on April 11-12, 2014.
66. Mr Prateek Jain, was selected to receive a Foreign travel grant from CSIR, New Delhi to attend the 5th FIP Pharmaceutical Sciences World Congress 2014, Australia during April 13 – 16, 2014.
67. Ms Zenab Attari Bagged ‘Best Paper Presentation Award’ for making an oral presentation on paper entitled ‘Enhanced solubility and bioavailability of pioglitazone nanosuspension’ at ‘3rd International Conference NANOCON 014’, Pune, held on October 14-15, 2014.
68. Mr Ramanath K V & Dr K Sreedhar R Pai received Best Poster award at 3rd International Conference and Exhibition on Pharmacovigilance and Clinical Trails held on October 27-29, 2014 in OMICS groups conferences, Hyderabad.
69. Mr Muhammad Mubeen, Dr Suvarna G. Kini, Dr K Sreedhara R Pai received First Prize for poster presentation in the research scholar category entitled "Design, Docking studies, Synthesis and Biological evaluation of benzothiazole derivatives" at 4th National conference of SOBSICON 2014 on Molecular Biology in Diagnosis and Management of Communicable and Non communicable Diseases Held at Yenaoya University, Deralakatte, Mangalore during November 18 – 20, 2014.
70. Ms Pallavi K and Mr Jagani Hitesh Vittalbhai, Research Scholars of MCOPS were selected for the award of “Kundapur Mohan abd Lata Bhandarkar’s merit-cum-means scholarship for PhD candidates” for the year 2013-14.

2013

71. Mr Prateek Jain, a Research Scholar of MCOPS was selected to receive a travel grant from AMGEN to attend the 2013 AAPS National Biotechnology Conference in San Diego, California during May 20-22, 2013 The travel award consists of \$ 500 00
72. Mr Uday Venkat Mateti, Research Scholar of MCOPS was selected as a winner of a “2013 Student Travel Grant” for the ISPOR 18th Annual International Meeting during May 18-22, 2013 in New Orleans, LA USA He was awarded complimentary registration and short courses
73. Ms Pallavi K (Research Scholar under Dr Srinivas Mutalik) has received First prize in Poster session during APTI – 18th Annual National Convention, Rajahmundry, AP October 25- 27, 2013
74. Mr Sai Balaji received Prime Minister’s fellowship for Doctoral Research of Rs 45,800/- per month
75. Mr Muttu Kumar A, Ms Revathi R Rajappan and Ms Atulya M received a “Certificate of Appreciation” in connection with poster presentation held on 3rd January 2014
76. Ms Pallavi K, Mr Jagani Hitesh Vittalbhai have been selected for the award of “Kundapur Mohan and Lata Bhandarkar’s merit –cum-means scholarship for PhD candidates” for the year 2013-14.

30. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

Year 2014: Total 10 Workshops / Seminars/ Conferences/ Alumni Meet were conducted during the yearl Dec 2014 in MCOPS, Manipal

Year 2013: Total 17 Workshops / Seminars/ Conferences/ Alumni Meet were conducted during the yearl Dec 2013 in MCOPS, Manipal

Year 2012: Total 21 Workshops / Seminars/ Conferences/ Alumni Meet were conducted during the yearl Dec 2012 in MCOPS, Manipal

Year 2011: Total 16 Workshops / Seminars/ Conferences/ Alumni Meet were conducted during the Year 2011 in MCOPS, Manipal

Year 2010: Total 19 Workshops / Seminars/ Conferences/ Alumni Meet were conducted during the Year 2010 in MCOPS, Manipal

10 Workshops / Seminars/ Conferences/ Alumni Meet were conducted during the Year 2014 in MCOPS, Manipal

Sl. #	Topic	Date and Funding agency	Participants
1.	Clinical Skills for Pharm D Students	January 6 - 7, 2014 Forty-four Pharm D students, mostly from Gujarat participated in the seminar in addition to the local participants	Teachers, students
2.	Crusade against neoplasia and challenges in targeting tumor-specific nuclear machinery	January 21 - 23, 2014 AICTE sponsored seminar cum workshop	Teachers, students
3.	Nanomedicines: Risk and Benefit Ratio	January 24 - 25, 2014 AICTE sponsored seminar cum workshop	Teachers, students
4.	Pharmacoeconomics, Outcomes Research and Pharmaceutical care guidelines for India	February 12, 2014 International Society for Pharmacoeconomics and Outcome Research (ISPOR) sponsored National Symposium	Resource persons from industry participated in this event.
5.	National Professor and a former Vice Chancellor of Manipal University Dr M S Valiathan exhorted the postgraduate students and researchers to publish their good work in Indian journals rather than in high-impact international journals	March 12, 2014 15th Annual Postgraduate Pharmacology Lecture Update	Teachers, students
6.	Management of Innovative Drug Development	June 16- 28, 2014 AICTE sponsored 1st Quality Improvement Programme	Pharmacy Teachers
7.	Discovery, Development and Design of Drugs from Nature	July 14 – 26, 2014 AICTE sponsored 2nd Quality Improvement Programme	Pharmacy Teachers
8.	Frontiers in Pharmacology of Drug research & recent trends in Pharmacy Practice	January 5-17, 2015 AICTE sponsored 3rd Quality Improvement Programme	Pharmacy Teachers
9.	Healthy Mother And Happy Child	Nutritional Awareness Event organized by Community Development Committee during September 3 – 4, 2014	Teachers, students
10.	PharmD-Pedia	September 13, 2014 One day exhibition on PharmD (Doctor of Pharmacy) jointly organized by PharmD students' forum,	Students

		Manipal and Academic council, MAPS (Manipal University Pharmacy Students Association)	
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17 Workshops / Seminars/ Conferences/ Alumni Meet were conducted during the Year 2013 in MCOPS, Manipal :

Sl. #	Topic	Date and Funding agency	Participants
1	Manipal IPC Commemoration Symposium 2013	February 14, 2013,	Teachers, students
2	Seven experts from industries visit MCOPS to deliver guest lectures :	February 14, 2013, Industry-Institute Interaction at MCOPS	Teachers, students
3	Leads from Natural and Synthetic Sources	June 3 – 15, 2013 AICTE-sponsored Quality Improvement Programmes	Teachers, students
4	Biosimilars-Technologies and Prospects	June 17 – 29, 2013 AICTE-sponsored Quality Improvement Programmes	Teachers, students
5.	Production to – Prescription Opportunities for Innovation	July 1 – 13, 2013 AICTE-sponsored Quality Improvement Programmes	Teachers, students
6.	Second Annual Convention of the Consortium of Progressive Indian Pharmaceutical Associations	July 12 – 13, 2013 IPA	Teachers, students
7.	Innovative Drug Delivery Approaches and Regulatory Implications in Cosmeceuticals and Nutraceuticals	August 22 - 24, 2013 ICMR-sponsored three-day Seminar	Teachers, students
8.	Pharmaceutical Regulations in Developing Countries at MCOPS: Faculty Development Programme (FDP) was held at Manipal College of Pharmaceutical Sciences	October 14 – 26, 2013. AICTE-sponsored Faculty Development Programme	Teachers, students
9.	A three-day Entrepreneurship Development Programme	October 21- 23, 2013, Entrepreneurship Development Cell (EDC)	Teachers, students
10.	Industry Institute Interaction	October 24 – 26, 2013	Teachers, students

		Trademark, Patents and Copyrights.	
11.	Food as Medicine	October 26, 2013 Indo-Queensland Biotechnology Project Fund & Department of Pharmacy Practice	Teachers, students
12.	Together We Delve	PharmaQuora November 23 - 24, 2013	Teachers, students
13.	Nanoparticle Drug Delivery- A more effective therapeutic solution?	December 9 and 11, 2013 Indo-UK Seminar was sponsored by Royal Society-UK and DST- India	Teachers, students
14.	training programme was aimed at apprising the doctoral candidates and research scholars of the various advanced research techniques	between 3 June and 2 July 2013 Summer School for Research Scholars	Teachers, students
15.	Advanced Techniques in Drug Delivery	June 17 – 22, 2013 Dr TMA Pai Endowment Chair of Manipal University	Teachers, students
16.	Nano-based Drug Delivery System	October 15 – 19, 2013, TMA Pai Endowment Chair	Teachers, students
17.	Benefit of M Pharm Regulatory students	7th February 2013, Lorenz Life Sciences, India Pvt Ltd, Chennai conducted one-day Workshop	Teachers, students

21 Workshops / Seminars/ Conferences/ Alumni Meet were conducted during the Year 2012 in MCOPS, Manipal

Sl. #	Topic	Date and Funding agency	Participants
1	Manipal IPC Annual Commemoration Symposium	January 27, 2012	Dr. B Suresh (President, Pharmacy Council of India and Vice Chancellor of JSS University, Mysore), Dr. MNA Rao (Director, R&D, Divi's Lab, Hyderabad), Mr. Jatish N Shet (Shrishti Labs, Bangalore), Dr. Amit Khanna (Novartis, Hyderabad) and Mr. S G Biligiri, (President, KDPM, Bangalore were the main speakers.
2	National Seminar by Indian Society of	Indian Society of Nanosciences,	Dr. H Vinod Bhat inaugurated the

	Nanosciences	January 27, 2012	programme in the presence of Mr. M V Kamath (Honorary Director, Manipal Institute of Communication, Manipal), Dr P. Chandra Sharma (Senior Scientist G & Associate Dean – PhD Programme, Sree Chitra Tirunal Institute for Medical Sciences & Technology (SCTIMST), hiruvananthapuram) and Dr. P D Gupta (Adjunct Professor, MCOPS)
3	The Annual Industry Institute Interaction of the Industry Institute Partnership Cell (IIPC)	AICTE, New Delhi January 27, 2012	Resource persons from industry participated in this event.
4	MCOPS Alumni Meet	MCOPS, January 28, 2012	the faculty of MCOPS, several outstation alumni
5	National Seminar by Association of Community Pharmacists of India (ACPI), Association of Practicing Pharmacists and Clinical Pharmacologists (APPCP), and International Society of Pharmacoconomics and Outcome Research (ISPOR),.	Manipal Chapter January 28, 2012	Dr. Atmaram Pawar (Vice Principal & Head, Bharati Vidyapeeth University, Poona College of Pharmacy, Pune) and Dr. Arun Garg (General Secretary, IPGA)
6	27 th Annual Convention of Indian Pharmacy Graduates' Association on "Future of Pharmacy Professionals: 2020"	Manipal University January 28-29, 2012	Dr. K Ram Narayan (Vice Chancellor, Manipal University) inaugurated the convention in the presence of Dr. Arun Garg, Mr. S L Nasa, Dr. B Suresh and Mr. M V Kamath.
7	The 48 th Annual Conference of Indian Hospital Pharmacists' Association (IHPA) on "Advancing Skills for Future Practice" was held at Manipal College of Pharmaceutical Sciences	Manipal University February 18 – 19, 2012	The conference was inaugurated by Dr. H Vinod Bhat (Pro-Vice Chancellor, Manipal University), Mr. M V Kamath (Honorary Director, Manipal Institute of Communication), Dr. R R Pulgaonkar (Medical Superintendent, Kasturba Hospital), Mr. S L Nasa

