



प्रज्ञानं ब्रह्म



INSPIRED BY LIFE

Evaluative Reports 2015

Vol. 5

Offshore Campuses - Dubai and Melaka

Submitted to

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



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1. Name of the Department: School of Design & Architecture - SoDA

2. Year of establishment: 2004

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

The School of Design & Architecture, Manipal University – Dubai is part of the Faculty of Architecture, Manipal University, Manipal, India. <http://manipal.edu/foa.html>

4. Names of Programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

Bachelor of Architecture (BArch)
Bachelor of Arts – Interior Design (BA ID) with specializations in:-
▶ Business Management
▶ Product Design
Master of Arts – Interior Design (MA ID)
▶ By Research
Certificate Program in Interior Design (CID)

5. Interdisciplinary courses and departments involved:

Name of Program	Courses	Department Involved
Bachelor of Arts-Interior Design	Business Management Specialization in the 5 th and 6 th Semester – BA ID Program	School of Business
Bachelor of Architecture	▶ Structures ▶ Environmental Science ▶ Workshop Practice ▶ Surveying & Levelling	School of Engineering & IT

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

Courses in collaboration	Name of Universities / Industries / Foreign Institutions
▶ Product Design – Specialization (3 rd Year BAID)	▶ In collaboration with Tasmena & ISG non-profit making design organization, participation in INDEX Students Design Challenge-2014-15, 2013-14 & 2011-12. The project was introduced as

	<p>academic exercise.</p> <ul style="list-style-type: none"> ▶ Site & Shade – Design Days event in collaboration with Tasmena which involved training with Product Designers from Brazil for building of live size project. ▶ Winning team of INDEX Students Challenge worked with NATUZZI for a One month to re-design Natuzzi sound chair under guidance of senior designers from Natuzzi – An Italian furniture brand.
<ul style="list-style-type: none"> ▶ Commercial Design (2nd Year BAID) 	<ul style="list-style-type: none"> ▶ APID(Association of Professional Interior Designer)-Danube Design competition project was introduced as an academic exercise
<ul style="list-style-type: none"> ▶ Internship – Practical Training BAID – Summer Training for 60days as part of curriculum 	<ul style="list-style-type: none"> ▶ Listed below are names of Industries who offered Internship to Students : Aedas Interiors, IKEA, Rak Ceramics, Spencer Interiors, Design Work Portfolio, Archinteriors, Design Co-Lab, Home Gallery, Salah Interiors
<ul style="list-style-type: none"> ▶ Building Services 	<ul style="list-style-type: none"> ▶ ERCO Lighting Factory conducted Training in Dialux software
<ul style="list-style-type: none"> ▶ Building Construction & Materials 	<ul style="list-style-type: none"> ▶ John R Harris & Partners, Ongoing sites

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

8. **Annual/ Semester/Choice Based Credit System:** Semester based system

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

Training Course Offered	Name of the Department
<ul style="list-style-type: none"> ▶ Art Appreciation in 2nd Semester 	Foundation Program

▶ Interactive Arts & New Media Installation (Practical) in the 6 th Semester (2011-12)	School of Media & Communications
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10. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)

Teaching Post	Sanctioned	Filled
Professor	02	02
Associate Professors	04	04
Assistant Professors	08	08
Research Assistant	00	00

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

Sl #	Name	Qualification	Designation	Specialization	No. of Years of Experience (T – Teaching I – Industry)	No. of Ph.D. students guided for the last 4 years
1	Ashok Iyer	PhD in Architecture, at Cardiff University, UK (Ongoing since July 2011) MArch(By Research) BArch	Chairperson – Professor	PG Diploma in Indian Aesthetics No. of Publications: 17	T - 17	Nil
2	Niva Mahanta	PhD at IIT, Guwahati, India (Ongoing since 2013) MArch BArch	Professor	No. of Publications: 4	T -12 I - 10	Nil

SI #	Name	Qualification	Designation	Specialization	No. of Years of Experience (T – Teaching I – Industry)	No. of Ph.D. students guided for the last 4 years
3	Bhakti More	PhD at University of Salford, UK (Ongoing since 2013), PG Dip in Indian Aesthetics, GD Arch	Assoc. Prof.	PG Diploma in Indian Aesthetics 3D Max Autodesk & Autodesk Revit Certification No. of Publications: 3	T - 18 I - 7	Nil
4	Dr.Shaji Panicker	PhD (University of Adelaide, Australia), MArch, BArch	Assoc. Prof	No. of Publications: 5	T – 8 I – 6	Nil
5	Asifa Mahajabeen	MBA in Project Management BArch	Asst. Prof. (Senior Scale)	AutoCAD Certification No. of Publications: 2	T - 9 I - 2	Nil
6	Priyalucy Dsouza	Masters in Environmental Architecture, BArch	Asst. Prof.	-	T –4 I -4	Nil
7	Gurpreet Kaur	Masters in Design Management (Birmingham City University, UK), MAID	Asst. Prof.	-	T-2 I-3	Nil

AE – Academic Experience IE – Industry Experience

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

EMERITUS PROFESSORS

- Dr. Harimohan Pillai – Architect & Academician, India
- Prof Y.D. Pitkar, Sir J.J. College of Architecture, India

FULL-TIME ADJUNCT FACULTY

- Ameeta Kale, Practicing Architect & Urban Designer.
- Sarah Merchant, Practicing Architect & Architectural Journalist.
- Sneha Elsa Thomas, Landscape Architect.
- Tasneem Shikari, Practicing Architect & LEEDs Consultant.
- Vidya Rao, Practicing Architect, Ex-Faculty member at Faculty of Architecture, Planning & Design, Manipal University, India.

VISITING CONSULTANTS

- Vinod Pillai, Director, Design Co-Lab
- Murtaza Alisagar, Director, Al Noon Interiors.
- Praveen Kumar, Director, PX Architects.

GUEST FACULTY

- Shalini Bhatnagar, Director, Fiona Environs.
- Kairmein Deboo, Urban Designer, Hyder Consulting, Dubai.
- Harmann Panchal, Practicing Architect, Dubai
- Violeta Varona, Industrial Designer.
- Rahul Malpure, Assistant Professor, Zayed University, Dubai
- Prof.Mehdi Sabet, Associate Professor, Zayed University, Dubai
- Rami Yousuf, Director, Arc Interiors, Dubai.
- Rashida Rajkotwalla, Managing Director, DWP, Dubai.
- Ritesh Jamaiyar, Senior Architect, John R Harris & Partners.
- Sunil Ladha, Director, Workspace Architects, India.
- Chaitanya Kulkarni, Senior Architect, Alec Consultants.

FACULTY FROM OTHER SCHOOLS IN MANIPAL DUBAI

- Ramesh Vandanapu, School of Engineering & IT.
- Sujata Punjala, School of Engineering & IT.
- Lenin Kartikeyan, School of Business
- Julie Vardhan, School of Business
- Sina Aneesh, School of Business

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

Programme	Percentage
Bachelor of Architecture (BArch)	15%
Bachelor of Arts – Interior Design (BA ID)	20%
Master of Arts – Interior Design (MA ID)	40%
Certificate Program in Interior Design (CID)	0%

14. Programme-wise Student Teacher Ratio

Programme	Student – Teacher Ratio
Bachelor of Architecture (B. Arch.)	6 : 1
Bachelor of Arts – Interior Design (BA ID)	6 : 1
Master of Arts – Interior Design (MA ID)	3 : 1
Certificate Program in Interior Design (CID)	4 : 1

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

- The School of Design & Architecture; since its inception in 2004 has taken the services of the academic support staff (technical) and administrative staff provided within the centralized pool of resources provided by Manipal University – Dubai.
- The School also shares the Lab Instructors from the Civil Labs, Environmental Labs and Workshops with the School of Engineering & IT for the B.Arch. Program.
- The School is currently sharing ICDL Test Center jointly as the NATA Test Center in direct cooperation with the School of Engineering & IT for the B. Arch. Program.
- The School has a Placements Coordinator who works closely with the Placements Manager – Placements Cell, Manipal University Dubai. They ensure the coordination of Internships for the Interior Design & Architecture students in addition to arranging Career Fairs for recruitment of graduates from the School.

16. Research thrust areas recognized by funding agencies:

The School is currently working on the following research thrust areas including

- Architecture & Design Education
- Pottery & Hands-on Craft Oriented Product Design

- Architectural & Urban Heritage
- Set Design for Exhibition spaces
- Architectural Historiography
- Architectural Discourse

The School is constantly in touch with local funding agencies to promote funding and research in the above thrust areas.

17. Number of faculty with ongoing projects from

- a. **National:** One
- b. **International funding agencies:** Nil
- c. **Total grants received:** AED 10,000/-

18. Give the names of the funding agencies and grants received project-wise.

- Prof. Ashok Iyer, Chairperson, SoDA received an internal grant of AED 10,000/- from Research & Development Cell for his research proposal titled titled “Impact of Fundamentals of Design and Visual Theory on the Design Curricula of the Architecture Program.”
- In the year 2011, the Students were involved in the Project of “Redesigning Natuzzi sound chair”, which was sponsored by Natuzzi and the chair was on sale for “Dubai Cares” for education for the girl child. The project involved a month of hands-on work at Natuzzi showroom and students of 3rd Year BAID participated in the project.
- The students have been working on projects organized by TASMENA, which is a non-government design organization since the academic year 2010-11. The students were involved in various labs including the projects on “Cutting through the city”.

19. Inter-institutional collaborative projects and grants received

- a) **All India collaboration:** Nil
- b) **International:**
 - The Dubai Economic Department, Government of Dubai had invited entries from the students graduating in the year 2012 from various Universities offering Interior Design Programs to submit proposals for the “Interiors of Fast track V.I.P Business Hub” at their office in Business Village, Deira. A team comprising of 8 students from the BA ID Program were selected for the above project.

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

21. Research facility / centre with

- **state recognition:** Nil
- **national recognition:** Nil
- **international recognition:**

The School is in the process of developing research facilities in the thrust areas elaborated in Point no. 16

The School is associated with advanced research laboratories sponsored by / created by industry or corporate bodies:

International companies like ERCO, Natuzzi, Dulux, Jotun and IKEA conduct specialized workshops with reference to their product range, software and product development for the Interior Design and Architecture Students as a part of their coursework.

22. Research output in last three years

Details		2012	2013	2014
Completed funded research projects				
Completed non-funded research projects				
Completed PhD research projects				
Completed PG research projects				
Completed UG research projects				
Publications	International			01
	National			
Books				01
Chapters in books				
Conference presentations	International	02	01	
	National		02	01

Publications:

- * **Monographs**
- * **Chapters in Books**
- * **Edited books**
- * **Book with ISBN with details of publishers** – Geoffrey Bawa, A Conscious Perception by Nivi Ann Monsy – Manipal University Press, ISBN 9789382460138

- * **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 – 1.0
- * **SNIP** -
- * **SJR** -
- * **Impact Factor** – range / average
- * **h-index**–

23. Details of patents and income generated: Nil

24. Areas of consultancy and income generated:

Details of Project	Team
<ul style="list-style-type: none"> • Interior design of retail outlets ranging from 1000-2000sqft in Dubai, Qatar & Kerala in collaboration with Design works. The practice exposed students to the working stages of the projects and were involved in site visits in Dubai during the varied stages of the execution process. 	<ul style="list-style-type: none"> • Faculty & Students of Master of Arts in Interior Design

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

Name of Faculty	Details of Visit
Ashok Iyer Niva Mahanta Bhakti More Nivi Ann Monsy	<ul style="list-style-type: none"> • Manipal University, India in January 2013 to visit and participate in a day workshop at the Faculty of Architecture, Planning & Design. This was followed by a visit to M-arena and Manipal Virtual Experience at the Manipal Edu. Block.
Indira Barve	<ul style="list-style-type: none"> • Prof. Indira Barve attended a Course in “Presenting Historic places”, issued by Oxford University and English Heritage in february 2011

26. Faculty serving in

a) National committees:	Bhakti More has served as a member of the committee for the Danube / APID Student Competition
b) International committees:	Review Member for IcoRD – Prof.Ashok Iyer

c) Editorial Boards:	Nil
d) any other:	Board of Studies Member, Faculty of Architecture, Manipal, India. Prof.Ashok Iyer, Prof.Niva Mahanta & Ms.Bhakti More

27. Faculty recharging strategies:

The School encourages the faculty to regularly attend International Exhibitions, Seminars & Symposiums, Conferences (International & National), Site Visits & Study Tours within and outside UAE

Details of Faculty recharging strategies	Details
A. Training Programs	<ul style="list-style-type: none"> The School hosted Entrepreneurship Development Program for professionals with COA (Council of Architecture, India), IIA (Indian Institute of Architects)& NIASA (National Institute of Advanced Studies in Architecture) in May 2014. President, COA & President, IIA were the key note speakers. The School conducted Faculty Development Program in February 2014 under the auspices of Council of Architecture, India & NIASA (National Institute of Advanced Studies in Architecture). It was attended by academicians from various Universities in India, and UAE. The Faculty attended Workshop on “Research Methodology” by Dr.K.N.Bhat, India. In December 2013. Bhakti More attended NIASA TRAINING PROGRAM ON “ARCHIMETRICS” BY DR. R.K.PANDIT, Professor, MITS, Gwalior at Pune, India on The Program also included training on ‘Ecotect & Design Build software” to measure the building performance with regards to the environmental factors in December 2012. Nivi Ann Monsy attended the Autodesk University Extension Dubai 2012 held during October 2012 at Dubai World Trade Centre .The Event was designed for industry professionals to know more about latest available products and trends in the digital media for application by Architects and Interior Designers. Indira Barve attended Course in “Presenting Historic places”, issued by Oxford University, UK and English

	<p>Heritage in February 2011.</p> <ul style="list-style-type: none"> • The Faculty attended the “Statistics Training Program” by Dr. Shreekumar Nair, at the campus organised by Department of Management, from Manipal University, India, on 10th to 13th July 2011. • Niva Mahanta, Asifa Mahajabeen attended the Faculty Development program by David Langley , Director of the Center for Teaching and Learning at the University of Minnesota. Hosted by Manipal University-Dubai.
<p>B. International Exhibitions</p>	<ul style="list-style-type: none"> • Faculty attended City Scape 2014, 2013 and Design Days – International Trade Fair in 2014, 2013. • Bhakti More attended the INDEX Exhibition in 2014, 2013, 2011& 2012 at the Dubai World Trade Centre. • Also attended FOID (Festival of Interior Design Exhibition) of Product Design at Al Quoz, Dubai during September 2011 & Design Days Event, Dubai in December 2012.
<p>C. Seminars & Symposiums</p>	<ul style="list-style-type: none"> • Vidya Rao & Niva Mahanta presented papers in “Manipal Research Colloquim – 2014” at Manipal, India. Vidya Rao received 2nd Prize for her paper. • Prof. Ashok Iyer & Bhakti More attended Smart Skyscrapers Summit 2013 & 2014 to interact with over 300 professionals from design industry. • Talking Art Series: Abu Dhabi: 7th November 2012 The Faculty with students from Department of Interior Design & Architecture attended the Saadiyat Cultural District: Talking Art Series on 7th November 2012 at Abu Dhabi. The event was part of the Abu Dhabi Art fair, and was witnessed by a large number of architects, students and designers. The legendary Architects Sir Norman Foster, Jean Nouvel & Frank Gehry discussed on their concept on “Architecture, education and on the projects that would be landmarks for Abu Dhabi and also the UAE”. • Niva Mahanta attended The future of concentrated solar power (CSP)lecture by Prof. Robert C. Armstrong, Deputy Director, Massachusetts Institute of Technology, Energy Initiative. (MITei) Lecture series arranged by Masdar

	<p>Institute, Abu Dhabi.</p> <ul style="list-style-type: none"> • Seminar on Research Methodology by Dr. Masroor, SZABIST University, Dubai was attended by Ashok Iyer & Niva Mahanta at campus.
<p>D. International Conference</p>	<ul style="list-style-type: none"> • Asifa Mahajabeen, Niva Mahanta & Sarah Merchant co-authored a Paper in International Conference – SB13, organized by The British University in Dubai. The Paper titled, “Integration of Green Palette in Desert Cities : Mitigating Challenges under the Stewardship of Dubai Municipality”. • Ashok Iyer attended an International Conference” at Welsh School of Architecture in Cardiff, Wales, UK from 6th to 8th July 2011 and presented a paper on “House, Home and the Concept of a Familial Economy”. • Abraham Samuel & Niva Mahanta presented paper on “Landscape Infrastructure in the U.A.E context”, at International Conference for Humane Habitat -2011 at Rizvi College of Architecture, Mumbai-India. • Ashok Iyer presented a paper titled “Relevance of Construction Project Management in the Interior Design Curriculums” Abstract of Proceedings of 2nd International Conference on Engineering Systems Management and its Applications (ICESMA'10) hosted by American University of Sharjah (http://www.aus.edu/conferences/icesma2010/)(ISBN#:978-9948-427-14-8) Sharjah, UAE in March 2010 • Ashok Iyer presented a paper titled, “Quality Management in Design Education: Parameters on Relating Quality and Creativity” Proceedings of 4th International Quality Congress hosted by HBM e-University(Congress Proceeding-ISBN 978-9948-15-397-9 http://qc.hbmeu.ae/) Dubai, UAE in March 2010

28. Student projects

- **percentage of students who have done in-house projects including inter-departmental projects:** 100%

The Bachelor of Interior Design students are sent for Internship during the summer break. There is a 100% Placement which is done through the School.