			(President, IHPA) and Mr. A K Adhikari (Treasurer, IHPA).
8	A two-day Annual Convention of Indian Pharmaceutical Association (IPA) theme “Excellence in Pharma Profession.”	Manipal College of Pharmaceutical Sciences during March 17-18, 2012	This also coincides with the Silver Jubilee of IPA Manipal Branch.
9	National workshop on “Conducting Population-Based Clinical Outcomes Research”	International Society of Pharmacoconomics and Outcome Research (ISPOR) India-Karnataka chapter. April 19, 2012	Dr. G K Prabhu (Registrar, Manipal University) inaugurated the programme in the presence of Dr. N Udupa (Principal, MCOPS).
10	Ssymposium on “Infectious Diseases”	ICMR April 21, 2012	Dr. K Ram Narayan (Vice Chancellor, Manipal University) was the Chief Guest and Dr. Arunachalam Kumar (Dean, KS Hegde Institute of Medical Sciences, Mangalore) was the Guest of Honour.
11	1 st Annual Convention of Consortium of Progressive Indian Pharmaceutical Associations of Manipal on “Excellence in Pharma Research, Technology, Profession and Practice” during 7 – 8 July 2012		Dr. H Vinod Bhat (Pro Vice Chancellor, Manipal University) inaugurated the convention in the presence of veteran journalist Mr. M V Kamath. The convention was marked by lectures from several eminent resource persons on topics of relevance to pharmacists and their profession.
QIP and Summer Training Programme at MCOPS			
13 (3 QIP)	Two-week long Quality improvement programme	AICTE, New Delhi, 28 May to 8 July 2012.	Pharmacy teachers from different parts of India
16	The XI Summer Training programme	May 28, 2012 (1 month)	For postgraduate students, coordinated by Dr. P D Gupta and Dr. N Udupa. More than 50 PG students, mainly drawn from

			MCOPS, participated in this month-long course.
17	National Workshop in PK/PD, "Pharmacokinetic and Pharmacodynamic models: Concepts and applications"	August 23–25, 2012	Pharmacy teachers of India Research students. The workshop was conducted by Department of Pharmacy Practice, MCOPS, Manipal.
18	17 th Annual National Convention of the Association of Pharmaceutical Teachers of India. "Road map for strengthening Pharma Education in Changing Scenario"	Manipal University October 12 – 14, 2012	The convention attracted pharmacy teachers and postgraduate students from pharmacy colleges across India.
19	5 th Annual National Convention of Indian Association of Pharmaceutical Scientists and Technologists (IAPST) "Gateway to Excellence in Pharma Research and Development by 2020".	Manipal University, November 4, 2012	IAPST is an association that promotes research in pharmaceutical sciences and technology
20	Workshop on Nuclear Magnetic Resonance: Concepts & Interpretation of Spectra	November 26 – 28, 2012	Teachers and PhD students
21	5 th International Conference on Medicinal Plants and Herbal Products	Manipal University, January 25-27, 2013.	Biological Scientists from different part of the country

16 Workshops / Seminars/ Conferences/ Alumni Meet were conducted during the Year 2011 in MCOPS, Manipal

Sl No.	Topic	Date and funding agency	Participants
1	Workshop on "Clinical Pharmacokinetics: Concepts and Applications"	ICMR, New Delhi February 4 - 5, 2011.	Pharmacy teachers and students
2	Industry Institute Interaction programme	AICTE, New Delhi	Staffs of MCOPS and

		March 11, 2011.	representatives from Industries
3	Alumni meet MCOPS, Manipal	March 12,	MCOPS alumni, Dr M N A Rao and Mr Kiran Shankar were the Chief Guests.
4	63 rd IPC on in Bangalore	16 th December 2011	MCOPS alumni
5	AAPS Annual Meeting and Exposition held at Washington DC, USA	October 2011.	MCOPS alumni
6	Alumni Meet of 1979-1983 B Pharm batch:	The alumni Day was celebrated on 10 and 11 December 2011 at MCOPS	Around 40 alumni, many along with their families attended the meet.
7	The first Manipal IPC Commemoration Symposium, "Pharmaceutical Education and Research".	March 12, 2011	MCOPS Staff and students
8	APTI Sponsored workshop on "Training Teachers for Tomorrow's Need"	APTI, Bangalore 28 th February to March 12, 2011	Pharmacy teachers of India
9	3 days National Seminar on "Emerging Trends in Nanoparticle Characterization Techniques need for Harmonization"	AICTE, New Delhi May 2 - 4, 2011.	Pharmacy teachers and students
10	Quality Improvement Programmes on "Challenges in Translational Research"	AICTE, New Delhi June 1-14, 2011.	Pharmacy teachers different parts of the country
11	National Workshop was organized by Association of Community Pharmacists of Indian on	June 11, 2011.	Teachers and students

	“Community Pharmacists & Patient Healthcare: an International Perspective”		
12	National Workshop organised by Kautilya’s Society for Pharmacoeconomics and Outcomes Research Pharmacoeconomics and Pharmacoeconomics and Pharmacovigilance: Emerging Opportunities in India”	June 12, 2011.	Teachers and students
13	QIP on “Biologicals: Concepts to Clinic”	AICTE Sponsored held during June 15-28, 2011	Pharmacy teachers from different parts of the country
14	10 th Summer Training Course on “Scope of Biopharmaceuticals”	Manipal University June 1-30, 2011	For postgraduate students, coordinated by Dr. P D Gupta and Dr. N Udupa.
15	Annual Workshop on “Research Methodology and Literature Search”	MCOPS, August 10 – 11, 2011.	For postgraduate students
16	DST-India and Royal society – UK sponsored India –UK Scientific Seminar scheme on “Biomaterials as Drug Delivery Matrices”	Manipal College of Pharmaceutical Sciences and School of Pharmacy and Biomolecular Sciences, University of Brighton, UK.	Staff and students

19 Workshops / Seminars/ Conferences/ Alumni Meet were conducted during the Year 2010 in MCOPS, Manipal

Sl #	Topic	Date and funding agency	Participants
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1	Pharmfest 2010” was organized by the Students’ Council of the Academic year 2009-10 in association with IPA, IPGA, ACPI and IHPA (Manipal branches) and Manipal College of Pharmaceutical Sciences on	February 7, 2010. The theme of the conference was “Changing face of pharmacy in India - Are we ready?”	Students and staff
2	A one-day workshop under the aegis of the Industry-Institute Partnership Cell (IIPC) of Manipal College of Pharmaceutical Sciences	AICTE, New Delhi February 26, 2010	Dr Shibu Chakrabarty (Consultant for formulation R&D), Dr K. G Rajendran (Adjunct Professor, MCOPS), Dr George Patani (Research Director, INGA Laboratory, Mumbai), Dr Sunil Kumar Agarwal (Sandoz) and Mr Dhiraj Chopra (Milipore). And MCOPS Staffs
3	The 42nd IPC Commemoration Lecture was delivered on	27 February 2010.	Dr G N Singh, Director, Indian Pharmacopoeial Commission (IPC) was the speaker. Mr S L Nasa (President, Indian Hospital Pharmacists’ Association) was the Chairman and Dr Ajit Shirodkar was the Co-Chairman for the session
4	The Alumni Meet of Manipal College of Pharmaceutical Sciences	in MCOPS on February 27, 2010.	About forty alumni including ten Distinguished Alumni were present on the occasion. Mr Kiran Shankar (Vice President, BPRL)
5	Staff Development Programme on " Pharmaceutical Regulations in Developing Countries "	AICTE New Delhi March 15-28, 2010	Pharmacy Teachers from different parts of the India
6	National Seminar on “Customer Relationship Management in Pharmaceutical Industry	AICTE New Delhi, March 29-31, 2010	Pharmacy teachers and students

7	Summer training course in Biopharmaceuticals	Manipal University June 1-30, 2010	PG students
8	Quality Improvement Programme on "Biotechnological products in Cancer therapy-an update"	AICTE New Delhi June 1-14, 2010.	Pharmacy teachers from India
9	Quality Improvement Programme on "Biotechnological products in Cancer therapy-an update "	AICTE New Delhi, June 15-28, 2010	Pharmacy teachers from India
10	one day seminar on "Introduction to Concepts in Rational Drug Use"	Department of Pharmacy Practice, MCOPS, Manipal University and Drug Action Forum–Karnataka (DAF-K), All India Drug Action Network (AIDAN) jointly organized July 20, 2010.	Staff and students
11	Nobel update	Pharmacy Practice department Jointly Organised on November 27, 2010.	Staff and students
12	Quality Improvement Programme on "Pharmacists for Better Health: Challenges ahead"	AICTE New Delhi December 1-14, 201	Pharmacy teachers from India
13	Pre-Congress Workshop to the 62nd IPC "Emerging Trends in Pharmacy Practice"	Indian Hospital Pharmacists Association, New Delhi was held on December 15, 2010	Pharmacy teachers and students
14	Workshop on "Research Process and Writing a Scientific Paper" was organized	ICMR, New Delh on December 15-16, 2010	Staff and students
15	Alumni Meet	December 16, 2010	Alumni of MCOPS
16	62nd Indian Pharmaceutical Congress	Manipal University December 17-19,	Delegates from all over the world

	2010, was organized with the theme: Pharmacists for Better Health care on	2010	
17	National level symposium: Drug Information services in India	DBT, New Delhi was held on December 18-19, 2010	Staff and students
18	National level symposium: Application and future prospects of siRNA	DST, New Delhi December 18-19, 2010	Staff and students
19	National level symposium: Pharmacokinetics and pharmacodynamics	CSIR, New Delhi December 18-19, 2010	Staff and students

31. Code of ethics for research followed by the departments

MCOPS has a research committee that meets often to discuss the progress in research. The committee is composed of the following recommendations by the committee and its implementation:

1. The Research Committee has stipulated guidelines for screening abstracts submitted to conferences, chiefly for ensuring quality and ethical standards.
2. Students should submit manuscripts for scrutiny before submission to journals.
3. Periodic workshops are conducted for increasing the awareness among staff and students regarding issues of scientific misconduct.
4. Weekly journal club discusses novel ideas and disseminates latest developments in research
5. The research committee proactively encourages teachers to submit research proposals to funding agencies regularly. Guidance is provided for novices making an attempt to prepare proposals to various funding agencies.

32. Student profile course-wise:

Name of the Course (refer to question no. 4)	Applications received	Selected		Pass Percentage	
		Male	Female	Male	Female
B Pharm (2009-10)	10935	35	52	95	97
Pharm D (2008-09)	32	7	22	First batch in 2013-14	First batch in 2013-14
M Pharm (2011-12)	2688	69	58	100	100

Name of the Course (refer to question no. 4)	Applications received	Selected		Pass Percentage	
		Male	Female	Male	Female
B Pharm (2010-11)	7387	52	49	36	50
Pharm D (2009-10)	5910	19	11	16	12
M Pharm (2012-13)	1291	69	57	70	53

33. Diversity of students : (Year 2012-13)

Name of the Course (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
B Pharm	---	5	85	10
M Pharm	20	00	75	05
Pharm D	--	10	75	15
Pharm D PB	05	00	95	00

Diversity of students: (Year 2013-14)

Name of the Course (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
B Pharm	-	30	56	14
M Pharm	21	11	89	0
Pharm D	-	17	76	07
Pharm D PB	33	0	83	17

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give

details category-wise.

GPAT –All India Council for Technical Education, New Delhi conducted the Graduate Pharmacy Aptitude Test (GPAT-) , an all India Examination for the admission in Master’s Programme in Pharmacy (M. Pharm).

Year	Number appeared	Number passed	Percentage of pass
2009-10	37	27	73
2010-11	50	45	90
2011-12	40	35	87
2012-13	40	27	68
2013-14	62	28	45

35. Student progression

Student progression	Percentage against enrolled
UG to PG	80
PG to M.Phil.	NA
PG to Ph.D.	10
Ph.D. to Post-Doctoral	5
Employed	
• Campus selection	85
• Other than campus recruitment	10
Entrepreneurs	5

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	27%
from other universities within the State	43%
from universities from other States	30%
from universities outside the country	-

37. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period

Ph.D Awarded from 2008 to Dec 2014= 75

Sl.No	Name	Sl.No	Name
1	Dr G.Subramanian	41	Dr S G Vasantharaju
2	Dr Prabhakar K R	42	Dr Virendra S Ligade
3	Dr M Manjunath Setty	43	Dr Aruna Sudheendra Theerthahalli
4	Dr S Lakshmana Prabhu	44	Dr Sivagurunathan
5	Dr Mahalaxmi R	45	Dr Punit Bansal
6	Dr Vipin Kumar	46	Dr Daisy PA
7	Dr I S R Punitha	47	Dr Piya Paul Mudgal
8	Dr Jimmy Jose	48	Dr S D Vachala
9	Dr H N Aswathram	49	Dr Anup Naha
10	Dr Anshu Rathi	50	Dr. Salimullah Khan
11	Dr Narayana Swamy	51	Dr. M. Naseer
12	Dr Richard Lobo	52	Dr. Faizal P
13	Dr Manthan D Janodia	53	Dr. Aravind Kumar
14	Dr Kishore Gnan Sam	54	Dr. Prapul Deshpande
15	Dr Dinesh Kumar C	55	Dr. Leelavathy Acharya
16	Dr Sudheer Moorkoth	56	Dr. TNV Ganesh
17	Dr Alex Joseph	57	Dr Jayesh Mudgal
18	Dr Ranjith Kumar A	58	Dr Anoop Kishore
19	Dr Prashant B Musmade	59	Dr Rajesh
20	Dr D Sreedhar	60	Dr. Sidharth Sankar Kar
21	Dr Usha Yogendra Nayak	61	Dr. Nitesh Kumar
22	Dr Machender Reddy Kandadi	62	Dr. V. Rajesh
23	Dr S N Manjula	63	Dr. Girish Thunga
24	Dr Kirthi S Prabhu	64	Dr. Syed Sajjad Hussien
25	Dr Alok Sharma	65	Dr. Kranthi Prashanth Musmade

26	Dr S A Manohar Reddy	66	Dr. Om Prakash Ranjan
27	Dr D Vijay Kumar	67	Dr. Dharendra B. Sanghai
28	Dr Rekha R Shenoy	68	Dr. R.S. Jeyaprakash
29	Dr Jesil Mathew	69	Dr. Vijayanarayana K
30	Dr G Dayanand Reddy	70	Dr. Anil T M
31	Dr Shiram M Pathak	71	Dr Atulya M
33	Dr Sreedharan	72	Dr Geetha Mathew
34	Dr Karthik A	73	Dr K Vijaya Bhaskar
35	Dr P Vasanth Raj	74	Dr K Narayanan
36	Dr Gopal Shavi	75	Dr Vamshi Krishna T
37	Dr Bhide Prashant Jivaji		
38	Dr Thiyaagu R		
39	Dr Ajay G Pise		
40	Dr Yogendra Nayak		
41	Dr Surulivel Rajan		

38. Present details of infrastructural facilities with regard to

- a) **Library:** The library operates on online public access catalogue and provides web-links to online subscriptions such as Science Direct, Proquest, Bentham, Delnet, Inflightnet etc. The archives consist of bound volumes of the bulk of high impact journals. Libraries are equipped with reading rooms and is kept open 365 days of the year till 10.30 PM. Several crores were spent on journal subscriptions. A WiFi enabled internet connection enhances utilization of laptops. The university has provided excellent infrastructure to the libraries and created a conducive environment for students to sit and read various books and journals. The university has ensured that there are sufficient copies of books available in the library. Most of the online journals are available on the intranet of the university.
- b) **Internet facilities for staff and students:** Every faculty member of the department is provided with a laptop and round the clock internet access. Besides, a state-of-art computer lab with a sitting capacity of 40 has been built in the college for all the needs of the faculty and students. Apart from that, each department has got around 12 desktops with internet access for the PG and research needs.
- c) **Total number of class rooms:** UG: 10. Lecture halls are acoustically designed with built in audio-visual units. The Interact hall complex has adequate facility for holding conferences and seminars.

- d) **Class rooms with ICT facility:** MCOPS has provided a laptop to every faculty member with adequate training for the effective use of these tools. The university encourages faculty to use various audio-visual aids during lectures. All lecturer halls are provided with fixed LCD projectors with good acoustics in order to enhance teaching-learning experience of the students.
- e) **Students' laboratories:** Well-equipped laboratories have been built for the needs of students at UG and PG level separately. Every student gets sufficient space and equipment to perform experiments individually. Trained technicians assist the students for proper utilization of these facilities.
- f) **Research laboratories:** Research laboratories are well-equipped with state-of-art instruments which are periodically calibrated and maintained under the supervision of TBS India Telematic and Biomedical Services Pvt. Ltd. (<http://www.tbs-india.com>).

39. List of doctoral, post-doctoral students and Research Associates: Ph D students

a) from the host university (Manipal University)

Sl #	Name	Department
1.	Mr Pawan G Nayak	Pharmacology
2.	Ms Sukriti Nigam (MU)	Pharm Chemistry
3.	Mr Reddy Neetinkumar (SERB-DST)	Pharmacology
4.	Mr Jagani Hitesh Vitthal (CSIR)	Pharm Biotechnology
5.	Mr Asim Priyendu (CSIR)	Pharmacy Management
6.	Mr Devkar Raviraj Anand (INSPIRE)	Pharmacognosy
7.	Ms Shilpee (MU)	Pharmacology
8.	Ms Zenab Attari (MU)	Pharmacology
9.	Mr Uday Venkat Mateti (MU)	Pharmacy Practice
10.	Mr Grandhi V Ramalingayya (MU)	Pharmacology
11.	Mr Mradul Tiwari (MU)	Pharm Biotechnology
12.	Mr Prateek Jain (INSPIRE)	Pharm Biotechnology
13.	Mr Deepak Bhare (MoU)	Pharmacology
14.	Mr Magith Thambi (Dr TMA PAI Endowment Chair - Dr Unnikrishnan)	Pharmacy Practice
15.	Ms Bhavana B Bhat (MU)	Pharmacy Management
16.	Ms Nimmy Kumar (SERB)	Pharmacognosy
17.	Mr Anuraag Muralidharan (INSPIRE)	Pharm Biotechnology

18.	Mr Karthik Gourishetti (DST)	Pharmacology
19.	Ms Aswathi Hegde (BIRAC)	Pharmaceutics
20.	Mr Subhankar Biswas (MU PhD)	Pharmacology
21.	Ms Sanchari Basu Mallik (MU PhD)	Pharmacology
22.	Ms Varsha Prabhu (MU PhD)	Pharmacy Practice
23.	Ms Jyothsna M (ICMR)	Pharmaceutics
24.	Mr Vivek Ghate M (MU PhD)	Pharmaceutics
25.	Ms Elizabeth Mary Mathew (MU PhD)	Pharm Q A
26.	Mr Aditya Kiran G (DBT)	Pharm Biotechnology
27.	Mr Ashutosh Prasad Tiwari (MU PhD)	Pharm Chemistry

b) from other universities :

Sl #	Name	Department
28.	Muhammad Mubeen (QIP)	Pharm Chemistry
29.	Mr H V Keerthi Prashanth (QIP)	Pharmacology
30.	Mr Rupesh K Shirodkar (QIP)	Pharmaceutics
31.	Ms Pallavi K (DBT)	Pharmaceutics
32.	Mr Chethan G H (DBT)	Technical Assistant
33.	Ms Shoja M H (DST-INSPIRE)	Pharmacology
34.	Ms Cinu Thomas A (QIP)	Pharm Chemistry
35.	Mr A Muthu Kumar (MU)	Pharmaceutics
36.	Mr S Ayyadurai (QIP)	Pharm Biotechnology
37.	Ms R Revathi(MU)	Pharm Chemistery
38.	Mr Chandra Sekhar Misra (DBT)	Pharmacology
39.	Mr K V Ramanath (QIP)	Pharmacy Practice
40.	Mr Kiran Avadhani (Queensland University)	Pharmaceutics
41.	Ms Seena K X (QIP)	Pharmacognosy
42.	Mr Amol Baban Khade (QIP)	Pharmaceutical Chemistry
43.	Mr Alkesh Kumar Lokhande(QIP)	Pharmacy Practice
44.	Ms Chonkar Ankita Deepak (Dr TMA)	Pharmaceutics

	Pai Endowment Chair)	
45.	Ms Renuka Suresh Managuli (DST-INSPIRE)	Pharmaceutics
46.	Ms Bhavana B Bhat (MU)	Pharmacy Management
47.	Ms Akhila HS (DST-INSPIRE)	Pharmacy Practice
48.	Mr P Picheswara Rao (Dr TMA Pai Endowment Chair)	Pharmacology
49.	Ms Lavanya Kondapalli (DST)	Pharmaceutics
50.	Ms Aarti Abhishek Shah (MU PhD)	Pharmacology
51.	Mr Abhishek Shah (MU PhD)	Pharmacognosy

40. Number of post graduate students getting financial assistance from the university.

- Five students (financial assistance to attend conferences)
- 210 students (Received Rs.10,000/- each as fee waiver)
- 210 students (contingency grant of Rs.8,000/- each for their dissertation work)

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

Need assessment is a major driver of the curriculum. Whenever special areas are identified, special programmes are conducted for developing specialized curricular needs. For instance, Pharmacokinetics /Pharmacometrics, which was recently identified as a major curricular need by the department of Pharmacy Practice, was the subject of a full-fledged CPE conducted for the benefit of students

42. Does the department obtain feedback from

a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

Yes. Regular meetings are conducted, in which the curriculum is a major topic of discussion. Teaching –learning- evaluation parameters are calibrated periodically against standards and goals set by departments.

b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Yes, Students evaluate teachers every year based on set parameters in an objective fashion. The feedback obtained is critical for annual performance appraisal of teachers. Variable pay incentives are partly dependent on student evaluation of teachers. The “Good Teacher Award” instituted by the college is a major motivating force for constant improvement.

c. alumni and employers on the programmes offered and how does the

department utilize the feedback?

Yes. Through Alumni Cell and annual alumni meets, feedback regarding the syllabus and the curriculum content are taken. All these feedbacks are reviewed in an objective manner and required changes are incorporated through discussion at various levels.