Students Projects : Inter-Departmental	Name of Department
Design of GETEX Kiosk – 2013 by faculty & students of Master of Arts in Interior Design Program	Admissions office
The 3 rd Year BAID Students of Product Design Specialization designed the Stage for “TEDx” held in April 2013.	School of Media & Communications
The Furniture Design project done by Students of 3 rd Year BAID in 2011 and won the Index Student’s Challenge in 2011 was used as the Product for Advertising & brand Management competition by the Business Management Students.	School of Business

- percentage of students doing projects in collaboration with other universities / industry / institute: 25 %

Students Projects : Institutional / Industry	Name of Industry / Institute
<p>The Dubai Economic Department, Government of Dubai had invited entries from the students graduating in the year 2012 from various Universities offering Interior Design Programs to submit proposals for the “Interiors of Fast track V.I.P Business Hub” at their office in Business Village, Deira.</p> <p>A team comprising of 8 students namely Jareena, Tooba Sarfaraz, Insia Shabbir, Shahana Mamod, Shazia Fazlullah, Sakina Lokhandwala, Sumaiya Younus, Irum Akhtar, Sana Fayyaz, from the Bachelor of Arts in Interior Design worked on the design proposal in a contemporary style using inspiration from local elements, colors etc. The Design was evolved with series of discussions with various officials from the Government of Dubai and was a great learning experience for the graduating students.</p>	Dubai Economic Department – Government of Dubai
The winning team of INDEX Students Challenge in 2011, redesign of Natuzzi Sound Chair which was sold for charity for Dubai Cares for Education for the Girl Child	Natuzzi Interiors
“Design of Lazy Locks” by Product Design Students in 2012 for INDEX Students Challenge & the entry was sent to IFI Awards in Germany	Tasmena

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

- Faculty:

Description of Event	Achievement
Vidya Rao received 2 nd Prize for her Paper at Manipal Research Colloquim – 2014”	Best Paper – 2 nd Prize
Ms.Tasneem Shikari completed her MBA in Project Management in 2014	Faculty Up gradation – Qualification
Prof.Niva Mahanta registered for her PhD at IIT Guwahati, India in 2013	Faculty Up gradation- Qualification
Ms.Bhakti More registered for her PhD at University of Salford, Manchester, Uk	Faculty Up gradation- Qualification
Mr Ashok Iyer, Chairperson, registered for his PhD Program, with Cardiff (Welsh) College of Architecture, UK in July 2011 and is currently pursuing his research as a visiting scholar in a leading university in the U.A.E, U.K & India.	Faculty Up gradation- Qualification
Ms Indira Barve attended Course in “Presenting Historic places”, issued by Oxford University and English Heritage in February 2011	Faculty Up gradation
Ms Asifa Mahajabeen (Lecturer), completed her MBA in Project Management & Ms Sarah Taizoon (Adjunct Faculty) also completed her MBA in August 2011	Faculty Up gradation- Qualification

- **Doctoral / post-doctoral fellows:** Nil
- **Students:**

Description of Award	Achievement
2011-12 Participation in RAK ceramics design competition	
2011-12 Faculty appointed as mentors for MENA Lab - Create, Sculpt & Emote by Tasmena	
2011-12 Finalist in FOID Competition by APID	
2011-12 Winner of INDEX Students Challenge - 2011	
2012-13 Winner of Design Days Award - 2012	
2012-13 Re-design of Natuzzi sound chair for Dubai Cares	
2012-13 Winners in Architecture Heritage Department, Dubai Municipality, Government of Dubai	
2013-14 Design of showroom for Juma Al Majid, Umm Ramool	
2013-14 Autodesk University Extension - Participation, shortlisted in final round	
2013-14 Students Design Challenge - Finalists for Street	
Vending Kiosk Product 2013-14 Certificate of Appreciation for participation in the International Day of Museum-2013, organized by Architecture Heritage Department, Dubai Municipality	
<p>Danube Awards hosted by APID (Association of Professional Interior Designers) for Middle East Region</p> <p>The Students of the Department of Interior Design & Architecture, were part of the winning entries for the Danube - APID Students – Interior Design Competition May hosted by APID (Association of Professional Interior Designers) in</p>	<p>The Students of Department of Interior Design & Architecture won two prizes including :</p> <p><u>Category 1</u> : Reception Area for</p>

<p>association with Danube Building Materials FZCO, a leading member of the building materials industry in the Middle East during May 2012.</p> <p>176 individual and group entries with a total participation of 264 students from 12 Universities across the GCC countries brought out the high level of interest for the competition, which also promoted the celebration of the World Interiors Day.</p>	<p>Museum of Contemporary Arts: Cash Prize : AED 5,000</p> <p>3rd Prize : Mohammed Tariq, Shifa Gharatkar , Reem Jahan & Heballa Sayed (Team : 2nd Year, BA ID Program)</p> <p><u>Category 2 : Display Vitrine</u> : Cash Prize : AED 10,000</p> <p>1st Prize: Lakshmi Shetty, 1st Year MAID Program</p>
<p>“Sit & Shade” Competition at Design Days, Dubai won by Students Team for the product “Rec-line”.</p> <p>Design Days, Dubai is the first fair in the Middle East entirely dedicated to collectible and limited edition furniture and objects, presented by a range of international and regional galleries. It was held from 18th to 21st March 2012. The Sit and Shade competition was organized by TASMENA & Design Days, for the Interior Design Universities in the UAE. There were in all 17 entries received in the competition. The Brief was based on use of recycled pallets to create street furniture (sit and shade) in selected areas of Al-Quoz, Al Khor & Satwa</p>	<p>The winning team was Tooba Sarfaraz, Tasneem Mustafa, Sakina Juzer, Inshia Shabbir and Sadaf Khan who received Prize as 6months membership at “Tashkeen</p> <p>The Honorable Mention was awarded to team comprising of Jamila Hassanali, Shazia Fazlullah and Ummu Habiba</p>
<p>The Students of Interior Design win “INDEX Students Challenge – 2011”, amongst 8 participating Universities in the UAE, based on theme, “Reduce Reuse & Recycle”, October 2011</p> <p>Product Name : “The Lazy Locks”.</p> <p><u>Participating Students : (3rd Year BAID)</u></p> <p>Franzita Fernandes, Inshia Shabbir, Sakina Juzer, Tooba Sarfaraz, & Tasneem Mustafa.</p> <p><u>Related Links :</u></p>	<p>Winner amongst 25 Entries from 8 Universities across the UAE.</p> <p>Students got an opportunity to design signature piece at “Natuzzi” – Italian furniture company.</p> <p>The Product Design will be published in magazine “Compasses”.</p>

http://www.indexexhibition.com/page.cfm/T=m/Action=Press/PressID=87	
<p>Firoz Sainuddin, our Alumni, graduated in 2010 wins the award for the Middle East's most promising young interior designer under the age of 30 in October 2011</p> <p><u>Related Links :</u></p> <p>http://www.constructionweekonline.com/article-14403-sainudeen-young-interior-designer-of-the-year/</p>	Alumni Achievement
<p>FOID (Festival of Interior Design) Product Design Competition hosted by APID (Association of Interior Designers)</p> <p>Product Name : "Lamp Shifter".</p> <p>Participating Students :</p> <p>Franzita Fernandes, Tooba Sarfaraz & Jaspreet Kaur (BAID Dept), assisted by</p> <p>Abeer Mohd (Media Dept) & Rahel Nelson (Eng Dept) October 2011</p> <p>Related Links : www.foid.ae & www.apid.ae</p>	Entry selected amongst top 4 for Phase – 2 in the competition along with professional entries. Only Student Entry in the Competition to compete with the professional designers. Work displayed at Jamjar Art Gallery for 3 weeks.
<p>The Students Group consists of 14 Members won the Design Competition organized by TASMENA during INDEX – 2010 at Dubai World Trade Centre</p>	Interaction with Professionals and other Universities in UAE

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

Name of Event	Details of the Event
COA-IIA Entrepreneurship Development Program, 2014	The School hosted the COA-IIA Entrepreneurship Development Program in May 2014 under the auspices of Council of Architecture, India & Indian Institute of Architects. The event was organized by over 100 Architects, President of COA & President of IIA. There were presentations by NIKKEN Sekki, and Fiona Environs.
Faculty Development Program, 2014	The Event was conducted in collaboration with NIASA (National Institute of Advanced Studies in Architecture

)and attended by academicians from India, UAE.
IDEAZ – 2004 to 2012	IDEAZ was an Annual Design Week organized by the School from 2004 to 2012 which included speakers from the design world, design workshops and a design exhibition

31. Code of ethics for research followed by the departments:

The School of Design & Architecture follows the Code of Ethics as prescribed by Manipal University, India which includes:

- Research Ethics Committee headed by the Chairperson of the School sits a member of the Research & Development Program, Manipal University Dubai
- Use of Plagiarism software, “Turnitin”, for review of Masters & Bachelors Dissertation Thesis documents
- Use of End Note Web; referencing software for the Masters & Bachelors Dissertation Thesis documents

32. Student profile course-wise:

Bachelor of Architecture (BArch)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
Academic Year 2014-15	50	10	30	-	-
Academic Year 2013-14	43	12	19	10(84%)	18(95%)
Academic Year 2012-13	32	12	16	3(25%)	3(81%)

Bachelor of Arts – Interior Design (BA ID)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
Academic Year 2014-15	48	05	38	-	-
Academic Year 2013-14	56	13	34	08(62%)	23(68%)
Academic Year 2012-13	42	05	29	02(40%)	15(52%)
Academic Year 2011-12	25	04	16	04(100%)	14(88%)
Academic Year 2010-11	35	06	25	04(67%)	22(88%)

Master of Arts – Interior Design (MA ID)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female

Academic Year 2013-14	10	04	06	02(50%)	04(66%)
Academic Year 2012-13	06	02	03	02(100%)	03(100%)
Academic Year 2011-12	04	01	03	01(100%)	03(100%)
Academic Year 2010-11	05	00	03	-	03(100%)

Certificate Program in Interior Design (CID)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
Academic Year 2013-14	14	05	08	05(100%)	08(100%)
Academic Year 2012-13	16	05	09	05(100%)	08(100%)
Academic Year 2011-12	13	01	09	01(100%)	09(100%)
Academic Year 2010-11	18	07	08	06(86%)	08(100%)

33. Diversity of students

2013-14

Bachelor of Architecture (BArch)	% of students from other universities within the Dubai	% of students from universities in other Emirates in U.A.E	% of students from other countries
59 Nos.	43%	50%	7% No. of Students from India : 4 Nos

Bachelor of Arts – Interior Design (BA ID)	% of students from other universities within the Dubai	% of students from universities in other Emirates in U.A.E	% of students from other countries
98 Nos.	51%	40%	9% No. of Students from India : 2 Nos

Master of Arts – Interior Design (MA ID)	% of students from other universities within the Dubai	% of students from universities in other Emirates in U.A.E	% of students from other countries
15 nos.	56%	22%	22% No. of Students from India : 1 No.

Certificate Program in Interior Design (CID)	% of students from other universities within the Dubai	% of students from universities in other Emirates in U.A.E	% of students from other countries
20 Nos.	47%	33%	20% No. of Student from India : 1 No.

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

Details of Competitive Examination	No of Students cleared
Civil Services & Defence Services	0
NET, SET, GATE	0
IELTS	9
TOEFL	4

35. Student progression

Student progression	Percentage against enrolled
UG to PG	6%
PG to M.Phil.	0
PG to Ph.D.	0
Ph.D. to Post-Doctoral	0
Employed	
• Campus selection	70%
• Other than campus recruitment	10%
Entrepreneurs	20%

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	01
from other universities within the State	01
from universities from other States	00

from universities outside the country	13
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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

Department	Books	No of Periodicals	AV Resources	Thesis	E-Books (EBSCO host)	E-Journals Ebsco host
School of Design & Architecture	1444	14	59	242	14	187
Infrastructure Facilities			Details			
b) Internet facilities for staff and students:			The Permanent Campus of Manipal University – Dubai is Wi-Fi enabled and the faculty and students can access the same using their Notebooks, Tablets and smart Phones. The Faculty is also provided with independent cabins with individual Desktops / Laptops, internet facility, networked printing and scanning / photocopying facilities.			
c) Total number of class rooms			02			
d) Class rooms with ICT facility			01			
e) Students' laboratories			05 <ul style="list-style-type: none"> • 6 No. Multi-purpose Design Studios • AutoCAD Lab Shared with School of Engineering & IT with specialized software including Autodesk – AutoCAD, 3DsMAX, Maya. 			
f) Research laboratories			01 <ul style="list-style-type: none"> • Well equipped construction lab and Pottery Studio 			

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

a. from the host university: Nil

b. from other universities: 01

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:

The Bachelor of Architecture Program was developed and introduced in the Academic Year 2012-13 based on a rigorous assessment exercise done at the School level, the university level with active participation by the Faculty of Architecture, Manipal University – India; University Quality Assurance International Board (UQAIB) & Knowledge and Human Development Authority (KHDA) - Dubai International Academic City and the Accreditation process set up by the Council of Architecture, New Delhi, India.

The Assessment was done as follows :

Time-line	Institution - Accreditation Body	Description
2007-2011	Department of Interior Design & Architecture & Admissions Department, Manipal University, Dubai campus.	A detailed assessment for Four academic years through interaction with prospective parents and students, professionals from the industry and forums including exhibitions, conferences and seminars for starting the Architecture Program in Dubai campus
Sept-2011	Application for Proposed B.Arch. Program for academic year 2012-13 – UQAIB & KHDA	A formal application was sent by the Director-Manipal University, Dubai Campus.
Nov-2011	Intimation to Pro Vice-Chancellor's Office & Registrar Evaluation	Detailed curriculum based on the B.Arch. curriculum followed by Faculty of Architecture at Manipal University, India with relevant additions and changes pertaining to the regional context.
March-2012	Letter for Program Registration issued by UQAIB & KHDA	Letter was issued to the Director's Office by Regulatory Authority giving tentative approval to start the B.Arch. Program provided approval from the

		Home campus & Council of Architecture, New Delhi-India was obtained.
April-2012	Application for starting B.Arch. Program - Council of Architecture, India (COA)	Detailed Application & Report including Form A, B & C with the Fees as prescribed by the COA was sent for review
May-2012	Senate-Manipal University, India	The Senate Meeting was held on the 12 th of May 2012 and the B.Arch. Program for Department of Interior Design & Architecture, Manipal University – Dubai Campus was approved.
June-2012	Council of Architecture – Inspection	The Inspection by the Expert Committee, COA took place in the 3 rd week of June 2012
Aug-2012	Approval to commence B.Arch. Program from COA with an Intake of 40 Students and Center as per CoA Website – KA02A	<ul style="list-style-type: none"> • The COA approved the commencement of the B.Arch. Program in the 1st week of August 2012 • The COA further approved the start of NATA (National Aptitude Test in Architecture) Test Centre at the Dubai Campus on 22nd August 2012 • The Test Centre was activated on the 5th September 2012.
Feb – March 2013	Application for Extension of original approval of 40 Students for B.Arch. Program & additional approval of 40 Students sent to Council of Architecture, India (COA)	Detailed Application & Report including Form A, B & C with the Fees as prescribed by the COA was sent for review
July-2013	Council of Architecture – Inspection	The Inspection by the Expert Committee, COA took place in the 2 nd week of July 2013 and Selection Committee with CoA Nominee interviewed and formalized the

		appointments of Faculty for School of Design and Architecture
Aug-2013	Approval to continue B.Arch. Program from CoA with an Intake of 40 Students and additional intake of 40 Students – KA02A (total intake – 80 Students)	<ul style="list-style-type: none"> The COA approved B. Arch. Program for academic year 2013-14, 2014-15 and 2015-16

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?

- The faculty prepares a detailed teaching plan and the same is incorporated within the academic map prepared by the Class-In-charge for each Semester.
- The faculty submits a detailed report on the course outcome to the Class-In-charge.
- The feedback mechanism plays an important role and the report of the same is maintained as an evaluation criteria.
- The Reports are evaluated by the Chairperson and the academic committee. Based on their recommendations, revisions, additions and alterations to the curriculum are forwarded to the Board of Studies

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

- Detailed feedbacks are taken from the student for the Program, course and the faculty-In-Charge for the same.
- Based on the feedbacks provided, the faculty have a one-to-one interaction with the Chairperson & the professional member of the Board of Studies with reference to the coursework.
- Structured feedback are provided for assessments of students for evaluation.

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

- Annual Alumni Meets have been organized for the past three academic years.
- The Alumni were invited to interact with the expert committee appointed by COA and their feedback played an important role in the approval to start the B.Arch. Program.
- A formal feedback mechanism is being devised for alumni and employers. This will further help the School in enriching the curriculum and strengthen the internship and placement services offered by the School.