43. List the distinguished alumni of the department (maximum 10)

Sl.No	Name	Position
1	Padmashree B.R.Shetty	CEO-New Medical center, Abu Dhabi, UAE
2	Padmashree Girish Kasaravalli	Renowed film maker and swarna kamal awardee
3	Dr. Murali K Divi	Managing Director, DIVIs Laboratories, Hyderabad
4	Dr. Sreejayan Nair	Director, Biomedical Sciences PhD Program, Director, Center for Cardiovascular Research and Alternative Medicine (C-CRAM) University of Wyoming, Laramie, USA
5	Mr. V Brahmaji	Managing Director, Halls Drugs, Chain of Pharmacies NJ USA
6	Mr. Ramprasad	Vice President-Global operations, Mylan, USA
7	Dr. Bobby George	Vice President, Reliance clinical research, Mumbai
8	Dr. George Pathani	Director, Inga Laboratories, Mumbai
9	Dr. A Raja Naresh	Head, International Marketing-UK, Orchid Pharma, India
10	Dr. Siddarth Sarma	Associate Professor, Dept. Molecular BioPhysics, IISc, Bangalore

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

MCOPS has a reputation for conducting the maximum student enrichment programmes in the campus. For instance, the current academic year has already witnessed more than four Conferences, QIP programmes. MCOPS is AICTE approved center for QIP, three QIP programmes of 15 days duration each are conducted annually on a regular basis. Besides, the institution has conducted several invited lectures, Workshops, Radio talks, in addition to cultural programmes, sporting events, athletic meets, alumni reunion etc. (Refer Q, No 30 for details)

Year 2014: Total 10 Workshops / Seminars/ Conferences/ Alumni Meet were conducted during the yearl Dec 2014 in MCOPS, Manipal

Year 2013: Total 17 Workshops / Seminars/ Conferences/ Alumni Meet were conducted during the yearl Dec 2013 in MCOPS, Manipal

Year 2012: Total 21 Workshops / Seminars/ Conferences/ Alumni Meet were conducted during the yearl Dec 2012 in MCOPS, Manipal

45. List the teaching methods adopted by the faculty for different programmes.

Didactic Lectures, Laboratory based Practical experiments, Case Studies, Seminars, Group Discussions, CPE, Quality Improvement Programmes, Research Projects, Fieldwork (Eg. Interacting with patients, pharmacies, health care workers, Interviewing Eminent visitors) Journal clubs, Discussion groups, Written Assignments, Literature Search exercises and preparing Reviews, Quizzes, Preparing Instructional materials (Eg. Posters, Patient Information Leaflets, Power point presentations, Lab manuals) Editorial assignments related to Student Newsletters, Proofreading, Composing, Layout designs, etc.,

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

MCOPS is an ISO certified ISO 9001:2008 and ISO 14001:2004 institution. Thus, the QMS of the ISO ensure that programme objectives are met through checks and balances

47. Highlight the participation of students and faculty in extension activities.

The Association of Community Pharmacist of India www.acpi.in is a national association involving in promotion of pharmacist in the public health. The pharmacist globally well recognized as health care professional involving in patient safety and ensuring efficacy of treatment. However in India, pharmacists are not participating in health care delivery. Their role is mainly restricted to Industrial pharmacy and dispensing of medicine. There is need to encourage wide spread participation of pharmacist in health care activities. Association of community pharmacist of India has conducted following programs involving the student's voluntary participation. Community care in the matter of Diabetes, Hypertension and Obesity from year 2008

onwards every year. Pharmaceutical care program for Diabetes Mellitus for 150 patients, Patient education program in disease, Public lectures, Pulse Polio, Eradication of filarial by distribution of CBZ tablets, Monthly check up for Hypertension for staff and students of MCOPS

Kuatilya's Society for Pharmacoeconomic and outcome research: This is a national professional body involved in promotion of research activities in the area pharmacoeconomic and outcome research. Pharmacoeconomic and outcome research is fundamental to evaluate the therapeutics not only from the point of expenditure and patient comfort. There is need to evaluate and document value of all the treatments. KSPOR is an affiliate to ISPOR international and involved in conducting the research in the area of Cancer, Rheumatoid Arthritis, Cardiovascular conditions, Infectious disease and HIV.

The ISPOR student chapter was declared as one of the best student chapter by ISPOR international as one best student chapter for 2012. ISPOR India is involved in promoting research and student leadership development. Mr. Deshpande, Prof A N Nagappa, Dr N.Udupa, Mr. T M Anil Mr. Pradeep Murgundi has participated and presented research papers in the ISPOR Scientific meetings held in Phuket, Mexico, Madrid, Washington and Taipie. ISPOR student chapter is involved in social work and blood donation camp.

48. Give details of “beyond syllabus scholarly activities” of the department.

Journal Club, Summer School, I2C (Innovate to communicate club), annual Nobel update, Pharmacology lecture update, CPE, IPC Commemoration annual symposium, Industry Institute Interaction Programme, Pharmfest, Pharmacy quiz etc

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

All India Council for Technical Education (AICTE), Pharmacy Council of India (PCI) and ISO 9001 and 14001 by TUV Rheinland

Manipal College of Pharmaceutical Sciences provides pharmaceutical education leading to **Undergraduate degree (B.Pharmacy) Postgraduate degree (M.Pharmacy), Doctor of Pharmacy (Pharm D), Pharm D Post Baccalaureate.** All includes **Research activities (PhD).**

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

- Published over 1000 peer reviewed articles in reputed national and international journals of high impact
- Produced over 100 doctorates
- Published over 10 books and contributed chapters

- Publishing journals (Pharmag, International Journal of Community Pharmacy and International Journal Hospital Pharmacy)

Eight patents

1. An improved process for the preparation of flavonoids from ocimum sanctum (Krishna Tulsi) (Pathirisseri Umadevi, Adikesavan Ganasoundari and Keloth Kaitheri Srinivasan - Document No. 184300)
2. “Transdermal drug delivery device containing oral antidiabetic drug” (Product patent) document No. 207023)
3. “Biodegradable polymeric composition for the treatment of diabetes mellitus (Product patent) (patent No. 214342)”
4. “Mucoadhesive Buccal Composition containing nicotine useful for smoking cessation and a process for its preparation” (221428 23-06-2008)
5. “Bioadhesive drug delivery system containing parasympathomimetic agent for the treatment of xerostomia” (Patent No. 222658 dated 20-08-2008)
6. Pharmaceutical composition useful for the treatment of diseases caused by viruses and a process for its preparation(Patent No. 222692 dated 23-06-2008)”
7. “Biodegradable polymeric composition useful in the treatment of periodontitis” (Patent No. 223664 dated 19/09/2008)
8. “Biodegradable polymeric monolithic film useful for the restoration of the periodontium (Patent No. 223665 dated 19/09/2008)”.

Patents Filed

1. Herbal Composition for improving anticancer activity, anti-inflammatory activity and protecting body from oxidative damage and the method of preparing the same.
2. Anti-inflammatory and analgesic activities of a non-ulcerogenic Novel synthetic molecule: 2-(4, 6-dihydroxy-2-mercaptophrindin-5-yl)-2-hydroxy-1H-1dene-1,3 (2H)-Dione (DMPI) (2300/CHE/2010 dated 11-08-2010).
3. Antiinflammatory and analgesic activities of a non-ulcerogenic novel synthetic molecule: 2(4, 6-dihydroxy-2-mercaptophrinidin-5-yl) -2-hydroxy-1H-1dene-1,3(2H)-dione (DMPI).
4. Timed-release compression-coated tablet composition for chronotherapy of hypertension.
5. “A Novel targeted Drug Delivery Sytem for Revastigmine in Liposomes and Nano Particles Forms For The Treatment Of Alzheimer’s Disease”(Patent Application # 2541/DEL/2011 dated 5.9.2011)

Other achivements:

- Iontophoresis for diagnosis of cystic fibrosis
- Laid the foundation for BA/BE studies at MCOPS which eventually lead into a clinical research organization (Acunova)
- Herbal Mouth Wash formulation was developed and sold to a pharmaceutical company (WINTAC)
- DHPO, an experimental AMPK activator is listed in Merk Catalogue as laboratory probe
- Simple method of estimation of Insulin by HPLC
- Successfully conducted Indian Pharmaceutical Congress three times (1971, 1990 and 2010) and provided a platform for scientific knowledge transfer.
- Contributed to scientific services

51. Future plans of the department.

- To develop a small scale manufacturing unit for herbal formulations
- To develop self-sustaining cGMP pilot plant
- To expand scope of clinical research with overseas collaborations
- To develop center of excellence for research in cytokine related disorders
- To develop new molecules for tropical/rare and orphan diseases
- To strengthen the research endeavors in microbial origin drug discoveries and cell based therapies
- To offer end to end analytical solution to small scale pharmaceutical industry
- To strengthen consultancy services in pharmaceutical marketing and administration

52. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strengths

- 1) Rank: Ranked number one among private institutes
- 2) Campus: Residential Campus with multicultural cosmopolitan outlook.
- 3) Infrastructure: State-of-the-art facilities for teaching and learning.
- 4) Faculty: Experienced, well qualified and dedicated.
- 5) Research: Strong research background with excellent publication history
- 6) Alumni: Support from strong alumni worldwide

Weaknesses

- 1) Regulatory restrictions are taking away the academic freedom.
- 2) Geographical isolation: Far from pharmaceutical industry and other related industries; hence suboptimal placement.
- 3) Dichotomy in regulatory control (AICTE and PCI).
- 4) Funding from the government organizations is limited.

Opportunities

- 1) To become number one college amongst all pharmacy colleges in India.
- 2) Interdisciplinary and integrated research to facilitate drug discovery and development, patent and commercialize.
- 3) To improve quality of the students.
- 4) Consultancy services
- 5) To establish a chair

Challenges

- 1) Stay in the number one position.
- 2) To fight against unhealthy competition from mushrooming pharmacy colleges.
- 3) To attract global talent.
- 4) To affiliate with globally reputed universities.
- 5) To commercialize the technologies/new molecules developed.

ANNEXURE NO. HS 1

Manipal University Admissions 2013 - Courses offered

Institution / Department	Courses	Eligibility
Department of Atomic and Molecular Physics, Manipal	M Sc Physics (Photonics)	Candidates must have passed Bachelors degree with a minimum of 55% marks in any of the following areas •B.Sc. in Physics •B.Tech. in Electronics/Electrical/Material Science/ Applied Physics.
	M Sc Physics (Nanoscience & Technology)	Candidate must have passed Bachelors Degree with a minimum of 55% marks in any of the following areas •B.Sc. in Physics •B.Tech. in Chemical Engineering/Biomedical Engineering, Material Science/Applied Physics.
	MSc Biophysics	The candidate must have passed MSc in Physics/Applied Physics/Masters in any area of physical sciences or BE / BTech / MTech (Applied Physics) with a minimum of 50% marks in aggregate.
	PG Diploma in Photonics	
Department of Sciences, Manipal	M Sc Chemistry	The candidate must have passed B Sc with Chemistry as major subject with a minimum of 50% marks in aggregate.
	M Sc Applied Mathematics & Computing	The candidate must have passed B Sc with Mathematics as major subject with a minimum of 50% marks in aggregate.
	M Sc Physics	The candidate must have passed B Sc with Physics as major subject with a minimum of 50% marks in aggregate.
Department of Advanced Pharmaceutical Sciences, Manipal	M Sc in Advanced Pharmaceutical Sciences	B Pharm from an institution approved by the Pharmacy council of India with minimum of 50% marks in aggregate.
Department of Commerce, Manipal	BBM e-Banking & Finance	Pass in 10+2, A Level, IB, American 12th grade or equivalent with a minimum of 50% marks in aggregate.
	BBM Financial Markets	
	BBM Professional	
	BBM Logistics & Supply Chain	
	M Com Logistics & Supply Chain	The candidate must have a bachelor's degree in Management or Commerce from a recognized university. They should have secured not less than 50% marks in aggregate.

Department of Geopolitics & International Relations, Manipal	MA Geopolitics and International Relations	The candidate must have a Bachelors Degree in any discipline from a recognized University with minimum of 50% marks in aggregate.
	MA in National Security Studies	The candidate must have a Bachelors Degree in any discipline from a recognized University with minimum of 50% marks in aggregate.
	Post Graduate Diploma in Gandhian & Peace Studies	Any graduate with Arts/Science/Commerce with a minimum of 50% marks aggregate. Candidates who are willing to do full-time course as well as part-time (by choosing a particular module of one's own interest) are eligible to apply for the course.
Department of Public Health, Manipal	Masters in Public Health	The candidate must have a Bachelors degree in Medicine, Dentistry, Nursing, Allied Health, Life Science from a recognized University with a minimum of 60% marks in aggregate.
	Masters in Social Work	The candidate must have a Bachelors degree in any discipline from a recognized university with a minimum of 50% marks in aggregate.
	Master in Hospital Administration	The candidate must have a bachelor's degree in MBBS / BDS / BAMS / BHMS / BNYS / BPT/B Sc Nursing (Basic or Post Basic) /B Pharm / B Sc in Allied Health Sciences /Bachelor degree in Arts / Commerce /Science / Law from a recognized university with a minimum of 50% marks in aggregate.
	Certificate Course in Public Health	Candidates must have passed bachelors degree in any Health Sciences subject including Medicine, Dental Sciences, Nursing, Allied Health Sciences, Life Sciences and mainstream Science graduates are also eligible.
Certificate Course in Global Health		
Department of Statistics, Manipal	Certificate Course in Biostatistics, Epidemiology & Research Methodology	The candidates must have passed graduation in health science professional courses (MBBS, BPT, BASLP, B Pharm, B Sc Nursing etc) or post graduation in health science related non professional courses (M Sc Anatomy, Physiology, Biochemistry etc) or students doing their internship after completion of undergraduate course work.
	M Sc Biostatistics	The candidates must have passed B Sc Statistics/B Sc Mathematics or BE/B Tech or BCA/B Sc Computer Science or any other graduation having minimum 2 years learning of Mathematics and Statistics with a minimum of 50% marks in aggregate.

Kasturba Medical College, Mangalore	Bachelor of Audiology & Speech Language Pathology	Pass in 10+2, A Level, IB, American 12th grade or equivalent with Physics, Chemistry and English with Biology or Mathematics as optional subjects with a minimum of 45% marks taken together in Physics, Chemistry and any one of the optional subjects.
	Bachelor of Medicine & Surgery	Pass in 10+2, A Level, IB, American 12th grade or equivalent with Physics, Chemistry, Biology and English with a minimum of 55% marks in Physics, Chemistry and Biology taken together. DATE OF BIRTH: Should fall on or before 31.12.96
	Bachelor of Physiotherapy	Pass in 10+2, A Level, IB, American 12th grade or equivalent with Physics, Chemistry, English and Biology with a minimum of 45% marks taken together in Physics, Chemistry and Biology.
	B Sc Medical Radiotherapy Technology	Pass in 10+2, A Level, IB, American 12th grade or equivalent with Physics, Chemistry, English and Mathematics with a minimum of 45% marks in Physics, Chemistry and Mathematics taken together.
	DNB Urology	The candidates must have passed MS General Surgery.
	DNB Gastroenterology	The candidates must have passed MD General Medicine.
	DNB Psychiatry Primary	The candidates must have passed MBBS.
	DNB Psychiatry Secondary	The candidates must have passed MBBS and DPM.
	Master of Audiology & Speech Language Pathology	The candidates must have passed BSLH/BASLP from a recognized University with minimum of 50% marks in aggregate. INTERNSHIP: Completed or completing their compulsory internship on or before 15.08.2013
	MD Anaesthesiology	Pass in MBBS degree recognized by Medical Council of India.
	MD Anatomy	
	MD Biochemistry	
	MD Dermatology	INTERNSHIP: Candidates completing their compulsory rotating internship on or before 30.04.2013 are eligible.
	MD General Medicine	
	MD Microbiology	
	MD Paediatrics	Candidates completing internship after 30.04.2013 are not eligible for admission in this academic year.
MD Pathology		
MD Pharmacology		
MD Physiology	REGISTRATION: Candidates should have obtained permanent registration with Medical Council or any of the State Medical Council or should obtain the same within one month from the date of admission.	
MD Radio-diagnosis		
MS General Surgery		
MS Obstetrics & Gynaecology		
MS Ophthalmology		

	MS Orthopaedic Surgery	
	MS Otorhinolaryngology	
	PG Diploma – Anaesthesiology	
	PG Diploma – Child Health	
	PG Diploma – Clinical Pathology	
	PG Diploma – Dermatology	
	PG Diploma – Obstetrics & Gynaecology	
	PG Diploma – Ophthalmology	
	PG Diploma – Orthopaedics	
	PG Diploma – Otorhinolaryngology	
	MPT Cardio-pulmonary Sciences	The candidates must have passed BPT from a recognized University with a minimum of 50% marks in aggregate. INTERNSHIP: Completed or completing their compulsory internship on or before 15.08.2013
	MPT Community Based Rehabilitation	
	MPT Neurosciences	
	MPT Orthopaedics	
	MPT Paediatrics Physiotherapy	
	M Sc Medical – Anatomy	The candidate must have passed B Sc with at least one subject of Biological Sciences or BAMS or MBBS or BHMS or BPT or B Pharm or any other professional graduates from a recognized University. B Sc graduates with Physics and Chemistry optionals, could be considered for admission to M Sc Biochemistry course. Candidates must have obtained not less than 50% marks in aggregate at the qualifying examination.
	M Sc Medical – Biochemistry	
	M Sc Medical – Microbiology	
	M Sc Medical – Pharmacology	
	M Sc Medical – Physiology	
Kasturba Medical College, Manipal	Bachelor of Medicine & Surgery	Pass in 10+2, A Level, IB, American 12th grade or equivalent with Physics, Chemistry, Biology and English with a minimum of 55% marks in Physics, Chemistry and Biology taken together. DATE OF BIRTH: Should fall on or before 31.12.96
	DM Cardiology	MD in General Medicine or Paediatrics from a college recognized by the Medical Council of India.
	DM Neurology	
	DM Gastroenterology	
	DM Nephrology	Permanent registration with Medical Council of India.
M Ch Cardiothoracic	MS in General Surgery from a college	

Surgery	recognized by the Medical Council of India. Permanent registration with Medical Council of India.
M Ch Neuro Surgery	
M Ch Paediatric Surgery	
M Ch Urology	
MD Anaesthesiology	<p>Pass in MBBS degree recognized by Medical Council of India.</p> <p>INTERNSHIP: Candidates completing their compulsory rotating internship on or before 30.04.2013 are eligible.</p> <p>Candidates completing internship after 30.04.2013 are not eligible for admission in this academic year.</p> <p>REGISTRATION: Candidates should have obtained permanent registration with Medical Council or any of the State Medical Council or should obtain the same within one month from the date of admission.</p>
MD Anatomy	
MD Biochemistry	
MD Community Medicine	
MD Dermatology	
MD Forensic Medicine	
MD General Medicine	
MD Hospital Administration	
MD Microbiology	
MD Paediatrics	
MD Pathology	
MD Pharmacology	
MD Physiology	
MD Psychiatry	
MD Radio-diagnosis	
MD Radio-therapy	
MD Pulmonary Medicine	
MD (Immunohematology & Blood Transfusion)	
MS General Surgery	
MS Obstetrics & Gynaecology	
MS Ophthalmology	
MS Orthopaedic Surgery	
MS Otorhinolaryngology	
PG Diploma – Anaesthesiology	
PG Diploma – Child Health	
PG Diploma – Clinical Pathology	
PG Diploma – Dermatology	
PG Diploma – Obstetrics & Gyaenocology	
PG Diploma – Ophthalmology	
PG Diploma –	

Orthopaedics	
PG Diploma – Otorhinolaryngology	
PG Diploma – Psychiatry	
PG Diploma – Radio-diagnosis	
M Phil Psychiatric Social Work	The candidates must have passed full time MSW (Social Work) from a recognized University with a minimum of 55% marks in aggregate of the Masters Degree course as a whole.
M Sc Medical – Anatomy	The candidate must have passed B Sc with at least one subject of Biological Sciences or BAMS or MBBS or BHMS or BPT or BP harm or any other professional graduates from a recognized University. B Sc graduates with Physics and Chemistry optionals, could be considered for admission to M Sc Biochemistry course. Candidates must have obtained not less than 50% marks in aggregate at the qualifying examination.
M Sc Medical – Biochemistry	
M Sc Medical – Microbiology	
M Sc Medical – Pharmacology	
M Sc Medical – Physiology	
M Sc Medical – Clinical Embryology	The candidates who have completed their B Sc with Reproduction, Zoology, Microbiology, Biochemistry, Biotechnology, Bioscience or Physiology as one of the subjects are eligible. Candidates must have obtained not less than 60% marks in aggregate at the qualifying examination.
M Sc Yoga Therapy	Graduates in any discipline are eligible. Candidates must have obtained not less than 50% marks in aggregate at the qualifying examination.
Post Graduate Certificate Course in Panchakarma	Candidates must have a bachelor's degree in Ayurveda from a recognized university and completed the compulsory rotatory internship.
Fellowship in Clinical Genetics	Pass in Post Graduate Degree (MD /MS/ DNB) in Paediatrics/Medicine/Obstetrics & Gynaecology.
Fellowship in Neonatology	Pass in Post Graduate Degree (MD/DNB) in Paediatrics.
Fellowship in Diabetes	Pass in Post Graduate Degree (MD General medicine) or equivalent.