43. List the distinguished alumni of the department

Name of Alumni	Details
Nivi Ann Monsy	Lecturer, Manipal University, Dept of Interior Design & Architecture, till January 2014 & authored Book on “Geoffrey Bawa – A Conscious Perception”.
Firoz Sainuddin	Winner of Young Designer Award from CID-2012
Haseela Siddique	Interior Designer, RAK Ceramics, Ras Al Khaimah
Neelanchana Shobhakumar	Interior Designer, Spencer Interiors, Dubai
Sherin Samuel	Design Director
Kamsin Mirchandani	Interior Designer, Aedas Interiors, Dubai
Pooja Solanki	Director, PS Interiors, Dubai
Elsa Somu	Senior Interior Designer, DWP, Dubai
Franzita Fernandes	Interior Designer, Natuzzi, Dubai
Gahana Rajat	Interior Designer, Natuzzi, Dubai
Mehnaz Bari	Manager, SNF Development Centre
Kay Ann Sousa	Interior Designer, IKEA

In May 2008, the School pioneered its first formal placement and internship week. The purpose of the carefully designed program was to provide the students with an opportunity and experience that promoted their personal and professional development and to instill determination and motivation in preparation for future endeavors. The goal of the Internship Program was to provide a real-world work environment where students can learn and develop practical and ethical behaviors that are important in the global workplace and society. Several architectural and interior design firms visited the university premises and conducted on-campus interviews of the undergraduate and graduating batch students. The School has a tie up with following Companies for Internship & Placements since 2010, where in Students have worked during Internship Program and successful placements have been done through the School.

- a. Home Gallery Interiors.
- b. RAK Ceramics.
- c. Al Reyami Interiors
- d. DWP (Design Works Portfolio), Dubai
- e. OFIS, Dubai

- f. Design Diva, Dubai
- g. Natuzzi
- h. IKEA
- i. Design Co-Lab
- j. Camouflage Interiors.

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

Participation in Extension activities	Significance For the Dept
The Group of 53 students and 6 faculty members from the School of Design & Architecture visited Barcelona, Spain in June 2014 on a Study Tour. The aim of the visit was to study the works of Architect Antoni Gaudi and contemporary Architecture and design styles of the city. They also visited Design Schools in Barcelona, Spain for interaction with the faculty and students. The students of both Interior Design & Architecture Program worked on their academic projects based on this Study Tour.	International Exposure to students to study the Architectural Development of Barcelona, Spain and visit Universities of Design & Architecture for collaboration
Jit Gupte, Vice President, Surbana Consulting, Singapore conducted session on “What Architecture School does not teach”, on 18th September 2014	Interactive Session with industry professionals.
Sanjay Badve, Director, Divisionspace, US, India & Tanzania conducted workshop on “Talking Design” for 1st Year students on 10th September 2014	
Preetam Panwar, Director,ZAS Architects, Vancouver, Toronto, Dubai had an interactive session on design of Institutional Buildings in April 2014	
Ezzat Bouzadi, Senior Lighting Designer, ERCO, Dubai conducted workshop in Dialux on 27th March 2014	Software Training for Lighting Design
Floris Smith, Design Director,DSA Architects, Dubai conducted talk on Resort Design on 6th March 2014	Interactive Session with industry professionals.
Franck Nowacki, Design Director, John R Haris & Partners conducted session on Approach to Design on 5th December 2013	
Design Konnect 2013 was event conducted in April 2013, Prof.Y.D.Pitkar, Sir J.J.College of Architecture, India & Dr.Harimohan Pillai, Chief Architect, Archiestudio, Trissur,	Interact with Senior faculty members from India, gave an exposure on topics on

Kerala conducted Architectural Heritage Tour & Sessions on Photography	Heritage & Photography
The team of 36 students and 5 faculty members from the Department of Interior Design & Architecture visited Manipal University, India in January 2013. The aim of the visit was to interact with the home campus, as they also visited Faculty of Architecture, where in students attended a workshop. The itinerary included visit to Goa, with a focus to study works of Gerard Da Cunha, and walk through the heritage area. The Group also visited the Bekal fort in Calicut.	The visit gave an exposure to student on Home campus and also they could study Heritage of Goa, India and interact with Gerard Da Cunha.
The Pottery Workshop was conducted by Sandeep Manchekar, Potter, India from 10th to 14th December 2012 at campus.	<p>The main aim of the exercise was to understand “Forms as 3-Dimension Element of Design”.</p> <ul style="list-style-type: none"> •To understand the process involved in pottery from firing the products in kiln to glazing. •Exhibition of work of students was displayed to showcase the various forms created from the potters clay to final products based on topics given to the students.
Dr.Fadi Jabri, General Manager Nikken Sekki gave a talk on “Sustainable Design” in November 2012.	To understand Sustainable Design solutions
Workshop on “Out of the Box Thinking” b y Vivek Bapat, Architect – India in November 2012	<p>The interactive workshop was designed for the 1st Year B.Arch Students to motivate the students to think different and out of the box.</p> <p>It involved various exercises that inspired the students to explore their creativity, and to develop concentration and visualization.</p>
Workshop on “Bionics” by Violeta Varona	

<p>Violeta Varona, Industrial Designer, Columbia, conducted Workshop for Students of 3rd Year BAID – Product Design Specialization on topic of “Bionics” and Nature, with application on “Furniture Design” on 27th November 2012.</p>	
<p><u>IDEAZ 2012</u></p> <p>The Annual Design Event “IDEAZ 2012”, was conducted from 1st to 5th April 2012. The Key Note speaker was Isabel Pintado, Associate Partner, Godwin Austen Johnson. She has won the highly commended Middle East Interior Designer of the Year 2009 and presented various innovative works, and ranging from luxury hotels, Tripoli’s 7*Guest House, etc. There were sessions by Iona Stanley on Art of writing, John Wigwam on Landscape Design, Elsa Somu, Interior Designer on her design projects at DWP. The students participated in Inter-University competitions based on design skills. The highlight of the event was the session by tee & bee which energised every individual. It was a great experience to see the students work showcased.</p>	<p>Interaction with Industry Experts, academic & industry interface.</p>
<p>Study Tour to Sri Lanka – February 2012.</p> <p>The School had organized Study Tour to Sri Lanka, from 15th February to 21st February 2012. There were about 47 students from Bachelors, Certificate & Masters Program in Interior Design who witnessed the works of Architect Geoffrey Bawa, who is one of the most important and influential Asian architects of the 20th century and a recipient of the Aga Khan Award for Architecture.</p>	<p>The School completed Publication on “Works of Geoffrey Bawa:.</p>
<p>Participation of the School in Design Competition organized for Students & Alumni of Interior Design Department for Design of “Tandoori Junction Restaurant” at Jumeirah Lake Towers, Dubai, introduced in November 2011</p>	<p>Live Project for Students & Alumni of the Department</p>
<p>Visit of Students and faculty to INDEX – Mena Regions largest Interior Design fair at Dubai World Trade Centre, 23rd October 2011</p>	<p>Upgrade on latest trends in Interior Design field</p>
<p>Workshop conducted by the Department as an Event Partner with APID (Association of Interior Designers) as part of Festival of Interior Design, sponsored by Jotun Paints, based on Works of “Piet Mondrian”. on 24th October 2011</p>	<p>Interaction with Professional Interior Designers</p>
<p>Prof Niva Mahanta, Ms Nivi Monsy & 10 Students of</p>	<p>Seminars on various topics by</p>

<p>Masters & Bachelors Course attended a One Day FOID Congress organized by APID during Festival of Interior Design, on 22nd October 2011</p>	<p>Professional Interior Designers</p>
<p>Site Visit to Lucky Recycling Plant, Jebel Ali, Dubai conducted by Prof Abraham Samuel & Prof Bhakti More to study the waste recycling in the UAE, during September 2011</p>	<p>Research for INDEX Competition on “Reuse, Reduce & Recycle”.</p>
<p>Tasmena is a non-profit organization that connects, discusses, collaborates and contributes to the society through design. They conducted lab & workshop, “Cutting through the city”. “Create, emote & Sculpt & Edit”, were the highlights of the lab . It was attended by faculty and students of Dept of Interior Design, Media & Communications, Manipal University in April 2011. Prof Indira Barve & Prof Bhakti More were the lab tutors. Related Links: http://www.facebook.com/MENAseries</p>	<p>Walking through the city is based on Research “Health & the City”, by Tasmena in Germany.</p>
<p>IDEAZ 2011 – Event organized by the Department, The Key Note Speaker was Ms. Lael Isakolu, Managing Director at Design Work Portfolio. The Speakers invited to present on various topics were, Mr Vivek Kale, Industry Consultant for Bentley Systems Ms. Neelanchana Shobakumar, alumni, Interior Design, Manipal University explained the project on Google office There was an interactive session with Shalaka Paradkar, Deputy Editor at Motivate Publishing about iconic expressions. Few more seminars were held by Mr K. Anbalagan, MEP consultant at Proleed Consultants, Ms. Mallika Nair & Mr Firdaus Irani, from Al Gurg Office Furniture and Sabir Haque, Sr. Lecturer from the Dept. of Media and Communications.</p>	<p>An Interactive platform for students to attend workshops and lectures by Professionals.</p>
<p>The Students of Bachelors Course, Certificate Course were taken for Site Visit to Bab AL Shams Resort to study the Interiors for Resort in December 2010.</p>	<p>Study of local architecture and case study for 5-star Resort</p>
<p>IDEAZ 2010 The Department organized ‘IDEAZ 2010’ in March, the 3rd Design Seminar and workshop and an annual interface between the academia and the industry from the 4th to the 6th of May 2010. Mr. Sudhir Regarh, Business Head at Marico was the keynote speaker followed by Ar. Shalini Bhatnagar,</p>	<p>An Interactive platform for students to attend workshops and lectures by Professionals.</p>

<p>an eminent practicing landscape designer in the region and founder of Fiona Environs landscape consultancy. Prof. Abraham and Prof. Indira Barve shared their experiences followed by a list of students, at the meet were final year students at the masters' and bachelors' level who introduced the audience to their final design projects. Mr. Sergio Padula and Ms. Sakina Duggawala of Iguzzini Lighting, a well known Italian firm conducted a workshop on day 2 followed by a series of creative inter-departmental workshops have been scheduled for the 6th of May 2010 which will be held at the Interior Design Department</p>	
<p>Prof. Ashok Iyer participated in the DIAC Educational Forum featuring a panel discussion titled "Is Dubai an Educational Hub?" which included MUDC Director, Dr. B. Ramjee in the 5 member panel on the 5th of May 2010</p>	Interaction with DIAC
<p>Architect Kiran & Designer Andy – Erco Lighting, a well-known German company conducted a workshop for the 2nd year BA ID Students on the 12th of May 2010 for Prof. Indira's coursework in Lighting</p>	Specialization in coursework for lighting
<p>Interior Designer Jaskaran Singh, an alumina of the ID Department gave a talk to the 3rd year BAID students on Central Air Conditioning systems and conducted a site visit of Block No. 6 DIAC on the 19th of May 2010 accompanied by the course coordinator, Prof. Niva Mahanta</p>	Alumni Interaction
<p>Architect Prasun Shrivastav, LEED Consultant for Arkiplan Architectural Consultancy, a Dubai based company gave a presentation to the 3rd & 2nd Year BA ID students on the importance of Sustainable Development and discussed the Royal Mirage project in Dubai on the 21st of April 2010.</p>	Interaction with LEED's Professional
<p>'Al WALK', an Exhibition by Interior Design - Product Design specialization students, was conducted from the 1st to the 7th of April 2010, at the Interior Design Department. The exhibition were a culmination to a series of assignments done by the students at Bastakiya, under the guidance of Prof. Indira Barve</p>	Exhibition on Students work
<p>Prof. Ashok Iyer attended a workshop on Digital Photography by Mr. Raul Gabat, Canon Middle East & Africa DSLR Product Specialist, Official Canon Professional</p>	Interaction with other Universities in the UAE.

Services (CPS) Pro Rep in MEA and Photographer, on the 15th of April 2010 as a part of the 2010 National Digital Imaging Student Competition (NDISC2010) organized by Khalifa University of Science, Technology and Research.	
Prof. Niva Mahanta attended the APID (Association of Professional Interior Designers) University Representatives meeting on the 9th of March 2010.	Interaction with professional bodies
Prof. Indira Barve attended the Art Dubai Open Lecture Series on the 17th of March 2010 featuring the leading artists of UAE and the Middle East Region	Interaction with local artistes
Prof. Indira Barve took the 3rd year BA ID Product Design Specialization students for a Site Visit and Live Design Session to Bastakiya, Bur Dubai in February 2010	Study of Local Art & Culture at Bastakiya
The final round of LG's inaugural 'Conceptualife Competition,' held at Zayed University Auditorium, Dubai on 15th of Feb 2010. It drew to an exciting finish with 12 contestants from the UAE, Saudi Arabia, South Africa, Turkey and Iran, presented their vision for the future of kitchen design and appliances. Two of our students Miss Adheena and Miss Sumerah from the 2nd Year BAID program presented their concepts. They won a certificate of excellence, a LG trophy and a LG Touch phone. LG - Middle East presented a mobile projector to the ID Department	An interactive platform for the students, to present their innovative ideas to the reputed companies.
Prof. Abraham, Prof. Asifa and Prof. Tasneem took the 2nd Year BA ID students for a site visit at Jumeriah Lake Towers on the 14th of Feb 2010. This was a part of their Interior Design Commercial Design Coursework	Site Visit for academic project
As a part of inter-departmental academic cooperation, the advanced Maya program lab work for the 3rd Year BA Media Specialization students started in the Interior Design CAD Lab for the present semester in February 2010	Software applications – Inter Departmental Academic activity.
As a part of inter-departmental academic cooperation, 44 Nos. Students from the 1st Year BA ID Program registered for the ICDL Program being conducted by the Department of Information Technology. Prof. Sophia from the IT Department conducted the training in February 2010	Software applications – Inter Departmental Academic activity.
Prof. Niva Mahanta went for a site visit of the CAPITAL HYATT, Twisted Hotel, a 7 star hotel being constructed in	Site Visit to study ongoing projects in UAE

Abu Dhabi on the 7th of Feb 2010.	
Prof. Indira Barve attended MENALAB 2010 from the 30th of January to the 6th of February 2010. MENALAB 2010 - DESIGNING CHANGE, a TASMENA pilot project offered an intensive five day inter-disciplinary laboratory that was for designers, academics and students who were interested in participating in a dynamic, creative, intensive and collaborative environment.	Interaction of the Department with the designers who are interested in social change through design.
Prof. Niva Mahanta attended a lecture titled 'CulTech for Archaeology and Conservation 'The Documentation of Petra Monuments in Jordan' by Prof. Talal Akasheh on the 5th of January 2010 at Ismaili Center, Dubai	Faculty Up gradation
Prof. Indira Barve and Prof. Bhakti More attended the Annual Association for Professional Interior Designers' (APID) Gala Dinner on the 24th of January 2010 at Grosvenor House	Interaction with Professional Bodies

The Department has always endeavored to use their creative talents to educate people about the advancements in the world of design.

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

Following Teaching Methods have been successfully used by the School

Courses	Teaching Methods
Design Oriented Courses	<ul style="list-style-type: none"> • Continuous Assessments & Inputs in the Design Process • Site Visits, Study Tours as relevant research. • Research Tools • Case Studies • Group Discussions & debates. • Workshops by Professionals with feedback. • Presentations Techniques • External Jury Organize directed reading of design reviews, journals and books and make group discussions to encourage the use of library resources and develop research skills. • Participation in various competitions organized by the industry and workshops attached to these ventures.

<p>Technical Courses such as Construction, Principles of Lighting and Acoustics, Building Services:</p>	<ul style="list-style-type: none"> • Use of Case Studies, visits to site under execution and working projects, joinery workshops, interior product manufacturing industries, architectural construction sites. • Arranging workshops and seminars by Industry experts. • Presentation of Documentaries
<p>Courses on History</p>	<p>To bring in the present day context and generate interest in an essentially theoretical subject, the following has been incorporated:</p> <ul style="list-style-type: none"> • Assignments such as mask making, ancient style clay building, block printing of Greek motif , Islamic calligraphy etc • Projects in set design and dramatics, which are research based for a particular historical period. Enact, design and execute. • Group Discussions, quiz and debates. • Presentation of Documentaries • Visit to various museums. • Heritage walks • Participation in architectural heritage activities of Government agencies
<p>Laboratory based Courses such as Computer Aided Design & Product Design Specialization:</p>	<p>Hands-on training in Laboratories.</p> <ul style="list-style-type: none"> • Invitation to Industry Experts. • University Extension software training * • Participation in various workshops conducted. • Guest Faculty Modules for hands-on courses.
<p>Industry Attachments Programs BAID Program : 60 Days – summer MAID Program : Sem III & IV B.Arch – 1 Year Practical Training</p>	<ul style="list-style-type: none"> • Feedback from Professionals • Industry-Academia Interface.