School of Information Science, Manipal	M Sc Tech (Embedded Systems)	<p>The candidate must have passed B Sc Computer Science/Electronics/BCA or Equivalent with a minimum of 50% marks in aggregate.</p> <p>BE / B Tech in Electronics and Communication, Computer Science, Information Science, Electrical and Electronics, Biomedical Engineering, Instrumentation Engineering for those seeking admission to M Sc Tech (Embedded Systems) Lateral Entry.</p>
	M Sc Tech (Medical Software)	<p>The candidate must have passed B Sc Computer Science/Electronics/BCA or Equivalent with a minimum of 50% marks in aggregate. BE / B Tech in Electronics and Communication, Computer Science, Information Science, Electrical and Electronics, Biomedical Engineering, Instrumentation Engineering for those seeking admission to M Sc Tech (Medical Software) Lateral Entry.</p>
	M Sc Tech (VLSI Design)	<p>The candidate must have passed B Sc Computer Science/Electronics/BCA or Equivalent with a minimum of 50% marks in aggregate.</p> <p>BE / B Tech in Electronics and Communication, Computer Science, Information Science, Electrical and Electronics or any other relevant branches of Engineering degree for those seeking admission to M Sc Tech (VLSI Design) Lateral Entry.</p>
	M Sc Tech (VLSI System Design & Verification) - Whizchip	<p>The candidate must have passed B Sc Computer Science/Electronics/BCA or Equivalent with a minimum of 50% marks in aggregate.</p> <p>BE / B Tech in Electronics and Communication, Computer Science, Information Science, Electrical and Electronics or any other relevant branches of Engineering degree for those seeking admission to M Sc Tech (VLSI System Design & Verification) Lateral Entry.</p>
	M Sc Tech (IT Management)	<p>The candidate must have passed BE/B Tech in any branch of Engineering with a minimum of 50% marks in aggregate.</p>

	M Sc Tech (Computing Technology & Virtualization)	<p>The candidate must have passed BSc Computer Science/Electronics/BCA or Equivalent with a minimum of 50% marks in aggregate.</p> <p>BE / B Tech in Electronics and Communication, Computer Science, Information Science, Electrical and Electronics, Biomedical Engineering, Instrumentation Engineering for those seeking admission to M Sc Tech (Computing Technologies & Virtualization) Lateral Entry.</p>
	M Sc Tech (Embedded Systems and Wireless Technology)	<p>The candidate must have passed B Sc Computer Science/Electronics/BCA or Equivalent with a minimum of 50% marks in aggregate.</p> <p>BE / B Tech in Electronics and Communication, Computer Science, Information Science, Electrical and Electronics, Biomedical Engineering, Instrumentation Engineering for those seeking admission to M Sc Tech (Embedded Systems and Wireless Technology) Lateral Entry.</p>
	M Sc Tech (High Performance Computing)	<p>The candidate must have passed B Sc Computer Science/Electronics/BCA or Equivalent with a minimum of 50% marks in aggregate.</p> <p>BE / B Tech in Electronics and Communication, Computer Science, Information Science, Electrical and Electronics, Biomedical Engineering, Instrumentation Engineering for those seeking admission to M Sc Tech (High Performance Computing) Lateral Entry.</p>
	Dual Degree – M Sc Tech (Embedded Systems & Instrumentation) ESIGELEC	Candidates must have passed BE/B Tech in Computer Science ,Electronics & Communication, Electrical & Electronics, Information Science, Bio medical Engineering, Instrumentation or any other relevant branches in Engineering with a minimum of 55% marks in aggregate.
	Dual Degree - Lancaster University, UK	Candidates must have passed BE/B Tech in Computer Science, Information Science, Information Technology, Electronics & Communication, Electrical & Electronics,
	Dual Degree - Edinburg Napier University, UK	Telecommunication, Medical Electronics, Biomedical Engineering or equivalent branches in Engineering with a minimum of 60% marks in aggregate.

	Dual Degree - GroepT International University College, Belgium	Candidates must have passed BE/B Tech in Computer Science, Information Science, Information Technology, Electronics & Communication, Electrical & Electronics, Telecommunication, Medical Electronics, Biomedical, Mechatronics or any equivalent branches in Engineering with a minimum of 60% marks in aggregate.
	M Sc in Information Science	<ul style="list-style-type: none"> • B Sc in Computer Science/Information Science/Mathematics/Electronics/Physics/Chemistry/BCA with minimum 50% aggregate marks • Equivalent qualifications from Universities outside India are also considered.
School of Allied Health Sciences, Manipal	Bachelor of Audiology & Speech Language Pathology	Pass in 10+2, A Level, IB, American 12th grade or equivalent with Physics, Chemistry and English with Biology or Mathematics as optional subjects with a minimum of 45% marks taken together in Physics, Chemistry and any one of the optional subjects.
	BSc Clinical Optometry	
	Bachelor of Occupational Therapy	Pass in 10+2, A Level, IB, American 12th grade or equivalent with Physics, Chemistry, English and Biology with a minimum of 45% marks taken together in Physics, Chemistry and Biology.
	Bachelor of Physiotherapy	
	B Sc Cardiovascular Technology	
	B Sc Medical Imaging Technology	
	B Sc Medical Laboratory Technology	
	B Sc Respiratory Therapy	
	B Sc Nuclear Medicine Technology	
	B Sc Renal Replacement Therapy & Dialysis Technology	
	B Sc Perfusion Technology	
	B Sc Medical Radiotherapy Technology	
B Sc Health Information Administration	Pass in 10+2, A Level, IB, American 12th grade or equivalent with any Science/Arts/Commerce groups with a minimum of 45% marks in aggregate.	

Bachelor of Health Sciences (BHSc)- Twining program	Pass in 10+2, A Level, IB, American 12th grade or equivalent examination with a minimum of 75% marks in Physics, Chemistry, Mathematics, Biology and 60% in English OR an IELTS with score band of 6.
Master of Audiology & Speech Language Pathology	The candidates must have passed BSLH/BASLP from a recognized University with minimum of 50% marks in aggregate. INTERNSHIP: Completed or completing their compulsory internship on or before 15.08.2013
MOT Developmental Disabilities	The candidates must have passed BOT/B Sc OT/ BOTH from a recognized University with minimum of 50% marks in aggregate. INTERNSHIP: Completed or completing their compulsory internship on or before 15.08.2013.
MOT Hand & Musculoskeletal conditions	
MOT Neuro Rehabilitation	
MOT Mental Health & Psychosocial Rehabilitation	
MPT Cardio-pulmonary Sciences	The candidates must have passed BPT from a recognized University with a minimum of 50% marks in aggregate. INTERNSHIP: Completed or completing their compulsory internship on or before 15.08.2013
MPT Community Based Rehabilitation	
MPT Neurosciences	
MPT Orthopaedics	
MPT Paediatrics Physiotherapy	
MPT (Dual Degree) - Sports & Clinical Biomechanics	The candidates must have passed BPT with a minimum of 50% marks and IELTS with score band of 7 in aggregate from a recognized University. INTERNSHIP: Completed or completing their compulsory internship on or before 15.08.2013
MRT Adult Respiratory Care	The candidates must have passed BSc RT from a recognized University with minimum of 50% marks in aggregate. INTERNSHIP: Completed or completing their compulsory internship on or before 15.08.2013.
MRT Neonatal & Paediatric Respiratory Care	
M Sc Hospital & Health Information Administration	The candidates must have passed any Bachelors degree from a recognized University with minimum of 50% marks.
M Sc Medical Imaging Technology	The candidates must have passed B Sc MIT of 3 years regular course from any University recognized by UGC with a minimum of 50% marks in aggregate+1 year compulsory internship or clinical experience. INTERNSHIP: Completed or completing their compulsory internship on or before 15.08.2013

M Sc Medical Radiation Physics	Candidates must have passed B Sc with Physics as major or B Sc with Physics as one of the major subjects from any University recognized by UGC in English medium. Candidates must have obtained not less than 60% marks in aggregate.
M Sc Medical Laboratory Technology - Clinical Biochemistry	The candidates must have passed B Sc MLT/BMLT from a recognized University with minimum of 50% marks in aggregate. INTERNSHIP: Completed or completing their compulsory internship on or before 15.08.2013.
M Sc Medical Laboratory Technology - Microbiology & Immunology	
M Sc Nuclear Medicine Technology	The candidates must have passed B Sc in Nuclear Medicine (BNMT) with DNMT or Diploma in Medical Radio Isotopes Techniques (DMRIT) from BARC or PG Diploma in Nuclear Medicine Technology or B Sc in Medical Imaging Technology (B Sc MIT) /equivalent or B Sc with Mathematics/ Physics /Chemistry/ Biology as major subject from a recognized University with minimum of 50% marks in aggregate.
Master of Optometry	The candidates must have passed B Sc Optometry from a recognized University with minimum of 50% marks in aggregate. INTERNSHIP: Completed or completing their compulsory internship on or before 15.08.2013.
M Sc Renal Replacement therapy & Dialysis Technology	Candidates must have passed B Sc RRT & DT from a recognized University with a minimum of 50% marks in aggregate. INTERNSHIP: Candidates should be completed or completing their compulsory internship on or before 15.08.2013
M Sc Echocardiography	The candidates must have passed B Sc Cardiovascular Technology/Cardiac Care with a minimum of 50% marks in aggregate. INTERNSHIP: Completed or completing their compulsory internship on or before 15.08.2013.
M Sc Cardiac Cath & Intervention Technology	The candidates must have passed B Sc Cardiovascular Technology OR diploma in Cardiovascular Technology with a minimum of 3 year experience and 50% marks in aggregate. INTERNSHIP: Completed or completing their compulsory internship on or before 15.08.2013.

	Lateral M Sc Nuclear Medicine Technology	Post-graduate Diploma holders in Nuclear Medicine Technology (DNMT/DMRIT) approved by Atomic Energy Regulatory Board, Mumbai subject to the condition that the degree will be awarded only when they attend and pass the following three additional papers along with the second year theory papers: 1) Mathematics in Nuclear Medicine 2) Computers in Nuclear Medicine 3) Biomedical Engineering
	M Phil Clinical Psychology	The candidates must have passed fulltime MA Psychology or M Sc Psychology from a recognized University with a minimum of 55% marks in aggregate in the Master Degree course as a whole.
Manipal Health Systems, Bangalore	B Sc Perfusion Technology	Pass in 10+2, A Level, IB, American 12th grade or equivalent with Physics, Chemistry, English and Biology with a minimum of 45% marks taken together in Physics, Chemistry and Biology.
	B Sc Medical Imaging Technology	
	M Sc Hospital & Health Information Administration	The candidates must have passed any Bachelors degree from a recognized University with minimum of 50% marks.
	MPT Cardio-pulmonary Sciences	The candidates must have passed BPT from a recognized University with a minimum of 50% marks in aggregate. INTERNSHIP: Completed or completing their compulsory internship on or before 15.08.2013
	MPT Community Based Rehabilitation	
	MPT Orthopaedics	
	MPT Neurosciences	
Manipal College of Dental Sciences, Mangalore	Bachelor of Dental Surgery	Pass in 10+2, A Level, IB, American 12th grade or equivalent with Physics, Chemistry, Biology and English and a minimum of 55% marks in Physics, Chemistry and Biology taken together.
	MDS Conservative Dentistry & Endodontics	Pass in BDS degree or equivalent degree recognized by Dental Council of India.
	MDS Oral and Maxillofacial Surgery	
	MDS Oral Pathology & Microbiology	INTERNSHIP: Candidates completing their compulsory rotating internship on or before 30.04.2013 are eligible. Candidates completing internship after 30.04.2013 are not eligible for admission in this academic year.
	MDS Orthodontics & Dentofacial Orthopaedics	
	MDS Paedodontics & Preventative dentistry	
	MDS Periodontology	REGISTRATION: Candidates should have obtained permanent registration with Dental Council of India or any of the State Dental Council or should obtain the same within one month from the date of admission.
	MDS Prosthodontics & Crown and Bridge	
	MDS Public Health Dentistry	
	MDS Oral Medicine and Radiology	