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

Monitoring Learning Outcome	Methods
Grading of Progressive Work	<p>The School has a well-designed constant assessment system being a very transparent process with the grading parameters introduced to students at the beginning of the semester. A structured feedback is given to the students to understand the evaluation and comments for improvement. Cumulative Grading system is followed to make students understand their academic ranking.</p> <p>A mid-semester report is also submitted to the parents to keep them aware of their wards' academic progress.</p>
Studio Assignments	<p>The student performances are coherently scrutinized following pre-structured quizzes, submission of descriptive answers, deadline-monitored portfolios, and other studio assignments.</p> <p>The School believes in employing tactile references to teach theory courses, in an effort to help the students grasp them better. For this purpose, the students are on a regular basis, exposed to workshops and lectures delivered by professionals from different aspects of the design industry and they are encouraged to work with varied mediums to create models and class projects.</p> <p>For all design-related courses the students are, on a periodic basis, made to give a viva to external jury members, to help them hone their presentation and concept building skills.</p>

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

Refer to Table attached as a part of point no. 44

48. Give details of “beyond syllabus scholarly activities” of the department.

Organization / Event	Details of Activities
<ul style="list-style-type: none"> • <u>Participation in various Activities – APID</u> • APID is Association of Professional Interior Designer which assists the promotion of the highest professional ideals of interior design to governmental bodies, industry and membership • It is a platform where the entire interior design community comprising of designers, decorators, the supply industry, educators and students of interior design, and the various client bodies can come together for common benefit and a thriving community 	<p>The School has been actively participating in various activities conducted by APID like :</p> <p>Design Competitions :</p> <p>FOID(Festival of Interior Design) 2012</p> <p>Danue-APID Design Competition -2012</p> <p>Lectures by Industry experts</p> <p>Seminars by various product suppliers etc</p>
<p><u>Tasmena</u></p> <ul style="list-style-type: none"> • Tasmena is a non-profiting making design organization with an initiative towards building designers. <p>TASMENA INITIATIVE is sponsored by</p> <ul style="list-style-type: none"> • Emirates Foundation • Dubai and Art and Culture Authority • Zayed University • Adobe Foundation 	<p>The Students have been actively involved in all the activities of Tasmena including :</p> <p>Design Walks through</p> <p>Students Challenge Competitions 2010 onwards.</p> <p>Sit & Shade Design Competition – Design Days 2012</p>

From demanding more design courses focused on real design problems, to developing tactical design solutions, to participating in inter-university competitions and events, to browsing and absorbing industry exhibitions and workshops, the students have been deeply involved in every stage of their overall career development; the program truly has always tried to live up to its inherent spirit to promote the cogitative development of every individual part of this professional regime.

The School initiated Alumni Association during “IDEAZ – 2011”, and there have been events held for interaction, which was a great success with more than 50 Alumni Members attending the Event.

As designers, in a bid to shape young inventive minds, the program has always targeted at the overall development of every student and to promote this, we have, on a few occasions incorporated enjoyable outdoor activities into our learning processes, by taking

the student to field trips to help them physically understand and experience spaces. All such excursions are always closely monitored and the outdoor activities are constantly graded based on a report submitted by the students, accompanied by photographs and sketching activities.

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

Name of Program	Recognition
Bachelor of Architecture (BArch)	<p>The Bachelors Program of Architecture has been accredited by the Council of Architecture, New Delhi, India on the 1st of August 2012 based on the inspection of the expert committee on the 26th and 27th of June 2012 with an original Intake of 40 Students</p> <p>The School was the first Test Centre in the U.A.E for NATA (National Aptitude Test in Architecture) which commenced in August 2012.It has an approval for 2013-14, 2014-15, & 2016-17 for Intake of 80 seats.</p>

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

Name of Program	Generating New Knowledge – Basic or Applied
Master of Arts in Interior Design (By Research)	<p>M.A. Interior Design is a research based program with focus on futuristic aspects of the Interior design environment and the spatial needs for a globalized world. Apart from our valued faculty, Architect Rahul Malpure, Assistant professor in Zayed University, Dubai who has his Masters in Fine Arts from the University of Cincinnati, USA also contributes to the course with his expertise in the subject “Design future”.</p>

51. Future plans of the department.

Future Plans for the Department

- The School introduced the Bachelors Program in Architecture in 2012, based on the current program offered by the Faculty of Architecture, Planning & Design at Manipal University, India. This is in continuation with a view of setting up a “School of Built Environment”, where in there would be programmes offered in various disciplines from the macro to micro level, ranging from the study of the built environment to specialized areas including Product Design.
- The approach of the interior design & architecture programmes are based on a concern

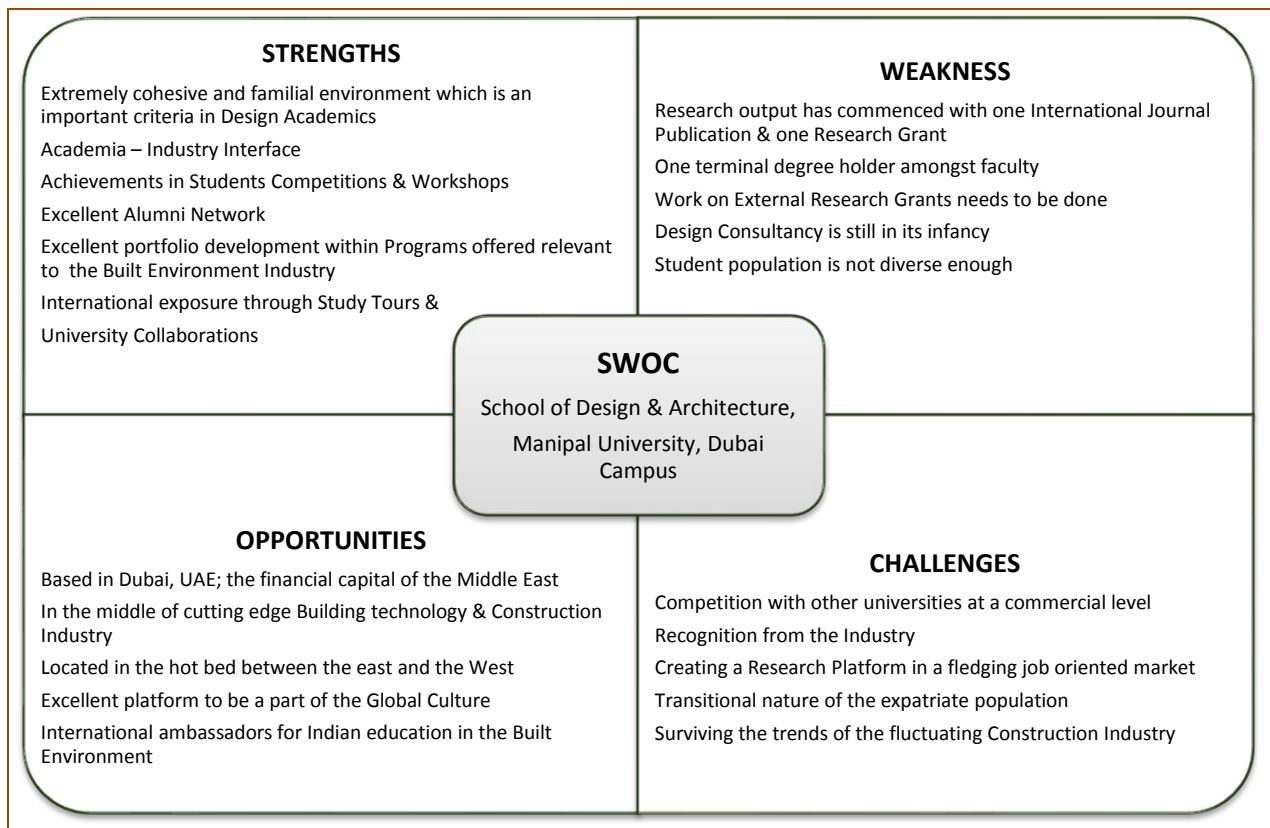
for human beings and the creation of interior settings that support human activities and values. The focus of the programs has always been to generate awareness on the functional and aesthetic qualities of design.

- Introduction of Live Projects and Design Competitions open for Students and Alumni have encouraged creative designs and innovative ideas to be part of the design world.
- As professional programmes designed specifically and strategically to expose young professionals-in-the-making to the vast industry of interior design and planning solutions, students at Manipal University – Dubai Campus, since its inception in 2004, have been well-introduced to the career industry; it is a place where they get their first taste of hands-on designing experiences.
- The School set up a highly specialized workshop and has procured the following equipment's including Band Saw, Drilling Machine, Wood Router, Planner & Buffer enabling students to work with varied materials such as wood, acrylic and a variety of plastics.
- The School has also set up a fully functional pottery studio and has conducted advanced work in ceramics.
- At all faculty meetings, the staff has always voted unanimously that our top priority is to increase our investment in the education of our undergraduate students. Over the next year, several more plans, now in their nascent stages, will slowly unfold our exciting new undergraduate teaching experiments that hold promise to blur the lines between classroom teaching techniques and hands-on laboratory learning.
- In 2009, the graduating Batch of Masters in Interior Design, were part of the design industry.
- Following student and faculty inputs and reactions, the program is being continually re-designed to be able to critically investigate curriculum aims and objectives in a number of subject areas, and reflect on how these might be re-written to become more learner-centered and transparent.
- Another long-term goal is to get the students to interact on a one-on-one level with the finer nuances of the design world, helping them strengthen their interpersonal and communication skills with the actual world.
- Within the next five years, the School of Design & Architecture is slated to become a centre for design excellence within the middle-eastern territories and will proudly represent advanced education; tactile training experiences; a superior reference library (both physical and web-based); membership to renowned international design forums; and a well-developed design-research center.
- The in-house faculty is being encouraged to upgrade their qualifications. Three faculty members completed Masters Level Programs. Asifa Mahajabeen & Sarah Merchant

completed M.B.A in Project Management. Ashok Iyer, Chairperson, registered for his PhD in Architecture at Cardiff (Welsh) College of Architecture, Cardiff University, UK in 2011. Niva Mahanta registered for her PhD in IIT, Guwahati in 2013, Bhakti More registered for her PhD in University of Salford, Manchester, UK in 2013.

- The School recruited its first faculty holding a Doctorate in Architecture from the University of Adelaide, Australia; Dr. Shaji Panicker in Sept. 2014 and endeavours to focus on Research & Consultancy with greater vigour.
- The School is aiming in setting up a PhD Cell in the next five years with a core team of terminal degree holders.
- To sum it all up, academic teamwork is the core character of the Interior Design Department and is essentially focused at churning out superior Interior Design Professionals; implementation of advanced design research methodologies; and introduction of sophisticated Design Specific software.

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



1. **Name of the Department :** School of Life Sciences
2. **Year of establishment:** September 2004
3. **Is the Department part of a School/Faculty of the university?** Yes
4. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**
 - BSc Biotechnology
 - MSc Medical Biotechnology
 - MSc Molecular Biology & Human Genetics
 - PhD Biotechnology

5. **Interdisciplinary courses and departments involved:**

The School of Life Sciences is offering programs in various specializations of life sciences discipline and is willing to initiate interdisciplinary teaching in the fields of health, pharmacy and environmental sciences.

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

The School of Life Sciences, Manipal University Dubai has signed MOU with School of Health Sciences, Lancaster University UK to offer undergraduate honors program in six disciplines as listed below as 1+2, where students will do his/her first year at School of Life Sciences, Manipal University Dubai and remaining two years at School of Health Sciences, Lancaster University UK. After successful completion of course requirements, Lancaster University will award degrees.

- B.Sc. Honors in Biological Sciences
- B.Sc. Honors in Biochemistry
- B.Sc. Honors in Cell Biology
- B.Sc. Honors in Biochemistry + Biomedical Sciences
- B.Sc. Honors in Cell Biology+ Biomedical Sciences

Also, the school has MoU with Edinburgh Napier University, Scotland, where a student gets an opportunity to earn two degrees

- MSc Medical Biotechnology –Manipal University India
- Post-graduate Diploma in Medical Biotechnology - Edinburgh Napier University, Scotland

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

BSc Honors in Biotechnology and BSc Bioinformatics programs were discontinued from the year 2012 on the directions of Knowledge Human Development Authority (KHDA), Government of Dubai, UAE which states that only program offered at Manipal University, India can be offered at Dubai Campus. As these programs are not offered at Manipal University, India we have decided to discontinued them.

Also, MSc Human Genetics and Forensic Sciecne is discontinued from the year 2014 onwards for the above mentioned reasons.

8. Annual/ Semester/Choice Based Credit System

Each academic year is divided into two semesters, and each semester consists of 16 weeks and it's based on the credit hour systems.

- BSc Biotechnology (110 Credits)
- MSc Medical Biotechnology (60 Credits)
- MSc Molecular Biology & Human Genetics (60 Credits)

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

The faculty members of School of Life Sciences involved in teaching courses like Physics and Biology to School of Engineering & IT; And Biological and Physical Sciences courses to students of Foundation program.

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

	Sanctioned	Filled
Professor	01	01
Associate Professors	01	01
Assistant Professors	04	04
Senior Lecturer	01	01
Distinguished Research Fellow	00	00

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

#	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided for the last 4 years
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#	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided for the last 4 years
1	Dr Firdos Alam Khan	MSc, Ph D	Professor & Chairperson	Neurobiology Stem cell Biology	20	1
2	Dr S.M. Faheem	MSc, MTech, PhD	Asso. Prof.	Biotechnology Industrial & Environmental Microbiology	18	-
3	Dr Mohammad Zeeshan Ansari	MSc, PhD	Asst. Prof.	Biochemistry Bioinformatics	8	1
4	Dr Arif Hussain	MSc, PhD	Asst. Prof.	Molecular Biology Oncology	7	1
5	Dr Naushad Rais	MSc, PhD	Asst. Prof.	Biochemistry Human Genetics	7	-
6	Dr Reema Shetty	MSc, PhD	Asst. Prof.	Chemistry	12	-
7	Ms Hussaina Banu	MSc, MPhil	Senior Lecturer	Microbiology Biotechnology	8	-

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

Adjunct faculty: Ms Madumitha Kedhari, MSc

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

Name of faculty	BSc	MSc Medical	Percentage of
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	Biotechnology	Biotechnology/MSc Human Genetics & Forensic Science	classes taken by temporary faculty
Ms Madumitha Kadhikari		Cell Biology (MMB 101) Clinical Genetics & Genetic Counseling (MGF 201)	3.2%

14. Programme-wise Student Teacher Ratio

Programs	Student-Teacher Ratio
BSc Biotechnology	12: 1
MSc Medical Biotechnology	1.6: 1
MSc Molecular Biology & Human Genetics	1.2:1

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

	Sanctioned	Filled
Laboratory Assistant	01	01
Laboratory Technician	01	01

16. Research thrust areas recognized by funding agencies

The Department of Biotechnology encourages its faculty members to conduct research work along with teaching responsibilities to enhance their contribution in new knowledge creations and considering the availability of resources and laboratory facilities, the department of Biotechnology has identified following key research thrust areas for conducting research:

- Cancer Biology and Biotherapeutics
- Human Genetics
- Microbiology
- Bioinformatics

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.

Three faculty members (Dr S.M Faheem, Dr Arif Hussain and Naushad Rias have research collaborations with local Universities like Zayed University Dubai and Khalifa

University Abu Dhabi, UAE in the areas of oncology, applied microbiology and human genetics.

18. Inter-institutional collaborative projects and grants received

The School of Life Sciences, Manipal University Dubai Campus have been collaborating with local Universities for joint research funding, the faculty members have written a joint research proposal with Zayed University, Dubai, and Khalifa University, Abu Dhabi, UAE respectively.

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
- national recognition
- international recognition

Nil

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

Nov 2015: Advanced Molecular Biology lab created in association with Dubai Equine Hospital for conducting research in the area of human genetics.

22. Publications: in the years 2012, 2013 & 2014.

1. Hussain A, Gheewala TM, Vas A, Shah K, Goala P, Khan S, C Sharma (2014). Growth inhibitory and adjuvant therapeutic potential of aqueous wheatgrass extract (AWE) on MCF-7 and HeLa cells. *Experimental Oncology*, 36 (1), 9–16.
2. Sharma C, Vas AJ, Goala P, Gheewala TM, Rizvi TA, Hussain A (2014). Ethanolic Neem (*Azadirachta indica*) Leaf Extract prevents growth of MCF-7 and HeLa cells and potentiates the therapeutic index of cisplatin. *Journal of Oncology*, 2014; 2014:321754.
3. Faheem S. M. and Hussaina Banu (Nov 2014), Gold Nanoparticles in Cancer Diagnosis and Treatment: A Review, *Austin J Biotechnol Bioeng*; 1(6): 5.
4. Hussaina Banu, Betsy Stanley, S. M. Faheem, Renuka Seenivasan, Kumpati Premkumar, Geetha Vasanthakumar (Springer July 2014) “Thermal Chemosensitization of Breast Cancer Cells to Cyclophosphamide Treatment Using

- Folate Receptor Targeted Gold Nanoparticles” Plasmonics.
5. M.A. Khan and S.M. Faheem (2013) “Monitoring bacterial diversity in a full-scale municipal wastewater treatment plant in Dubai by fluorescence in situ hybridization technique” *International Journal of Environmental Research*, Vol 7, No. 2, Spring 2013, Page 479-484.
 6. Munawwar Ali Khan, Javeria Mohsin, Sultan Mohammad Faheem (2013), “Monitoring microbial diversity of a full-scale Municipal wastewater treatment plant in Dubai”, oral presentation at The 4th International Conference on Environmental Science and Development, 19-20, Jan 2013-Dubai (ICESD 2013) sponsored by Asia-Pacific Chemical, Biological & Environmental Engineering Society (APCBEEES): Published in *APCBEE Elsevier procedia* 5 (2013) 102-106.
 7. Hussain A, Mohsin J, Prabhu S, Begum S, Nusri Q, Harish G, Javed E, Sharma C (2013). Sulforaphane Inhibits Growth of Human Breast Cancer Cells and Augments the Therapeutic Index of Chemotherapeutic Drug, Gemcitabine. *Asian Pacific Journal of Cancer Prevention*, 14 (10), 5855-5860.
 8. Rais N, Hussain A, Chawla YK, Kohli K (2013). Association between urinary 6 β -OH-Cortisol/Cortisol ratio and CYP3A5 genotypes in normotensive North Indian population. *Experimental and Therapeutic Medicine*, 5: 527-532.
 9. Al-Safar H, Pillai S.S., Abood L.J, Chandhoke A.S, Usman S.K., Hassoun A., and Rais N (2013) Interaction between angiotensin converting enzyme (ACE) insertion/deletion and aldosterone synthase (CYP11B2) -344C/T polymorphisms in relation to type 2 diabetes mellitus risk in Emiratis. *Int J Genet Mol Biol*. 5(2): 20-27.
 10. Hussain A, Harish G, Prabhu S, Mohsin J, Khan MA, Rizvi TA, Sharma C (2012). Inhibitory Effect of genistein on the Invasive Potential of Human Cervical Cancer Cells via Modulation of MMP-9 and TIMP-1 Expression. *Cancer Epidemiology*, 36(6): e387–e393.
 11. Sharma C, Nusri Q, Begum S, Javed E, Rizvi TA, Hussain A (2012). (-)-Epigallocatechin-3-gallate (EGCG) induces apoptosis and inhibits invasion and migration of human cervical cancer cells. *Asian Pacific Journal of Cancer Prevention*, 13: 1-4..
 12. Faheem S.M., Vasanthakumar G., Pio Santiago C., Grewal R., and Joshi V., (2012) “A pilot study on occurrence of multidrug resistant E.coli and Salmonella in retail meat”; *International Journal of Research in Pharmaceutical and Biomedical Sciences (IJRPBS)* Vol 3 Issue 1, pg 54-60.
 13. Saxena A, Dhillon VS, Shahid M, Rani M, Das TP, Hussain A, Naqvi RA, Deo SVS, Shukla NK, Das BC and Husain SA (2012). GSPT1 methylation and its polymorphic variant together increase risk of breast cancer, and its association with dietary and life style factors among breast cancer patients from Northern Indian population.

- Experimental and Therapeutic Medicine, 4: 1097-1103.
14. Munawwar Ali Khan and Sultan Mohammad Faheem (Dec 2012), “Isolation and Characterization of Filamentous Bacteria from A Full-Scale Municipal Wastewater Treatment Plant in Dubai”, ICECB 2012, Hong Kong: International proceedings of chemical, Biological and Environmental Engineering (IPCBE ISSN: 2010-4618) Vol 49 #25 Pg 124
 15. Hussain A, Priyani A, Sadrieh L, Brahmhat K, Ahmed M, Sharma C (2012). Concurrent Sulforaphane and Eugenol Induces Differential Effects on Human Cervical Cancer Cells. Integrative Cancer Therapies, 11(2):154-65. Epub 2011 Mar 7.
 16. N. Renuka, N. Vijayan, Brijesh Rathi, R. Ramesh Babu, K. Nagarajan, D. Haranath, G. Bhagavannarayana (2012); Synthesis, growth and optical properties of semi organic nonlinear optical single crystal: L-Arginine acetate ,Optik 123 189 – 192.

* **Chapters in Books:** 02

1. “Waste Management Methods and Sustainability” by Faheem S.M and Khan M.A in the book titled “Advances in Bioprocess Technology”

Edt. By Ravindra Pogaku

Publisher: Springer (2015)

Language: English

ISBN 978-3-319-17915-5

2. “Bulking And Foam Causing Filamentous Bacteria In Wastewater Activated Sludge Systems” by S.M.Faheem and M.A.Khan in the book titled “Environmental Biotechnology-Recent Perspectives: Application and New Horizons of Environmental Biotechnology”

Navneet Joshi, K.C.Sharma and Manju Sharma

Publisher: LAP LAMBERT Academic Publishing (April 12, 2012)

Language: English

ISBN-10: 3848425157

ISBN-13: 978-3848425150

* **Books with ISBN with details of publishers :** 02

1. Biotechnology Fundamentals (2011) Author: Firdos Alam Khan (Taylor and Francis Group, USA),

Publisher: CRC Press; 1 edition (September 20, 2011)

Language: English

ISBN-10: 1439820090

ISBN-13: 978-1439820094

2. Biotechnology in Medical Sciences (2014) Author: Firdos Alam Khan
(Taylor and Francis Group, USA),
Publisher: CRC Press; 1 edition (May 8, 2014)
Language: English
ISBN-10: 1482223678
ISBN-13: 978-1482223675

23. Details of patents and income generated

Nil

24. Areas of consultancy and income generated :

Dr Firdos Alam Khan has been working as member of advisory board for 2nd World Biotechnology Conference and Biotechnology and Pharmaceutical Middle East companies on a voluntary basis to give an expert opinion.

Dr Firdos Alam Khan committee member of MEMBS

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

Dr Arif Hussain and Dr. Faheem.SM has been visiting Zayed University, Dubai for collaborative research work.

Dr Naushad Rais has been visiting Khalifa University, Abu Dhabi, UAE for research work.

26. Faculty serving in National committees b) International committees c) Editorial Boards d) any other (please specify)

National committees	International committees	Editorial Boards
Dr Firdos Alam Khan has been nominated as member scientific advisory board of Biotechnology and Pharmaceutical	Dr Firdos Alam Khan has been nominated as member international advisory board of 2 nd Biotechnology World	Dr Arif Hussain is a member of Editorial Review Board and Associate Editor "Current Research Journal of Biological Sciences. Technical Editor, American Journal of Biochemistry and Molecular Biology, Biotechnology, Journal of

Middle East, UAE	Congress East, UAE	Pharmacology and Toxicology, International Journal of Cancer Research, Journal of Medical Sciences Dr Faheem S.M is a member of Editorial Review Board for the Austin Journal of Biotechnology and Bioengineering
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27. Faculty recharging strategies

- The faculty's members of School of Life Sciences have been encouraged participating in the research meeting, conferences, and workshops to enhances their skill-sets and knowledge
- The faculty members of the School of Life Sciences are encouraged to publish their research findings in the peer reviewed scientific international journals. To maintain the quality of teaching among faculty members, the student's feedback are taken on regular basis and report is shared to faculty members that enable them to overcome the shortcomings.
- Faculty members are involved in organization of International conference and participate in faculty development programs conducted in-house.

28. Student projects

- **Percentage of students who have done in-house projects including inter-departmental projects**
90 % of MSc students conduct research projects within the school of Life sciences, Manipal University Dubai, UAE
- **Percentage of students doing projects in collaboration with other universities / industry / institute**
10 % percent of students are deputed in other universities / industry / institutes to conduct research projects

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

- **Faculty:**
Dr Firdos Alam Khan has been appointed as member of International Advisory Board of 2nd World Biotechnology Congress, Dubai, UAE where four members are Noble Laureates.

- **Students**

2013: Ms. Dipinder Sethi and team of other MSc students won the second best student research award at the 4th National Genetic Diseases Conference, Dubai: “Gold nanocomposites: a novel approach towards breast cancer therapy”

2012: Mr. Jason and team of other BSc Biotechnology students has won the first prize for oral presentation in the 3rd National Genetic Diseases Conference- student research session at RAKMHSU, UAE: “Altered α Hb structure and its unstable complex formation with AHSP increases the formation of Reactive Oxygen Species in Hemoglobin Fontainebleau [α 21(B2)Ala-->Pro]: Molecular dynamics simulation and docking studies.”

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

Nil

31. Code of ethics for research followed by the departments

The School of Life Sciences follows a standard code of ethics in order to promote and execute healthy scientific research among its faculty members. The Chairperson of School of Life Sciences reviews research proposals designed by faculty members and review research practices and ensure research data is accurately generated. The research proposals are also reviewed by internal Ethics committee and Research council.

32. Student profile course-wise:

BSc Biotechnology	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
Academic Year 2011-12	25	1	19	100%	100%
Academic Year 2012-13	30	0	24	100%	100%
Academic Year 2013-14	50	4	37	100%	100%
Msc Medical Biotechnology	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
Academic Year 2011-12		2	3	100%	100%
Academic Year 2012-13		0	7	-	100%
Academic Year 2013-14		1	1	100%	100%
Msc Human Genetics and Forensic Science	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female

Academic Year 2011-12		3	6	66.7%	100%
Academic Year 2012-13		2	4	100%	75%
Academic Year 2013-14		0	2	-	100%

33. Diversity of students

BSc Biotechnology	% of students from other universities within Dubai/Sharjah	% of students from universities in other Emirates in UAE	% of students from other countries
Academic Year 2013-2014	73.5		26.5%

MSc Medical Biotechnology / MSc Human Genetics & Forensic Science	% of students from other universities within Dubai/Sharjah	% of students from universities in other Emirates in UAE	% of students from other countries
Academic Year 2013-2014	14%		71%

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

Nil

Usually, after completing degrees, the students either go for higher studies in UAE, UK, Australia, and USA or they do jobs in the local industries. These students usually appear for TOEFL and GRE tests.

35. Student progression

Student progression	Percentage against enrolled
UG to PG	38%
PG to M.Phil.	--
PG to Ph.D.	--
Ph.D. to Post-Doctoral	--
Employed	
• Campus selection	

Student progression	Percentage against enrolled
• Other than campus recruitment	55%
Entrepreneurs	5%

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	0
from other Indian universities	100 %
from non-Indian universities	0

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

Department	Books	No of Periodicals	AV Resources	Thesis
Biotechnology	1507	6	156	46

The School of Life Sciences has approximately 1507 different titles of books on biotechnology (genetics, forensic science, agricultural biotechnology, environmental biotechnology, microbiology and industrial biotechnology, medical biotechnology, recombinant DNA technology, molecular biology) and its associated field (chemistry, biochemistry, microbiology, cell biology, histology, human anatomy, and physiology, plant biology, pharmacology). We have also books on physics, biostatistics, and mathematics. Most of the books are revised and latest additions. The prescribed text books are mostly from internationally recognized authored. The School also has good collection of reference books in various field of biotechnology.

Number of Books - 1507

Periodicals – 6 (as listed below)

- | | | |
|---|--------------------------|---------|
| 1 | Journal of Biotechnology | 24/year |
| 2 | Nature Biotechnology | Monthly |

3	Nature Medicine	Monthly
4	Nature Neuroscience	Monthly
5	Stem cell Research	Bimonthly
6	Science	Monthly

b) Internet facilities for staff and students

- Class rooms and Faculty / staff rooms are equipped with a broad band internet facility from local service provider through Wifi as well as fiber optic cable.

c) Total number of class rooms

- 5 class rooms equipped with white board, and Overhead projectors and internet facility (WiFi connectivity is there in all class rooms)

d) Class rooms with ICT facility: All Five classrooms

e) Students' laboratories

The School of Life Sciences has approximately 6000 square feet of laboratory space, well equipped with state of the art scientific instruments. We have separate laboratories for BSc and MSc students and for doctoral research students.

- Biology/Microbiology Lab
- Biochemistry/Chemistry Lab
- Molecular Biology Lab
- Bioinformatics Lab
- Physics Lab

f) Research laboratories

With a sole aim to encourage research and development activity among biotech faculty members, the School has developed an excellent facility. We have special research labs for

- Cytogenetic-Microscopy and Imaging,
- Cell and Tissue Engineering Lab
- Stem Cell Biology Lab

List of Major Lab Equipment:

S.No.	INSTRUMENT NAME	QTY
1	Analytical Balance	5
2	Audiometer	2
3	Autoclave	3
4	CO2 Incubator	2
5	COD apparatus	1
6	Colony Counter	1
7	Compound Microscope	32
8	Conductivity Meter	5
9	Cooling Micro centrifuge	1
10	Demonstration Bridge 1M Long	1
11	Diffraction grating spectrometer table with gratings	1
12	Electrophoresis Power Supply	6
13	Elisa Reader	1
14	Florescence Microscope	1
15	Epiflorescence Microscope With Camera	1
16	Forced Convection Oven	1
17	Freezer -20	4
18	Freezer -80	1
19	Gel Documentation system	1
20	Gel Documentation system (G Box)	1
21	Hand UV Lamp	1
22	High speed Digital Centrifuge	1
23	Homogenizer	1
24	Hotplate Magnetic Stirrer	4

25	Ice Maker	1
26	Incubator	3
27	Inverted Microscope (Dissection)	1
28	Inverted Microscope With Camera	1
29	Laminar Flow Clean Bench	4
30	Liquid Nitrogen Container	2
31	Liquid Nitrogen Refill Tank	1
32	Mantle Heater	5
33	Micro Centrifuge	1
34	Microwave Oven	1
35	Multi Tube Rotator	1
36	Newtons rings arrangement	1
37	PCR Thermal cycler	3
38	pH Meter	9
39	Polarimeter	1
40	Refrigerator	6
41	Shaking Incubator	2
42	Shaking Water Bath	4
43	Table Top High Speed Centrifuge(cooling)	1
44	Spectrometer	1
45	UV-Vis-Spectrophotometer	2
46	UV- Transilluminator	1
47	Vortex Mixer	3
48	Voltmeter	1
49	Water purification Unit (Diamond-RO)	1

50	Weighing Machine (Height & Weight)	1
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39. List of doctoral, post-doctoral students and Research Associates

a) from the host university

Name of student	Program	Registration status
Ms Madhumita Kedhari	PhD Program School of Life Sciences, Manipal University Dubai	Registered 2015

b) from other universities: Nil

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

The students who achieved 80% and more and 3.6 CGPA at bachelor level receive merit scholarship when they are admitted to first semester of MSc Medical Biotechnology or MSc Human Genetics & Forensic Sciences which include 15% tuition fee waiver and also for 15% tuition fee waiver if they maintain 3.60 GPA in the subsequent semesters.

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

Before starting a new program in the School of Life Sciences, the proposal is first submitted to Manipal University India and University conducts first meeting with the presence of the Registrar, Director Finance, HR Head, Direct Admission, Controller of Examination, Deputy Registrar Academics and these points are being discussed like program objective, feasibility of the program, HR and Infrastructure and formation of board of studies. Based on the recommendations of the members of the Board of studies, new program is submitted for Academic Senate Approval at Manipal University, India, and once the program is approved by Academic Senate, the new program can be offered at the branch campus with the approval of local accreditation agency UQAIB, KHDA, Dubai, UAE.

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?

The faculty's feedbacks are taken, in standard feed back forms, regularly at the end of each semester and also when course structure is changed or modified to ensure the quality of teaching.

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

To maintain the quality of teaching among faculty members, the student's feedback are taken on regular basis and report is shared to faculty members that enable them to overcome the shortcomings.

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

N/A

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

#	Students name	Program	Year	Company's name	Position
1	Mr. Raiees IsmaiL	MSc Human Genetics & Forensic Science	2014	Celergen Health - Dubai	Business Development Manager
2	Ms. Zahra Sadatmand	MSc Medical Biotechnology	2014	Alliance Global LLC-Dubai	Product Specialist
3	Ms. Alma Raheem	BSc Biotechnology	2014	Scientific Clinal Laboratories- Dubai	Medical Representative
4	Ms. Mrinaleni Ganesh	BSc Biotechnology	2014	MARS Chocolate Factory-Dubai	Microbiologist-QC
5	Mr. Saad Sultan Khan	BSc Biotechnology	2014	Dubaiomics- Dubai	Intern-Business Development
6	Ms. Dipinder Kaur Sethi	MSc Medical Biotechnology	2013	Gyma Food Industries	R&D Technician & Quality Controller
7	Mr. Andre Eugene Edgar	MSc Medical Biotechnology	2013	Holistic Intl Testing Services- Dubai	Biochemist

8	Mr. Dian Gunasekara	MSc Human Genetics & Forensic Science	2013	MELT Frozen Yogurt, Dubai	Operations Manager
9	Ms. Husna Rasool	BSC Biotechnology	2012	Zayed University, Dubai	Laboratory Assistant
10	Ms. Khadija Murad	BSC Biotechnology	2012	National General Insurance	Medical claims executive

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

The list of prominent personalities visited and delivered guest lectures at School of Life Sciences.