	Post Graduate Diploma Dental Materials		
Manipal College of Dental Sciences, Manipal	Bachelor of Dental Surgery	Pass in 10+2, A Level, IB, American 12th grade or equivalent with Physics, Chemistry, Biology and English and a minimum of 55% marks in Physics, Chemistry and Biology taken together.	
	Post Graduate Certificate Course in Aesthetic Dentistry	Pass in BDS from any institution recognized by the Dental council of India.	
	Post Graduate Certificate Course in Oral Implantology		
	Post Graduate Certificate Course in Laser Dentistry		
	MDS Public Health Dentistry	<p>Pass in BDS degree or equivalent degree recognized by Dental Council of India.</p> <p>INTERNSHIP: Candidates completing their compulsory rotating internship on or before 30.04.2013 are eligible. Candidates completing internship after 30.04.2013 are not eligible for admission in this academic year.</p> <p>REGISTRATION: Candidates should have obtained permanent registration with Dental Council of India or any of the State Dental Council or should obtain the same within one month from the date of admission.</p>	
	MDS Conservative Dentistry & Endodontics		
	MDS Oral and Maxillofacial Surgery		
	MDS Oral Medicine and Radiology		
	MDS Oral Pathology & Microbiology		
	MDS Orthodontics & Dentofacial Orthopaedics		
	MDS Paedodontics & Preventative dentistry		
	MDS Periodontology		
	MDS Prosthodontics & Crown and Bridge		
	Post Graduate Diploma in Dental Materials		
School of Nursing, Bangalore	B Sc Nursing		Pass in 10+2, A Level, IB, American 12th grade or equivalent with Physics, Chemistry, Biology and English and a minimum of 45% marks taken together in Physics, Chemistry, Biology and English. DATE OF BIRTH: Only those whose date of birth falls on or before 31.12.96 are eligible.
	Post Basic Diploma in - Neonatal Nursing		Pass in B Sc/PB B Sc Nursing/ GNM recognized by Indian Nursing Council and a minimum of 55% marks in aggregate.
	Post Basic Diploma in - Oncology Nursing		
	Post Basic Diploma		

	in - Operation Room Nursing	
School of Nursing, Mangalore	B Sc Nursing	Pass in 10+2, A Level, IB, American 12th grade or equivalent with Physics, Chemistry, Biology and English and a minimum of 45% marks taken together in Physics, Chemistry, Biology and English. DATE OF BIRTH: Only those whose date of birth falls on or before 31.12.96 are eligible.
Manipal College of Nursing, Manipal	B Sc Nursing	Pass in 10+2, A Level, IB, American 12th grade or equivalent with Physics, Chemistry, Biology and English and a minimum of 45% marks taken together in Physics, Chemistry, Biology and English. DATE OF BIRTH: Only those whose date of birth falls on or before 31.12.96 are eligible.
	PB B Sc Nursing	Pass in GNM after 10+2 or equivalent examination preferably with Science subjects. Candidates should be a registered Nurse and registered Midwife or equivalent with any State Nursing Registration Council. Candidates should have completed their GNM course on or before 31.05.2013.
	Post Basic Diploma in - Cardio Thoracic Nursing	Pass in B Sc/PB B Sc Nursing/ GNM recognized by Indian Nursing Council and a minimum of 55% marks in aggregate.
	Post Basic Diploma in - Critical Care Nursing	
	Post Basic Diploma in - Emergency & Disaster Nursing	
	Post Basic Diploma in - Psychiatric /Mental Health Nursing	
	Post Basic Diploma in - Neonatal Nursing	
	Post Basic Diploma in - Neuro Science Nursing	
	Post Basic Diploma in - Nurse Practitioner in Midwifery	
	Post Basic Diploma in - Oncology Nursing	
	Post Basic Diploma in - Operation Room Nursing	
	Post Basic Diploma in - Orthopedic and	

	Rehabilitation Nursing	
	M Phil Nursing	The candidate must have passed M Sc Nursing recognized by Indian Nursing Council with at least 60% marks in aggregate.
	M Sc Community Health Nursing	<p>Pass in B Sc/PC B Sc/PB B Sc Nursing recognized by Indian Nursing Council with minimum of 55% marks in aggregate.</p> <p>EXPERIENCE: The applicants must have 1 year of experience as on 31.07.2013 after B Sc Nursing in a hospital of at least 100 beds or in a community health programme or in a school or college of Nursing. PB B Sc degree holders need to have one year experience either before or after Post Basic B Sc Nursing degree.</p>
	M Sc Medical Surgical Nursing	
	M Sc Obstetrics & Gynaecology Nursing	
	M Sc Child Health (Paediatric) Nursing	
	M Sc Psychiatric (Mental Health) Nursing	
Manipal College of Pharmaceutical Sciences, Manipal	Bachelor of Pharmacy	<p>Pass in 10+2 with Physics, Chemistry and English with Mathematics or Biotechnology or Computer Science or Biology as optional subjects.</p> <p>Candidates who have passed 10+2 from national open school are not eligible for admission under the Pharmacy Act.</p>
	Lateral B pharm	Diploma holders in Pharmacy from an Institution recognized by the Pharmacy Council of India.
	Pharm D	<p>Pass in 10+2 examination with Physics, Chemistry and English with Mathematics or Biology as optional subjects / D Pharm or any other equivalent qualification recognized by the Pharmacy Council of India.</p> <p>Candidates who have passed 10+2 from national open school are not eligible for admission under the Pharmacy Act</p> <p>DATE OF BIRTH: Should be on or before 31.12.96</p>
	Pharm D Post Baccalaureate	BP harm from an institution recognized by the Pharmacy Council of India with minimum of 50% marks in aggregate.
	M Pharm Pharmaceutical Administration	B Pharm from an institution recognized by the Pharmacy Council of India with minimum of 50% marks in aggregate.
	M Pharm Pharmaceutical Biotechnology	
	M Pharm Pharmaceutical Chemistry	
M Pharm Pharmaceutical Marketing		

	M Pharm Pharmaceutical Quality Assurance	
	M Pharm Pharmaceutics	
	M Pharm Pharmacognosy	
	M Pharm Pharmacology	
	M Pharm Drug Regulatory Affairs	
	M Pharm Pharmacy Practice	
	M Pharm Industrial Pharmacy	
School of Communication, Manipal	BA Journalism & Communication	Pass in 10+2, A Level, IB, American 12th grade or equivalent and a minimum of 45% marks in aggregate. Arts group subjects will be the preferred qualification.
	Certificate in Animation Technology	Candidates with a pass in 10+2 or those pursuing B Sc with Mathematics as one of the subjects or students of 3 years Diploma in Engineering. Computer knowledge, proficiency in Mathematics and good communication skills are essential.
	MA Communication	The candidate must have a bachelor's degree in any discipline from a recognized university and a minimum of 50% marks in aggregate.
	Post Graduate Diploma in Corporate Communication	The candidate must have a bachelor's degree in any discipline which is of 3 or more years of duration after 10+2 examination from a recognized university and a minimum of 50% marks in aggregate.
	PG Diploma in Film Art	The candidate must have completed a bachelor degree course in any stream (which is of three or more years' duration after the 10+2 examination) from any recognized university, having secured not less than 50% of marks in the aggregate of the total marks prescribed.
	Masters in Film Art and Film Making	The candidate must have a bachelor's degree in any discipline which is of 3 or more years of duration after 10+2 examination from a recognized university and a minimum of 50% marks in aggregate.
School of Management, Manipal	MBA	The candidate must have a bachelor's degree in any discipline from a recognized university. They should have secured not less than 50% marks in aggregate.
School of Regenerative Medicine,	M Sc Regenerative Medicine	The candidates must have passed B Sc with at least one subject of Biological Sciences or MBBS or B Pharm or BV Sc or BE

Bangalore		Biotechnology or any other professional graduate programme from a recognized university and a minimum of 60% marks in aggregate.
	M Phil Regenerative Medicine	The candidates must have passed M Sc in any branch of Life sciences / MSC in Biotechnology/M Pharm/MBBS /MV Sc / MDS/ MD/M Sc in Regenerative Medicine/ Clinical Embryology and other paramedical course with a minimum of 50% marks in aggregate.
	Post Graduate Diploma in Regenerative Medicine & Stem Cells	The candidates must have passed Bachelors in Life sciences/B Tech/BE in Biotechnology/Biomedical/ MBBS /BDS / BV Sc and Allied Health Science from a recognized university and a minimum of 60% marks in aggregate.
Faculty of Architecture Planning & Design, Manipal	Bachelor of Architecture	<p>Candidates must have a minimum of 40% marks in the All India National Aptitude Test in Architecture (NATA) conducted by Council of Architecture (COA) and must have passed any one of the following courses with a minimum of 50% marks in aggregate:</p> <ul style="list-style-type: none"> · 10+2 with Mathematics and English as compulsory subjects <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> · 3 years Diploma after 10 years of schooling (any stream) recognized by Central/State Government with Mathematics and English as compulsory subjects
	Bachelor of Design (Fashion Design)	Pass in 10+2 or 3 years Diploma by the Central/State Government or equivalent qualification from any Board
	Bachelor of Science (Fashion Design-Couture)	
	Bachelor of Arts (Interior Design)	
	Master of Architecture (Advanced Design)	The candidates must have passed B Arch or its equivalent as approved by Council of Architecture with a minimum of 50% marks in aggregate.
	Executive Master of Architecture (Advanced Design)	The candidates must have passed B Arch or its equivalent as approved by Council of Architecture with a minimum of 50% marks in aggregate.
	Diploma in Fashion Design	Pass in 10+2 or 3 years Diploma by the Central/State Government or equivalent qualification from any Board
	Certificate in Fashion Design and Information Technology	Pass in 10+2 or 3 years Diploma by the Central/State Government or equivalent qualification from any Board

Manipal Institute of Technology, Manipal	B Tech Aeronautical Engineering	Pass in 10+2, A Level, IB, American 12th grade or equivalent with Physics, Mathematics and English as compulsory subjects along with Chemistry or Biotechnology or Biology or any technical vocational subjects (Automobile Technology, Air Conditioning and Refrigeration Technology, Computer Science, Dairying Technology, Electrical Technology, Geospatial Technology, IT Application, Structure and Fabrication Technology)as optional subjects with a minimum of 50% marks taken together in Physics, Mathematics and any one of the optional subjects.
	B Tech Automobile Engineering	
	B Tech Biomedical Engineering	
	B Tech Biotechnology Engineering	
	B Tech Chemical Engineering	
	B Tech Civil Engineering	
	B Tech in Computer & Communication Engineering	
	B Tech Computer Science & Engineering	
	B Tech Electrical & Electronics	
	B Tech Electronics & Communication	
	B Tech Industrial & Production Engineering	
	B Tech Information Technology	
	B Tech Instrumentation and Control Engineering	
	B Tech Mechanical Engineering	
	B Tech Mechatronics	
B Tech Printing Technology		
Lateral B Tech	3 years Diploma in Engineering granted by the Board of Technical Examination of a Sate Government or B Sc with Mathematics as one of the subjects or equivalent qualification with a minimum of 50% marks in aggregate.	
Master of Computer Applications	The candidate must have a bachelor's degree in any discipline from a recognized university. In addition, candidates must have studied Mathematics/Statistics/Computer Science as one of the subjects in 10+2 (PUC) level or Mathematics/Statistics in bachelor's degree. They should have secured not less than 50% marks in aggregate. Candidates who have obtained their bachelors degree through Distance Learning mode must have at least 3 years work experience in the related field after obtaining bachelors degree.	