Visitor's particulars	Purpose of visit	Date of visit
Dr. Sudhanshu Shukla, Postdoctoral Fellow, National Institute of Health, USA	Guest lecture: "Sirtuin 2&3: Novel Targets to mitigate radiotherapy induced neurotoxicity".	22nd Dec, 2014
Dr. Subhash Nair, Biocide Application Specialist, Dow Microbial Control, UAE	Guest lecture: "Impact of Microbes in conventional oil production".	6th Nov, 2014
Dr. Neelam Jawad, Prime Hospital, Dubai	Health Awareness Lecture: "Risk factors and myths of Breast Cancer"	29 th Oct, 2014
Dr Janusz Sadowski, Vice President-R&D BioNavis, Finland	Guest lecture: "Molecular surface analysis for life sciences application".	23rd Sept 2014
Prof Channarayappa, Head-Biotechnology, MSRIT Bangalore	Guest lecture: "Ultrastructural changes in tomato infected with tomato leaf curl virus, a whitefly-transmitted geminivirus".	20th April 2014.
Dr. Saba Qayyum, Research Scholar, Forensic DNA Laboratory, Jawaharlal Nehru Medical College, Aligarh Muslim University-India	Guest lecture: "Occupational Exposure to Nickel and Chromium in the Lock Industry".	6th April, 2014.
Dr. Moemin Abdalla, Director, Norgen Biotek North America	Technical seminar: "Current and future research in the area of	30th Mar, 2014.

	molecular Biology, Biotechnology and Genetics”.	
Ms Judy Sebastian, Food safety consultant, Apex Food Consultants, Dubai, UAE	Career Guidance: “Importance of HACCP in food safety and career opportunities”.	13th March, 2014
Dr. Mohammed Naveed, Director Planning & Operation, Sultan Bin Khalifa Al Nahyan Humanitarian & Scientific Foundation, UAE	“Genetic Basis of multi-factorial disorders”	07 th Nov, 2013
Dr Mohamad Haitham Ayad, Manager, Technology transfer & Reformulation (SMP), Johnson & Johnson Middle East, Dubai	“Drug discovery and development: Trends and Business Models”	05 th Dec, 2013

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

- Conventional white board-based teaching
- Lecture using PowerPoint presentation
- Class room Interactive discussion
- Laboratory demonstration
- Online teaching resources such as www.pubmed.com;
- Field trips to Industries and Hospitals
- Assignment-based discussion
- Continuous Assessment: The students are being continuously assessed throughout the semester to know teaching outcome

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

Industrial field Trip: The School of Life Sciences has been regularly organizing industrial field trips to various biotechnology-associated industries in UAE. The objectives of such field trips are to show the students practical aspects of biotechnology. The undergraduate students have been visiting following industries in UAE.

Field trips for BSc students:

1. Gulf Safa Dairy, Dubai
2. Dubai Sewage Treatment Plant
3. Date Palm Tissue culture Lab, Al Ain
4. Department of Anatomy, Ras Al Khaimah Medical College, Ras Al Khaima

5. Canadian Speciality Hospital, Dubai
6. Quest Vitamins LLC.

Field trips for MSc students:

1. Department of Anatomy, Ras Al Khaimah Medical College, Ras Al Khaimah
2. Forensic Laboratory at Dubai Police Labs, Dubai, UAE
3. Arab Lab Expo, Dubai
4. Neopharma manufacturing, Abu Dhabi

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

The School of Life Sciences encourages its faculty members and students to participate in several extension activities with a social cause:

Blood Donation Drives:

School of Life Sciences, in collaboration with Dubai Blood Donation Centre, Latifa Hospital- Dubai, organized Blood Donation Drives during academic years 2012, 2013 and 2014. The entire student community as well as the staff and faculty of Manipal University, Dubai has supported this noble cause by donating blood. The event was coordinated by the faculty members and students of School of Life Sciences.

Brain O' Bee: Inter School Neuroscience Quiz Competition:

The School of Life Sciences, every year, organizes UAE Level Brain O' Bee Competition in the month of April/May, which is an Inter-School Neuroscience competition. 9th, 10th, 11th and 12th grade students (about 150 students) from different schools of Sharjah, Ajman, and Dubai participate in the event. The winners of the competition were awarded with trophies and certificates. The event was coordinated by faculty members and students of School of Life Sciences.

Manipal Young Innovators 2014:

For the pursuit of scientific excellence, the School of Life Sciences in association with the School of Engineering, jointly organized the Inter-School Science Model Making Competition "Manipal Young Innovators 2014" on May 14, 2014. In this event, over 400 school students of grades 9 – 12 across various schools of UAE exhibited their scientific talents in an interesting and active manner. This event stimulated positive attitudes towards science and technology among the young scientific minds that will help in the development of a knowledge-based society in UAE

Health Drive: The School of Life Sciences has organized a free Health Checkup on December 11, 2014 in association with VLCC Dubai. The event was coordinated and supervised by Ms Joyeeta Bhattacharya, Student Service Officer, faculty members & students of School of Life Sciences.

Beat Diabetes Walkathon: School of Life Sciences joins Beat Diabetes Walkathon, organized by Landmark Group, on Friday, 12 December 2014 at Zabeel Park at 8.00 am under Manipal University Dubai's banner

Breast Cancer Awareness Walkathon: School of Life Sciences under the banner of Manipal University Dubai (MUD) took part in Safe & Sound- Burjuman's Breast Cancer Awareness Walkathon, held at Zabeel Park, Dubai, on the 31st of October 2014. Mr. Ravi Panchanadan (Director and CEO), Dr. Kota Reddy (Academic President), Dr. Firdos Alam Khan (Chairperson, School of Life Sciences), senior faculty members and students have participated in the 3 km walkathon.

48. Give details of “beyond syllabus scholarly activities” of the department.

The School arranges regular field trips to various labs and industries to enable the students learn practical aspects of application of Biotechnology and to gain additional knowledge in various specialized areas. Also, the school encourages students to participate in local conferences and give them opportunity to present their research in the poster form or as an oral presentation.

Student presentations at UAE national conference:

1. Middle East Molecular Biology Congress and Exhibition by Middle East Molecular Biology Society (MEMBS): Sep 2014
2. The 4th National Conference on Genetic Diseases, organized by UAEGDA: HealthCare City Auditorium, Dubai-UAE (29th May 2013)
3. The 3rd National Genetic Diseases Conference, organized by UAEGDA: RAKMHSU campus, Ras Al Khaima-UAE (May 2012)

Following is the list of various student field visits conducted as cocurricular activity:

Visit to DUBAL:

Biotechnology students visited Dubai Aluminium Company (DUBAL) on 27th Oct 2014 where a lecture and the factory tour was organized by DUBAL in coordination with the faculty member Mr Mujeebur Rahaman. Students were given guidelines on safety precautions and were briefed on operations of DUBAL, Introduction on Alumina (Cryolite) Electrolysis- details and prevention of environmental damage with the effluent

water treatment.

Visit to Neopharma:

A field trip to Neopharma, one of the oldest generic drug manufacturing facilities in Abu Dhabi, was arranged for students as part of their curriculum for the courses of Pharmacology and Pharmacogenomics. The trip was coordinated by Mr Mujeebur Rahman and Dr Naushad Rais accompanied the students to the plant. Students went around beta-lactam manufacturing unit, R&D facility, Quality control, and Quality Assurance, Regulatory and Administration departments.

Trip to Gulf and Safa Dairy:

BSc final year and MSc previous students visited Gulf and Safa dairy, one of the oldest dairy companies with over 40 years of successful presence in the UAE, on 20th Nov 2014. Students were acquainted with the practices of manufacturing dairy products such as Milk, Laban and Yoghurt. Students had the opportunity to learn practical aspects of sanitization, pasteurization, manufacturing and quality control of milk, yoghurt and fruit juice. Students were taken around milk processing & pasteurization unit, butter milk & yoghurt section (Culture preparation, incubation and chilling), flavored milk/fruit Juice plant and quality testing laboratory. The tour was organized by Mr Mujeebur Rahaman, conducted by Dr.Faheem, Dr Zeeshan and was guided by Ms.Chandani Rajanikant, a Food safety executive who happens to be an alumnus of school of life sciences.

Visit to Biomedical Laboratory:

The students of BSc Biotechnology, under the guidance of Ms Hussaina Banu, visited the biomedical instrumentation facilities at Canadian Specialty Hospital on Dec 15th, 2014. The trip was organized with the purpose of educating students on several life-saving biomedical instruments such as defibrillator, hemodialysis unit, MRI, CT scanner, CATH, advanced X-ray unit, baby incubator and automated histopathological, biochemical and immunological analysis units.

Visit to Quest Vitamins LLC:

Quest vitamins is an UK based manufacturer of Probiotics, Vitamins and Naturaceuticals located in Jabel Ali Free Zone, Dubai. Senior students of Biotechnology have visited the facility under the expert supervision of Dr Faheem SM accompanied by Dr Zeeshan Ansari, on 7th and 8th of April 2014. The tour was organized with the objective of educating students with various facets of industrial manufacturing such as Probiotic formulation, Industrial scale Bioreactor and accessories, Upstream, Fermentation and Downstream processing, Packaging and Quality control.

Visit to Arab Lab Expo 2014:

Arab Lab expo is the largest technology show serving Middle East and Africa, and showcases the very latest laboratory and instrumentation equipment from the world's leading manufacturers. A trip to the exhibition, at Dubai World Trade & Convention Centre, was organized by the School of Life Sciences on 20th Mar 2014 for senior BSc and MSc students to expose them to the trade show, know the latest advancements in technology, and facilitate interaction and networking with the industry experts. Interestingly, the students met several of the School's alumni working with leading companies and learned about placement opportunities and tips on career development. The educational trip was arranged and planned under the mentorship of Dr. Zeeshan Ansari and Dr. Faheem SM. The students were accompanied by the laboratory assistant Mr. Imran Khan.

Visit to Central Veterinary Research Laboratory:

Both MSc and BSc Honors students visited Central Veterinary Research Laboratory (CVRL) located in Dubai. The visit was organized and accompanied by Dr. Geetha Vasanthakumar. During their trip to CVRL, students had an opportunity to learn DNA sequences, Nucleotide synthesizer, Robot spotting and quantitative RT-PCR in action.

Field trip to the "Dubai Sewage Treatment Plant(DSTP):

DSTP located at Al Aweer was arranged by Mrs. Hussaina Banu to the second year students of B.Sc. Biotechnology as a part of "Environmental Biotechnology" subject on 20th Dec, 2011. The objective is to make the students understand the industrial applications of principles of biotechnology. The students observed the collection of domestic wastewater by sewers, operation of aerobic and anaerobic treatment processes by means of bar screens, settling chambers, surface aerated basins, trickling filters, anaerobic sludge bioreactors, and tertiary treatment methods like sand filters, lagoons, disinfection and odour removal chambers. In addition to the field visit, the students also had a lab visit during which they learnt the various chemical and biological tests performed on a daily basis to control the treatment processes; and were explained about the computerized systems to monitor the functioning of the entire treatment plant. The students were also exposed to the processing steps to convert the tertiary treated effluent for reuse in irrigation, and to convert the treated sludge to manure for use as a soil conditioner and fertilizer.

Visit to Canadian Hospital Dubai:

The third year students of B.Sc. Biotechnology visited the Canadian Hospital Dubai to

observe the instrumentation and working of various biomedical equipment, under the supervision of Ms. Renuka Seenivasan. The advanced biomedical techniques used in the medical fields such as: Dialyzer, Angiography, X-ray, MRI, CT scan, Ultrasonography, Cardiac unit (ECG) and EEG were demonstrated by experts and physicians. This field trip ultimately helped the students to gain an in depth knowledge of the practical applications of various biomedical principles.

Visit to Date Palm Tissuculture Lab:

In order to get an insight of the plant tissue culture techniques used in the field of “Agricultural biotechnology”, an educational tour to Date Palm Tissue Culture Laboratory (DPTCL) at Al Ain affiliated to the UAE University was arranged by Dr. Rajyalakshmi, Dr. Raziuddin & Ms. Hussaina Banu. The students were taken to sterilization, media preparation, inoculation and incubation areas; and the tissue culture techniques were briefed to them stage-by-stage by the experts. They also had a brief introduction about the DNA barcoding of date palm trees; and visited the green houses for hardening the plant lets. Altogether, the students realized the significance of plant tissue culture techniques for the betterment of agriculture.

Visit to Anatomy Lab at RAKMHSU:

In order to educate students on various aspects of Human Anatomy, an educational trip to RAK Medical and Health Sciences University was arranged by Dr. Mohammed Raziuddin and Chhavi Sharma on 7th December 2011. The students were taken to anatomy lab, the faculty members explained the internal organs like stomach, intestine, heart, brain, major blood vessels using cadaver. The professors briefed about the skull and vertebrae. The students visited anatomy museum, there they could see different stages of human development. The students also allowed visiting various laboratories, like biochemistry, physiology lab, and clinical laboratories. The trip was a great success as it helped to understand anatomy and physiology fully.

Visit to Animal house facility at Dubai Pharmacy College:

An educational trip for students to Dubai Pharmacy College was organized by Dr. Naushad Rais on 26th December 2011 to obtain training in animal handling and experimentation. Followed by a lecture on clinical pharmacology, routes of drug administration and draw blood samples from experimental animal, they were taken around the college and demonstrated different techniques regarding the research and drug testing on animals such as mice, rats and rabbits. They also visited the animal house to see the animals within their habitats.

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

The undergraduate, post-graduate and doctoral program offered by School of Life Sciences Manipal University Dubai is recognized and accredited by Knowledge and Human Development Authority (KHDA), Government of Dubai, UAE.

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

- Advanced Laboratory Training Program: With a view to enhanced student's laboratory skill sets, the School of Life Sciences is organizing short-term laboratory training programs. The students have been learning various laboratory techniques such as molecular biology and genetic techniques. List of training conducted at Department of Biotechnology is given below:
 - Biotechniques training on FISH technology: Detection of bacteria by Fluorescent in-situ hybridization (FISH).
 - Biotechniques Training on PCR technology: Detection of foodborne bacteria by polymerase chain reaction.
- Annual Biotech Meet: The School of Life Sciences believes in sharing the information and scientific data relevance to the biotechnology and organizing an annual biotechnology meet is a step towards this direction. The School has been calling experts from healthcare, medical, biotechnology industries to share the knowledge of current advancement in the field of biotechnology to students and faculty members, so far we have successfully conducted 4 annual biotechnology conferences.
- Research Publications: So far, more than 30 original peer-reviewed research papers have been published involving work of faculty members and students of the School of Life Sciences, Manipal University-Dubai.
- Textbooks and Chapters: Faculty members have contributed towards publication of textbooks and chapters related to their respective fields of specialization in Biotechnology.

51. Future plans of the department.

Academic plans

The School of Life Sciences is striving to become a center of excellence in biotechnology education, training, and research in UAE region. After successfully launching the

undergraduate and postgraduate programs in biotechnology, the School has also initiated its doctoral research program in biotechnology where students can do research work in various emerging fields of biotechnology such as genetic disorders, stem cell technology, microbiology and cancer biology and pharmacogenomics.

According to KHDA, Dubai regulations, the programs and the curriculum is currently being completely aligned with that of the parent campus.

Further, assistance is being provided for student placements after graduation. Also, the school is planning to have MoUs with more industries, research organizations and universities within UAE for the purpose of student training/internships, field trips and research.

Research plans

The School of Life Sciences would like to upgrade its laboratory facilities by introducing advanced laboratory equipment and technology and also would like enhance laboratory skill sets of existing faculty and staff members. With a view to get international recognition in research and development domain, the faculty members of the School of Life Sciences will be submitting research proposals to various funding agencies based in India, UAE, Europe, and USA. The department is also keen to develop industrial interaction in the field of biotechnology and Biopharmaceuticals locally as well as internationally by engaging in collaborative research and training programs. In the next five years, the School would be a center for excellent in the entire Gulf region for the advancement of biotechnology education, training and research.

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

Strength

- The first University to offer undergraduate, post-graduate and doctoral program in biotechnology in the entire Middle East.
- Qualified faculty with diverse experience in the respective areas of biotechnology
- Highly diverse and integrated course curriculum
- Hands-on training and intensive laboratory sessions
- Excellent laboratory facility equipped with advanced equipment.

Weakness

- Absence of animal house for animal testing and animal-based experiment

Opportunities

- Tremendous scope to develop biotechnology education and research
- High prevalence of genetic diseases in UAE/Middle East which provide a platform for educating people of its diagnosis and treatment by biotechnology education
- Enormous investment in health care sectors like creations of health care city in Dubai would enhance job prospects for biotechnology students

Challenges

- Lack of research grant/funding opportunities in UAE and Middle East
- Lack of biotechnology-based industry in the UAE and Middle East
- Lack of research and training opportunities for students in UAE

1. Name of the School : SCHOOL OF ENGINEERING & IT

2. Year of establishment:

INFORMATION TECHNOLOGY : 2003
 ENGINEERING : 2008
 Merging of ENGINEERING & IT : 2013

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

Yes, Part of Manipal University, Dubai Campus.

4. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

UG courses offered by the School
<p>Bachelor of Technology (BTech) (4 years)</p> <ul style="list-style-type: none"> • Civil Engineering • Mechanical Engineering • Mechatronics Engineering • Electronics & Communication Engineering • Computer Science & Engineering • Chemical Engineering (Started in September 2014)
<p>Bachelor of Science in Information Systems & Management (ISM) (3 Years)</p> <p>Specializations:</p> <ul style="list-style-type: none"> • Software Management • Network Management • E- Commerce and Technology Management
PG courses offered by the School
<p>Master of Technology (MTech) (2 years)</p> <ul style="list-style-type: none"> • Digital Electronics & Advanced Communication Engineering • Manufacturing Engineering & Technology • Construction Engineering & Management (Started in February 2015)
<p>Master of Science in Information Systems (IS) (2 Years)</p> <p>Specializations:</p> <ul style="list-style-type: none"> • Database Systems • Internet Systems & Security • E-Commerce • Software Engineering

Certificate Program in Graphics & Multimedia (CGM)(1 Year)
New programmes Approved (Commencing from September 2015)
Nil

5. Interdisciplinary courses and departments involved:

Course Name	School
Essentials of Management & Engineering Economics	School of Business
Biology for Engineers	School of Life Sciences
Communication skills in English	General Studies
Technical Report Writing	General Studies
Principles of Management	School of Business
Accounting and Financial Management	School of Business
Organizational Behavior	School of Business
Customer Buyer Behavior	School of Business
Supply Chain Management	School of Business
Mathematics and Statistics	School of Business

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

The department has collaborated with industry partners (EMC², CISCO and ECDL/ICDL) and mapped the relevant certification courses under their hood to the university courses in the curriculum of the B.Tech & B.Sc. ISM program.