Master of Computer Application (MCA)-Lateral Entry	Candidate should have studied BCA or B Sc Computer Science or B Sc Information Technology from a recognized University. They should have secured not less than 50% marks in aggregate. Candidates who have obtained their bachelors degree through Distance Learning mode must have at least 3 years work experience in the related field after obtaining bachelors degree.
M Tech in Advanced Thermal Power & Energy Systems	The candidates must have passed the following courses with a minimum of 50% marks in aggregate.
M Tech in Astronomy & Space Engineering	ADVANCED THERMAL POWER & ENERGY SYSTEMS: BE/B Tech or AMIE or equivalent in Mechanical or Industrial & Production or Manufacturing Science or Automobile Engineering.
M Tech in Biochemical Engineering	ASTRONOMY & SPACE ENGINEERING: BE/B Tech or AMIE in Aeronautical Engineering, Electrical Sciences-Electrical /Electronics/Instrumentation/Mechatronics.
M Tech in Biomedical Engineering	BIO-MEDICAL ENGINEERING: BE/B Tech or AMIE or equivalent in Bio-medical or Medical Electronics or Electrical & Electronics or Electronics & Communication or Electronics & Telecommunication or Instrumentation Engineering.
M Tech in Chemical Engineering	BIOCHEMICAL ENGINEERING: BE / B Tech or AMIE or equivalent in Biotechnology, Chemical Engineering, Pharmaceutical Technology ,Bio-Chemical Engineering, Bio Process Engineering.
M Tech in Computer Aided Mechanical Design & Analysis	CHEMICAL ENGINEERING: BE/B Tech or AMIE in Chemical Engineering/Bio-Chemical Engineering/Petroleum Engineering/Environmental Engineering/Bio Process Engineering/Bio Technology/ Pharmaceutical Technology.
M Tech in Computer Science & Information Security	COMPUTER AIDED MECHANICAL DESIGN & ANALYSIS: BE/B Tech or AMIE or equivalent in Mechanical or Industrial & Production or Mechatronics or Manufacturing Science or Automobile Engineering.
M Tech in Computer Science & Engineering	COMPUTER SCIENCE & ENGINEERING: BE/ B Tech or AMIE or equivalent in
M Tech in Construction Engineering & Management	
M Tech in Control Systems	
M Tech in Digital Electronics & Advanced Communication	
M Tech in Energy Management, Auditing & Lighting	
M Tech in Engineering Management	
M Tech in Environmental Engineering	
M Tech in Industrial Biotechnology	

M Tech in Industrial Pollution & Control	Computer Science or Electronics & Communication or Electrical & Electronics or Electronics & Telecommunication or Telecommunication Engineering or Instrumentation Engineering or Information Technology.
M Tech in Manufacturing Engineering & Technology	
M Tech in Microelectronics	
MTech in Network Engineering	
MTech in Power Electronic Systems & Control	
MTech in Printing & Media Engineering	
MTech in Software Engineering	
MTech in Structural Engineering	<p>COMPUTER SCIENCE & INFORMATION SECURITY: BE/B Tech or AMIE or equivalent in Computer Science or Electronics & Communication or Electrical & Electronics or Electronics & Telecommunication or Telecommunication Engineering or Instrumentation Engineering or Information Technology.</p> <p>CONSTRUCTION ENGINEERING & MANAGEMENT: BE/B Tech or AMIE or equivalent in Civil Engineering or Architecture.</p> <p>CONTROL SYSTEM: BE/B Tech or AMIE or equivalent in Electrical Sciences or Electronics or Instrumentation or Mechatronics.</p> <p>DIGITAL ELECTRONICS AND ADVANCED COMMUNICATIONS: BE / B Tech or AMIE or equivalent in Electronics & Communication/Electrical & Electronics/Electronics & Instrumentation/ Telecommunication Engineering.</p> <p>ENERGY MANAGEMENT, AUDITING & LIGHTING: BE/B Tech or AMIE or equivalent in Electrical & Electronics or Electronics & Communication or Instrumentation.</p> <p>ENGINEERING MANAGEMENT: BE/B Tech or AMIE in any branch of Engineering.</p> <p>ENVIRONMENTAL ENGINEERING: BE/B Tech or AMIE in Civil/Chemical Engineering/Ceramic Technology/Mechanical/Metallurgy/Mining/ Environmental/Bio-Chemical Engineering/Bio-Technology.</p> <p>INDUSTRIAL BIOTECHNOLOGY: BE/B Tech or AMIE or equivalent in Biotechnology or Chemical Engineering or Pharmaceutical Technology or Biochemical</p>

		<p>Engineering or Bioprocess Engineering.</p> <p>INDUSTRIAL POLLUTION CONTROL: BE/B Tech or AMIE or equivalent in Chemical Engineering, Mechanical Engineering, Biotechnology or Civil Engineering.</p> <p>MANUFACTURING ENGINEERING & TECHNOLOGY: BE/B Tech or AMIE or equivalent in Mechanical or Manufacturing or Industrial & Production or Mechatronics or Automobile Engineering or Production Engineering or Material & Metallurgy.</p> <p>MICROELECTRONICS: BE/B Tech or AMIE or equivalent in Electrical & Electronics, Electronics & Communication, Electronics & Telecommunication, Instrumentation & Control.</p> <p>NETWORK ENGINEERING: BE/B Tech or AMIE or equivalent in Computer Science or Electronics & Communication or Electrical & Electronics or Information Technology.</p> <p>POWER ELECTRONIC SYSTEMS & CONTROL: BE/B Tech or AMIE or equivalent in Electrical & Electronics or Electronics & Communication or Instrumentation & Control.</p> <p>PRINTING & MEDIA TECHNOLOGY: BE/B Tech or AMIE or equivalent in any branch of Engineering.</p> <p>SOFTWARE ENGINEERING: BE/B Tech or AMIE or equivalent in Computer Science and Engineering or Information Technology or Information Science and Engineering.</p> <p>STRUCTURAL ENGINEERING: BE/B Tech or AMIE or equivalent in Civil Engineering</p>
	M Tech in Network Engineering (Dual Degree)	The candidates must have passed BE/B Tech or AMIE or equivalent in Computer Science or Electronics and Communication or Electrical and Electronics or Information Technology course with a minimum of 50% marks in aggregate.
	M Tech in Printing & Media Technology (Dual Degree)	The candidates must have passed BE/B Tech or AMIE or equivalent in any branch of Engineering course with a minimum of 50%

		marks in aggregate.
	M Tech in Software Engineering (Dual Degree)	The candidates must have passed BE/B Tech or AMIE or equivalent in Computer Science and Engineering or Information Technology or Information Science and Engineering course with a minimum of 50% marks in aggregate.
School of Life Sciences, Manipal	B Sc Biotechnology	Pass in 10+2, A Level, IB, American 12th grade or equivalent with Physics, Chemistry and English with Biology or Biotechnology or Mathematics or any other Life Science subject as optional and a minimum of 55% marks taken together in Physics, Chemistry and any one of the optional subjects.
	M Sc in Bioinformatics	The candidates must have completed graduation in Basic Science / Life Science / Pharmaceutical Science / Medicine / Computer Science / Biomedical Engineering / Electronics / Biotechnology or other related Engineering Sciences and a minimum of 50% marks in aggregate.
	M Sc Medical – Biotechnology	Candidates must have passed Bachelors degree in any Life Science subject from a recognized university with a minimum of 50% marks in aggregate.
	M Sc Medical – Molecular Biology & Human Genetics	The candidate must have passed B Sc with at least one subject of Biological Sciences/ BAMS/MBBS/BHMS/BPT/B Pharm or any other professional graduate programme from a recognized University with a minimum of 50% marks in aggregate.
	PG Diploma in Cellular and Molecular Diagnostics	The candidates must have completed bachelors or masters degree in Biotechnology/ Bioscience/ Agriculture/ Veterinary Science/ B pharm /M Pharm /MBBS/ BE/ B tech in Biomedical/ Biotechnology/Chemical with the minimum 50% marks in aggregate.
	Certificate Course in Bioinformatics	Students pursuing graduation in Basic Sciences / Life Sciences/ Pharmaceutical Sciences/ Medicine/ Computer Science/ Biomedical Engineering/ Electronics/Post Graduates/ PhD Scholars or Faculty.
	Manipal School of Nursing, Manipal	Diploma in Nursing

Welcomgroup Graduate School of Hotel Administration, Manipal	Bachelor of Hotel Management	Pass in 10+2, A Level, IB, American 12th grade or equivalent preferably above 50% marks in aggregate.
	Bachelor of Hotel Management - Lateral Entry	3 years diploma in Hotel Management or equivalent after 10+2 or equivalent, preferably above 50% marks in aggregate. A committee will award the equivalence to approve admissions.
Department of Culinary Arts & Allied Hospitality Studies, Manipal	BA Culinary Arts	Pass in 10+2, A Level, IB, American 12th grade or equivalent preferably above 40% marks in aggregate.
	Bachelor of Hotel Management, Travel and Tourism	Pass in 10+2, A Level, IB, American 12th grade or equivalent.
	M Sc Hospitality & Tourism Management	The candidates must have completed graduation from a recognized University. For candidates who have completed any degree other than Hotel Management are needed to enroll for a 'Bridge Programme' for three months concurrent to the commencement of Masters Programme.
	M Sc in Hospitality and Tourism Management (M Sc HTM [UCB])	The candidates must have a Bachelors degree in any discipline from a recognized University and a minimum of 50% marks in aggregate.
	M Sc in Dietetics & Applied Nutrition	Candidates must have a bachelor's degree from a recognized university in Home Science / Nutrition / Dietetics/ Food science/Biology/Microbiology/Clinical Biochemistry/ Life Sciences or BNYS(Naturopathy) or BAMS (Ayurveda) or PG Diploma in Dietetics with a minimum of 50% marks in aggregate.
Department of European Studies, Manipal	Dual-degree Masters Program in European Studies and Management	The candidate must have passed bachelors degree in any discipline from a recognized university with a minimum of 50% marks in aggregate.
Department of Virus Research, Manipal	M Sc Clinical Virology	The candidates must have passed Bachelors degree in Life Sciences or BV Sc or B Sc Medical Laboratory Technology or MBBS or B Sc Biotechnology or B Sc Microbiology/Biochemistry/Zoology or any other related subjects preferably above 60% marks in aggregate or CGPA 6.5 at UG level. Training in human anatomy and physiology or experience in Virology/Clinical laboratory/Research will be given preference.
Department of Philosophy & Humanities, Manipal	MA in Philosophy	The candidate must have passed bachelors degree in any discipline from a recognized university with a minimum of 55% marks in aggregate.
	MA in English	
	MA in Sociology	
	Integrated MA - PhD	
Department of Library &	Certificate Course in Library and	Pass in 10+2, A Level, IB, American 12th grade or equivalent with any Science / Arts /

Information Science, Manipal	Information Science	Commerce group.
	M Sc Library and Information Science	The candidate must have a bachelors degree in B.A/B.Com/B.Sc/B.C.A/B.B.M etc.
	M Sc Library and Information Science (Lateral Entry)	The candidate who have a Bachelor's degree in Library and Information Science (B.L.I.Sc.; one year).

प्रज्ञानं ब्रह्म



INSPIRED BY LIFE

Manipal Academy of Higher Education

manipal.edu, Madhav Nagar, Manipal - 576104, Karnataka, India
Phone: 91 820 2922323 Fax: 91 820 2570062 E-mail: registrar@manipal.edu

www.manipal.edu