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

Bachelor of Technology in Automobile Engineering

The program is being closed as there have been no student enrolments since its approval in November 2012. Thus, beginning academic year 2015-16, this program was no longer be offered and no new students were admitted.

Bachelor of Technology in Instrumentation & Control Engineering

This program is being closed as no student has joined the program since its inception in September 2008. Thus, beginning academic year 2014-15, this program was no longer be offered and no new students were admitted.

8. Annual/ Semester/Choice Based Credit System :

Semester

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

School offers its services to the following schools:

Department	Programs
School of Design & Architecture	BArch
School of Life Sciences	Foundation
School of Business	MBA and BBA
School of Media & Communications	BA in Media & Communications

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

	Sanctioned	Filled
Professor	4	1
Associate Professors	9	3
Asst. Professors	29	27

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

#	Name	Qualification	Designation	Specialization	No. of Years of Experience (T: Teaching I: Industry)	No. of Ph.D. students guided for the last 4 years
1	Dr. S.V. Kota Reddy	PhD, ME, BE	Academic President	* Thermal & Fluid * Refrigeration & AC * Mechanical Engineering	T:26	Nil
2	Dr. S. K. Pandey	PhD, MTech, MSc	Chairperson	* Research Methodology * Software Engineering * Object-Oriented concepts * IT Project Management * Quality System	T - 10 I - 1	NIL

				* Computer Network		
3	Dr. Raghavendra	Ph.D,MSc, BSc	Assoc. Prof.	* Mathematics	T:11	Nil
4	Dr. Ravishankar Dudhe	PhD, MTech , BE	Assoc. Prof.	* Microelectronics * Electronics	T:22 I:1	Nil
5	Dr. Sophia Rahman	PhD, MS Computer Science	Asst. Prof. (Selection Grade)	* Database * Data Mining, * Computer Programming (C,C++ and .Net)	T - 18	Nil
6	Dr. Chithirai Pon Selvan	PhD, ME, BE	Asst. Prof (Selection Grade)	* Manufacturing Systems * Computer Aided Design * Production Engineering	T:17 I:2	Nil
7	Dr. Ramaprasad Poojary	PhD, MTech, BE	Asst. Prof (Selection Grade)	* Image Processing * Digital Electronics & Advanced Communication Engineering * Electronics & Communication Engineering	T:19	Nil
8	Dr. Vijay Kumar	PhD, MPhil MSc, BSc, BEd	Asst. Prof (Selection Grade)	* Chemistry	T:20	Nil
9	Dr. Vijaya Arjunan	PhD, ME, BE,	Assoc. Prof.	* Computer Science * Image Processing	T: 15 I: 2	Nil
10	Dr. Roma Raina	PhD, MTech	Asst. Prof (Selection Grade)	* Radial Power Distribution * Controls & Instrumentation	T:19	Nil
11	Dr. Shivmurthy	PhD, MTech, BE	Asst. Prof (Selection Grade)	* Micro & Nano	T: 15 I:10	Nil

	B		Grade)	Composites * Mechanical Engineering		
12	Mr. M I Jawid Nazir	PhD (Submitted Thesis) ME	Asst. Prof (Selection Grade)	* Computer Networks * Computer Architecture * Multimedia Technologies for Learning System	T - 20	NA
13	Mr. Zaheeruddin Ahmed	PhD (Pursuing) MCA MBA	Asst. Prof (Selection Grade)	* Database * Internet and Web Technologies (.NET, Java) * Graphical Tools and Technologies * 2D and 3D Animation Tools * Information Systems	T - 17	NA
14	Mr. Sachidananda	PhD (Persuing) MSc(Engg) by Research BE	Asst. Prof (Selection Grade)	* Mechanical Design * Mechanical	T-16	NA
15	Mr. Abdulla K P	PhD (Persuing) MTech, BE	Asst. Prof (Selection Grade)	* Soft Computing * Power electronics * Instrumentation Engineering	T:16	NA
16	Mrs Sukhwant Kaur	PhD (Persuing) MS , BTech	Asst. Prof (Senior Grade)	* Software system * Computer Science & Engineering	T:15	NA
17	Mr. Suresha R	MTech, BE	Asst. Prof (Senior Grade)	* Power Electronics * Electronics Engineering	I:3 T: 16	NA

18	Mrs. Sumathy Ayyalusamy	MTech, BE	Asst. Prof (Senior Grade)	* Laser & Electro optics * Electronics & Communication Engineering	I:4 T:9	NA
19	Mr. Sampath Suranjan	MBA, MTech, BE	Asst. Prof (Senior Grade)	* HR * CAMDA * Mechanical Engineering	T: 9	NA
20	Mr. Ramesh Vandanapu	PhD (Pursuing) MTech BTech	Asst. Prof (Senior Grade)	* Geotechnical Engineering * Concrete Technology * Civil Engineering	I:7 T: 5	NA
21	Mr. Suresh. B	ME, BE	Asst. Prof (Senior Grade)	* Communication System * Electronics & Communication Engineering	I:1 T:10	NA
22	Mrs Susan John	MSc(Engg), BTech	Asst. Prof (Senior Grade)	* Geotechnical Engineering * Civil Engineering	T:7	NA
23	Mr. Shamik Palit	MTech BE		* Computer Science & Engineering * Computer Science & Engineering	I:6 T:6	NA
24	Mr. Alias Kurien	MEd,MSc, BSc	Asst. Prof (Senior Grade)	* Educational Technology * Applied Mathematics * Mathematics	T:17	NA
25	Mr. Ganesan	MTech, BE	Asst. Prof (Senior Grade)	* Digital Communication & Networking * Electronics & Communication	T:15	NA

				Engineering		
26	Mr. Anil Antony	MSc (Engg), BE	Asst. Prof (Senior Grade)	* CNC Machining * Industrial & Production Engineering	T:8	NA
27	Mr. Saawan Shetty	MTech,PGD, BE	Asst. Prof (Senior Grade)	* Manufacturing Engineering * Marine Engineering * Mechanical Engineering	T:7 I: 1	NA
28	Mrs Deepa Varghese	MTech, B.E	Asst. Prof (Senior Grade)	* Hydraulics Engineering * Civil Engineering	T:8	NA
29	Mr. Anil Babu.S	ME, BE, DAE	Asst. Prof (Senior Grade)	* Automobile Engineering	I:5 T:5	NA
30	Mrs Rashma RSV	MTech, BTech	Asst. Prof (Senior Grade)	* Geotechnical Engineering * Civil Engineering	T:4	NA

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

Under Graduate and Post Graduate Programs:

#	Visiting Faculty /Industry Expert	Designation	Organization
	Prof. Nagaraja	Visitng Faculty/Associate Professor	Manipal Institute of Technology, Manipal, India
	Dr. G.V. Rao	Visiting Faculty	--
	Dr. Asha Nair	Adjunct Faculty	--
	Ms. Farina Riaz	Adjunct Faculty	--
	Ms JamalFathma	Adjunct Faculty	Industry Expert
	Ms. Sujata	Adjunct Faculty	Industry Expert
	Dr. Masroor Alam	Assistant Professor	University of Modern Science, UAE

	Dr. Ritesh Srivastava	Assistant Professor	Skyline University College, Sharjah, UAE
	Dr. Deepak Kalra	CEO	AI ASAS Information Technology, Dubai, UAE
	Dr. Faiz Ishaq	Professor and Head of Campus	Shahid Zulfikar ali Bhutto Institute of Science and Technology (SZABIST), Dubai, UAE
	Dr. Usman Zafar	Managing Director	AI Taqnya Business Solutions, Dubai, UAE
	Mr. Kripa Shanker	Database Administrator	Road and Transport Authority, Dubai, UAE
	Mr. Afsar Nawaz	System Administrator	Saptech, Dubai, UAE
	Mr. Manish Agarawal	ERP Consultant	AI Safer Group, Sharjah, UAE
	Mr. Akram Kazi	CEO Mena Region	RAS Infotech, Dubai, UAE
	Mr. Noorish	Project Manager	GEMS Group, Dubai, UAE
	Mr. Najam Ahmad	Corporate Trainer	SEO International, Dubai, UAE
	Ms. Beenu Mago	Adjunct Faculty	
	Mr. Hasan Ishaq	IT Consultant	--
	Ms. Farah Akbar	Consultant	Middle East Training Institute
	Ms. Shiv Shankari	Adjunct Faculty	--
	Ms. Nitika Pawha	Adjunct Faculty	--
	Mrs. Swapna Vasudevan	Adjunct Faculty	--
	Mrs. Farida Begam	Adjunct Faculty	--

* Certificate Program in Graphics and Multimedia

#	Visiting Faculty /Industry Expert	Designation	Organization
1	Mr. Amjad Desia	ADOBE Instructor	TwoFour54
2	Mr. Demo Valve	General Manager	Polyform Ads
3	Mr. Thomos Zakaria	Manager	Idea Services
4	Mr. Sanjay Nair	Manager	Full Circle

5	Mr. Sirwan Hajo	Designer	r3D Studio
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* The program is tool based and requires experienced industry personnel.

13. Percentage of classes taken by temporary faculty : 15%

14. Student Teacher Ratio of the school: 16.7: 1 (This ratio is calculated by taking into consideration Full time and Parttime/Adjunct Faculty).

15. A) Number of academic support staff (technical) :12

B) Administrative staff (sanctioned and filled): Central Administration

16. Research thrust areas recognized by funding agencies

Discipline	Thrust Area
Mechanical	<ul style="list-style-type: none"> Refrigeration & Air-conditioning Computer Integrated Manufacturing Micro & Nano Composites
Electronics & Communication	<ul style="list-style-type: none"> Digital Signal Processing MEMS Technology VLSI & Embedded System Wireless Communication (Mobile Communication, Cloud Computing)
Mechatronics	<ul style="list-style-type: none"> Automation & PLC
Computer Science & Information Technology	<ul style="list-style-type: none"> Web Development and E - Learning Data Mining Device Management Networking
Civil	<ul style="list-style-type: none"> Admixtures in Concrete Forensic Geotechnical Engineering

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.

Project Title	Funding Agency	Project Fund
2013- 2014		

Simulation Protocol Development for MEMS Devices	Research Project Fund, Manipal University, Dubai Campus	AED 15,000
Direct Exchange Ground Source Heat Exchanger	International Funding Agency: American Society of Heating Refrigerating and Air Conditioning Engineers (ASHRAE)	USD 5000
2012- 2013		
Solar Liquid Desiccant Air Conditioning System	International Funding Agency : American Society of Heating Refrigerating and Air Conditioning Engineers (ASHRAE)	USD 4000
2011-2012		
Ground Source Heat Pumps	International Funding Agency : American Society of Heating Refrigerating and Air Conditioning Engineers (ASHRAE)	USD 5000

18. Inter-institutional collaborative projects and grants received

a) All India collaboration b) International :

Nil

19. School 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** - CISCO Network Lab, ECDL / ICDL, Nissan Arabian Automobile Laboratory , Robotics & 3D Printing Laboratory

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

Lab	Industry/Corporate
Automobile Engineering Laboratory	Nissan Arabian Automobile
CISCO Network Lab	CISCO Academy

22. Publications:

Number of papers published in peer reviewed journals (national / international)	89
Monographs	Nil
Chapters in Books	01
Edited Books	Nil
Books with ISBN with details of publishers	06
Mean impact factor of the best journals in which publication were made (last 5 years)	1.0 (Approx)

Publication Details	
Papers published in peer reviewed journals (national / international)	
2010	
1.	Zaheeruddin Ahmed, Pandey S.K.(2010), “Information Technology Reinforcement for better Higher Education Services”, Journal of Advanced Computing, India, Volume 1, Issue 1.
2.	Zaheeruddin Ahmed, Pandey S.K. (2010), “Scale Information Technology Services in Higher Education with Lean Six Sigma “, Journal of Commerce & Management, India, Volume 3; Issue 1; January 2010, ISSN: 0974-1879.
3.	Sukhwant Kaur, H.K.Kaura and Mritunjay Ojha(2010),” Development of Optical Character Recognition Software Package for Mobile Phones” International Journal of Computer & Communication Technology (IJCCT), Volume 1; Issue 2,3,4;PP 3-8, 3-5 August 2010.
4.	Sukhwant Kaur, H.K.Kaura and Mritunjay Ojha(2010),” Development of Optical Character Recognition Software Package for Mobile Phones” <u>Information Processing and Management Communications in Computer and Information Science</u> Volume 70, 2010, pp 601-604, Springer-Verlag Berlin Heidelberg ONLINE ISBN: 978-3-642-12214-9
2011	
5.	Banu Rahaman S, Prof. M. Shashi, "Sequential Mining Equips e-Health with Knowledge for Managing Diabetes", International Journal of Information Processing and Management (Impact Factor 0.62), Vol. 2, No. 3, pp. 74 ~ 85, July, 2011.
6.	Satyarajan, D. and Akre, V. L., (2011), “Open Source Software Adoption : An Academic Perspective”, Special Issue of International Journal of Computer & Communication Technology (IJCCT), Volume 2, issue 5, pp 38 – 42.

7. M.Chithirai Pon Selvan, Dr. N. MohanaSundaraRaju,. “Effects of process parameters & depth of cut model for abrasive waterjet cutting of ceramics”. International Journal Engineering Research and Applications, vol 1, issue 3, pp. 929-933. 2011.
8. M.Chithirai Pon Selvan, Dr. N. MohanaSundaraRaju, Dr. R. Rajavel, 2011. “Effects of process parameters on depth of cut in abrasive waterjet cutting of cast iron”. International Journal Scientific and Engineering Research, vol 2, issue 9. 2011.
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23. Details of patents and income generated

NIL

24. Areas of consultancy and income generated

School is providing consultancy services in the field of web and application development to few of its internship industry associates without any consultation fee.

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

- Faculty have visited the laboratories of the following institutions :
 - Zayed University, Dubai
 - Khalifa University, Sharjah
 - Etisalat Academy, Dubai

- Emirates Aviation Services, Dubai
- Faculty have visited the following companies and R&D centers :
 - ETA Data Center
 - PitsnLand CD manufacturing industry
 - Hellmann World Wide Logistics

26. Faculty serving in

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

Serving Body	Faculty name
ASHRAE student activity chapter	Dr. S.V. Kota Reddy
BOS, MIT, Manipal	Dr. S.V. Kota Reddy
Editorial Board Member International Journal of Vocational and Technical Education (JVTE)	Dr. S.V. Kota Reddy
Member of Editorial Board of Journal of Innovations in Electronics and Communication	Dr. S.V. Kota Reddy
Member of Advisory Board of Arab Unity School, Dubai, UAE	Dr. S.V. Kota Reddy
Quality Assurance Board, Islamic Azad University, Dubai, UAE	Dr. S. K. Pandey
Project Guide, Bansathli University, Rajasthan, India.	Dr. S. K. Pandey
Program Review Committee, SZABIST, Dubai, UAE	Dr. S. K. Pandey
Editorial Board Member of International Journal of Network Security & its Applications (IJNSA)	Dr. Ramaprasad Poojary
Editorial Board Member of International Journal of Computer Networks & Communications (IJCNC).	Dr. Ramaprasad Poojary
<u>Editorial Board Positions:</u> <ul style="list-style-type: none"> ➤ Mechanical Engineering Research (ISSN: 1927-0607) ➤ European Journal of Advances in Engineering and Technology (ISSN: 2394-658X) ➤ Journal of Engineering and Technology Research (ISSN: 2006-9790) ➤ International Journal of Mechanical Engineering Research (ISSN: 2141-2383) ➤ Mechanical Engineering: An International Journal ➤ i-manager's Journal on Material Science (ISSN: 2347-2235) 	Dr. Chithirai Pon Selvan

<ul style="list-style-type: none"> ➤ GSTF Journal of Engineering Technology (ISSN: 2251-3701) ➤ i-manager's Journal on Mechanical Engineering (ISSN: 2230-9055) 	
IEEE UAE Section	Mr. M. I. Jawid Nazir
Fellow Member International Congress of Chemistry and Environment	Dr. Vijayakumar
Senior Member: Asia-Pacific Chemical, Biological & Environmental Engineering Society, (APCBEEES), www.cbees.org	Dr. Vijayakumar
Member of Board of Studies SOEIT	Dr. Raghavendra R Dr. RaviShanker Dhudhe Dr. Sophia Rahaman Prof. Suresha Prof. Sukhwant Kaur Prof. Ramesh V. Prof. Zaheeruddin Ahmed Prof M I Jawid Nazir
Elected co-opted member from academics by Broad cast Engineering Society (I), Chennai chapter	Dr R Vijaya Arjunan
Chairperson, International Conference on Advances in Recent Technologies in Communication and Computing, organized by ACEEE technically co-sponsored by IEEE Computational Society, 2009.	Dr R Vijaya Arjunan
Designated reviewer, International Conference on Advances in Computing, Communications and Informatics, 2013.	Dr R Vijaya Arjunan
Convenor, Manipal Conference on technology Management (MiCTM), Technically Sponsored by IEEE UAE Section (2011)	Dr. Sophia Rahaman
The Second International Conference on Digital Information Processing, E- Business and Cloud Computing (DIPECC 2014), Islamic Azad University, UAE Branch, Dubai - UAE, April 9 – 11, 2014.	Dr. Sophia Rahaman
International conference on “Current Trends in Information Technology” (CTIT Dubai 2013) -Hosted by Higher College of Technology – Dubai Women’s College	Dr. Sophia Rahaman
Technical Committee, Manipal Conference on Technology Management, Manipal University, Dubai, 2011	Dr. Sophia Rahaman

Reviewer – Peer reviewed Journal – International Journal of Digital Content s Technology and its Applications (AICIT)	Dr. Sophia Rahaman
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27. Faculty recharging strategies :

Name of Faculty Development Program	Names of Faculty benefited	Year
“EE-COT-1406-1 Certificate of Teaching” online training was organized by GlobalNxt university. Duration of the training was 6 weeks.	Dr. Roma Raina Dr. Ravishankar Dudhe	2014
Workshop on Mathematics: <ol style="list-style-type: none"> Recent developments in the field of Mathematics. Solutions of differential equations in real life situations. Recent innovations in Mathematics used in computers. 	D. P. S. Sharjah School Teachers	2013
Research Methodology and tools & techniques by Dr. K.N. Bhatt, Associate Professor, G.B. Pant Social Science Institute, University of Allahabad, India	Faculty and Master’s students of the school	
Workshop on IT Infrastructure by Mr. Altaf, IT Manager Hellman Logistics, Dubai.		
Workshop on Research Methodology by Dr. Salim Khan, Director Rizvi Institute of Management Studies & Research.		
Professional Training on Information Storage Management by EMC ² , Dubai, UAE	Dr. S K. Pandey M. I. Jawid Nazir	2012
ICDL Tester Workshop	Shekar Roy	
Computer Simulation Technology Workshop By Dr.-Ing. Mohamed El-Hadidy, Research Group leader at the Duisburg-Essen University, CST-Middle East General Manager.	School Faculty Members	
Cyber Defense by Juniper Networks, Zayed University, Dubai, UAE	M. I. Jawid Nazir	
CISCO Workshop	M. I. Jawid Nazir	

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

Category	Award Recognition	Date
Faculty	Certificate of Appreciation presented to Mr. Ganesan. S for serving as a judge in the 9th I.E.E.E U.A.E day held at Ajman University of Science and Technology on 10th May 2014.	2014
Student	Civil Engineering students won ‘Second Prize’ in “Spaghetti Bridge Making” competition held at American University of Sharjah (AUS) on 22nd November, 2014 The American Society of Civil Engineers (ASCE) International Student Group had invited students from many universities in the region to participate in the event, "Civil Engineering Competition Day 2014".	
Student	Dev Chelot, Final year B.E Electronics and Communication from the School of Engineering & Information Technology won first runner up position in Jhalak Dikhla Jaa - UAE Extravaganza 2014.	
Student	School of Engineering & IT won the rolling trophy among all the schools in the cultural competition “Manipal Carnival 2014”.	
Student	Samiya Salim, 3rd year B. Tech. Mechanical Engineering student, for her achievement at the GCC WOMEN’S T20 CRICKET CHAMPIONSHIP 2014, which was held in Oman. She was one among the players in the UAE Cricket Team. She was declared the best bowler of the tournament.	
Student	Mr. Farzeen, final year mechatronics student was selected to represent IEEE UAE section in the IEEE Region 8 student branch and young professionals’ congress 2014 Krakow, Poland, hosted by one of the best technical universities in the country- AGH University of Science & Technology. He was sponsored by IEEE Region 8 student Activities committee.	
Faculty	Certificate of Appreciation presented to Mr. M I Jawid Nazir for	

	<p>serving as a Steering Committee member of IEEE UAE Student Day 2014</p>	
Student	<p>Manipal CISCO Networking Academy students, Harish Chander, Muhamed Fuzail of B.Sc. ISM and Ms. Halima Aminu of M.Sc. IS bag the 1st, 3rd and 4th top talent positions in 2014 CISCO Networ Academy Net Riders CCNA National level competition in the UAE for TMENA region held on May, 21, 2014.</p>	
Faculty	<p>Mr. Jawid Nazir, CISCO certified Instructor, Manipal CISCO Networking Academy, was awarded the Instructor Excellence Award among the 40 CISCO Academies in the region.</p>	
Student	<p>CISCO Networking Academy students won the 5 ranks in the NetRiders -2015 Skill Competition in the TMENA Region and winners of 2nd potision.</p>	
Faculty	<p>Certificate of Appreciation presented to Mr. Zaheeruddin Ahmed for serving as a Session Chair Manipal Internaltional Conference on Technology Management 2015.</p>	
Faculty	<p>Certificate of Appreciation presented to Mr. M I Jawid Nazir for serving as a Steering Committee member of IEEE UAE Student Day 2015</p>	
Faculty	<p>Dr. Roma Raina was awarded Doctoral degree for her research work titled “Intelligent Method for Optimal Operation of Radial Distribution Network” in Electrical; Engineering from Jamia Millia Islamia University, New Delhi., in March 2014.</p>	
Student	<p>CISCO Networking Academy students won the 8 ranks in the NetRiders -2014 Skill Compitition in the TMENA Region and winners of 1, 3 and 4th potision.</p>	
Faculty	<p>M. Chithirai Pon Selvan, received the best paper award for his research paper titled Selection of process parameters in Abrasive water jet cutting of titanium at the Proceedings of 2nd International Conference on Trends in Engineering and Technology, London, UK.</p>	
Faculty	<p>Mr M I Jawid Nazir, Manipal University Dubai-EMC Academic Alliance Instructor received EMC Academic Associate Certification during June 2015</p>	
Faculty	<p>Certificate of Appreciation presented to Mr. M I Jawid Nazir for being a Panel Member in the 5th International Conference on Development Policy organized by Avinashilingam University, Coimbatore and The Institute of Finance Management , Tanzania</p>	

	during Aug 2014	
School	Manipal Cisco Networking Academy was awarded the Academy Excellence award for the year 2013.	
Faculty	Dr. S. V. Kota Reddy has become a member of Advisory Board of Arab Unity School, Dubai UAE.	
Faculty	Ms. Sophia, was awarded Doctoral degree for her research work on “ Mining Closed Sequential Patterns Using Condensed WAP Tree” from Andhra University, Visakhapatnam, Andhra Pradesh, India in September 2013.	
Faculty	Dr. Chithirai Pon Selvan has got best paper award for the paper titled” Influence of Operating Parameters in Abrasive Waterjet Cutting of Aluminium” Proceedings of International Conference on Emerging Trends in Engineering and Technology, Marthandam, Tamil Nadu.	
Student	Mr. Aquib Ilyas, 3rd year Civil Engineering, scored 250 runs in 75 balls in Golden Tower T-20 League organized by Umm Al Quwain Cricket Association. Ilyas was in blistering form blasting an unbeaten 250 from just 75 deliveries.	2013
Faculty	R.Vijaya Arjunan awarded with Ph.D., for the Thesis: A Novel Framework for Image and Video Denoising, by Sri Chandrasekharendra Saraswathi Viswa Maha Vidyalaya University, India, october 2013.	
Faculty	Certificate of Appreciation presented to Mr. M I Jawid Nazir for serving as a Steering Committee member of IEEE UAE Student Day 2013	
Faculty	Best Research Paper award: Vijaya Arjunan, R., “Image Denoising using Multiple Wavelet Decomposition with Bicubic Interpolation”, 4 th International Conference on Signal and Image Processing, Lecture notes in Electrical Engineering 221, DOI: 10.1007/978-81-322-0997-3_28, © Springer India, pp.301-312, 2013.	
Student	The students from the department of Civil Engineering, participated in the event: "Civil Engineering Competition Day 2013" organized by the American Society of Civil Engineers (ASCE) International Student Group in the American University of Sharjah (AUS). Our students won the First Prize at the “Spaghetti Bridge Making” Competition.	
Student	Our students won the 2nd prize for the Engineering Design	

	competition during 8th IEEE day for UAE Students. The IEEE Day was hosted by the University of Sharjah	
Student	Our civil engineering students got First Prize in the Marshmallow Tower Making Competition conducted by ASCE student chapter at American University of Dubai	
Faculty	Mr. M I Jawid Nazir, CISCO Networking Academy Instructor awarded with “Instructor Years of Service” for his active participation and service in the CISCO Networking Academy Program on 2013	
Faculty	Sri Chithirai Pon Selvan was awarded Doctoral degree for his research work on “Some studies in abrasive waterjet cutting of materials” by Karpagam University, Coimbatore in Feb 2013.	
Faculty	Sri Ramaprasad Poojary was awarded the Doctoral degree for his research work on “Multiresolution based Dental Registration Tool for Assessing bone formation in Periapical dental radiographs” by VTU, Belgaum in April 2012.	2012
Faculty	Sri Vijay Kumar was awarded the Doctoral degree for his research work on ”Soil quality assessment in selected areas of nagapattanam district” by Bharathidasan University Thiruchirapalli in August 2012.	
Students	Nokia University App Challenge, Nokia, UAE : <ul style="list-style-type: none"> • Position : 3rd • App : N9 Smartphone App “Make-a-Meme” • Team: Rishit Kedia and Jobin Babu. 	

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

Nil

31. Code of ethics for research followed by the departments

The University has a Central Research & Development Committee chaired by Dr. Firdos Alam Khan.

32. Student profile course-wise:

Academic Year	Name of the Course (refer to question no. 4)	Applications received	Selected		Pass percentage	
			Male	Female	Male	Female

2012	BSc ISM	17	4	12	100	100
	BTech-Civil	18	14	4	65	100
	BTech - ECE	9	3	6	100	100
	BTech - CSE	22	11	11	63	90
	BTech- Mechanical	50	48	2	81	100
	BTech - Mechatronics	13	12	1	100	100
	MSc IS	12	6	3	100	100
	C- GM	10	8	2	100	100
2013	BSc ISM	34	22	10	90	100
	BTech-Civil	25	18	7	77	100
	BTech - ECE	19	10	9	80	89
	BTech - CSE	30	21	9	81	100
	BTech- Mechanical	79	75	4	65	80
	BTech - Mechatronics	31	24	7	54	100
	BTech - Automobile	4	4	0	25	NA
	BTech – Instrumentation & Control Engineering	0	NA	NA	NA	NA
	MSc IS	6	2	2	100	100
	MTech-DE&AC	0	NA	NA	NA	NA
	MTech - MET	2	2	0	100	NA
C- GM	4	1	3	100	100	
2014	BSc ISM	28	17	8	--	--
	BTech-Civil	27	20	7	--	--
	BTech - ECE	20	11	9	--	--
	BTech - CSE	33	24	9	--	--
	BTech- Mechanical	75	72	3	--	--
	BTech - Mechatronics	19	13	6	--	--
	BTech-Chemical	12	8	4	--	--
	MSc IS	11	8	1	--	--
	MTech-DE&AC	8	2	6	--	--
	MTech - MET	6	5	1	--	--
	MTech - CEM	0	NA	NA	NA	NA
	C- GM	4	3	1	--	--

33. Diversity of students (2014 -2015)

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
BSc-Information Systems & Management	17	1	--	--
BTech- Civil	7	--	--	--
BTech - ECE	0	--	--	--
BTech - CSE	9	--	--	--
BTech- Mechanical	15	--	--	--
BTech - Mechatronics	0	--	--	--
BTech - Chemical	8	--	--	--
BTech – Instrumentation & Control Engineering	0	--	--	--
MSc IS	11	6	0	83
MTech-DE&AC	0	13	0	87
MTech - MET				
MTech - CEM	0	0	0	0

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

Students' enrollment in UK based universities for their graduate programs are mandated to have cleared the IELTS / GRE examination to be eligible to apply for pursuing their masters.

35. Student progression

Student progression	Percentage against enrolled
UG to PG	18 %
PG to M.Phil.	Not applicable
PG to Ph.D.	
Ph.D. to Post-Doctoral	

*Employed	70 %
<ul style="list-style-type: none"> • Campus selection • Other than campus recruitment 	
Entrepreneurs	12 %

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	10%
from other universities within the State	00
from universities from other States	00
from universities outside the country	90%

37. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

Year	Number of Faculty Awarded Ph.D	Names of the Faculty
2012	02	<ul style="list-style-type: none"> • Dr. Ramaprasad Poojary • Dr. Vijay Kumar
2013	02	<ul style="list-style-type: none"> • Dr. Chittirai Pon Selvan • Dr. Sophia Rahman
2014	01	<ul style="list-style-type: none"> • Dr. Roma Raina

38. Present details of infrastructural facilities with regard to

a) Number of Books in the Departmental Library	5,209
b)Number of Journals/Periodicals in the departmental library/AV sources/Thesis	23
<ul style="list-style-type: none"> • No. of Periodicals • AV sources • Thesis • Ebooks 	488 62 12,007 4,039

<ul style="list-style-type: none"> Ejournals 	
c)Internet facilities for the staff	All the staff members are provided with desktop computers with internet facility
d)Internet facilities for the students	Systems with internet facility are provided for the students in the Central Library, Computer Laboratory.
e) Classrooms with ICT facility	All the 23 classrooms are provided with ICT facility
f)Students laboratories <ul style="list-style-type: none"> Mechanical/Mechatronics E&C/Mechatronics Civil Information Technology 	10 Laboratories including <ul style="list-style-type: none"> CNC Machine Lab Material Testing Lab Metal Testing Lab Machine Shop 6 Laboratories including <ul style="list-style-type: none"> PLC & Automation LAB Digital Signal Processing Lab Sensors & Signal Processing Lab Advanced Communication Lab Microcontroller & PIC controller LAB 6 Laboratories including <ul style="list-style-type: none"> Soil Mechanics Fluid Mechanics Survey Lab Basic IT Lab Advanced IT Lab Network/ Hardware Lab/ CISCO Lab Online Testing Center Advanced Programming Lab

	<ul style="list-style-type: none"> • Database Lab
g) Research laboratories	<ul style="list-style-type: none"> • IT • Engineering
	<ul style="list-style-type: none"> • Network/ Hardware Lab/ CISCO Lab • Innovation Center

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

a) from the host university

Name of the Doctoral Student	Year of Registration	University Registered
Mr. Sachidananda K	2012	Manipal University, India

b) from other universities

Name of the Doctoral Student	Year of Registration	University Registered
Mr. M. I. Jawid Nazir	2009	Karpagam University, TN, India
Mr. Zaheeruddin Ahmed	2009	Dravidian University, AP, India
Mr. Abdulla. K.P	2009	VTU, Karnataka
Mrs Sukhwant Kaur	2014	University of Salford, UK
Mr. Ramesh Vandanapu	2014	Kingston University, London, UK

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

01

Name of the Post graduate student	Academic year of admission	Programme
Mr. Natarajan P R	2014-2015	MTech (DE&AC)

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

Yes. Need assessment exercise undertaken before the development of new program.

As a branch campus, MU Dubai offers programs available at home campus and following steps follows before starting a new program:

- Report on description of target market and evidence of student and employer demand prepared by marketing and admission department
- Evidence that the program includes some localized industry element integrated into the curriculum.
- School organized a preliminary meeting for feasibility study to start a new program. All the concerned department like facility, finance, HR representatives are included in the meeting.
- If Committee find program feasible and all the department commit for resources school prepare the structure of the program or modified existing structure of the program available at home campus as per the local requirements.
- Program structure put in front of Board of Studies (BOS) for approval.
- Program structure is sent for the university academic senate approval after BOS approval.
- New program applied for the KHDA (local regulatory authority) approval.

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 the department obtains feedback from faculty on curriculum at the end of every semester. The feedback response of the individual faculty will be discussed with concerned expert members of the departments and review the same for any changes. With respect to teaching – learning-evaluation the feedback is taken randomly to discuss the outcome of the methodology adopted by each faculty.

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

Yes the department obtains the feedback from every student on staff and curriculum in during every semester with respective to the current subject taken by each faculty. The feedback taken from students helps the department to make required changes in the teaching methodology, know students level of understanding, to know the course progress at the right time to make appropriate changes.

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

Alumni feedback is taken through monthly alumni meet within the department to discuss their experience on program curriculum and industry expectation.

Employer's feedback is taken from different industry partners on the curriculum offered by the department. This feedback is taken mostly while the students are taking their internship and when the industry expert lectures are arranged in the department. The department seriously considers making changes in the curriculum as per the requirements.

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

S.No	Distinguished Alumni	Current Position	Program
1	Ms. Radhika Chopra,	Engineer, Siemens LLC, UAE	BE, ECE
2	Mr. Jasim Mohammed	Engineer, Scientech, UAE.	BE, Mechatronics
3	Ms. Karishma Kamath	Engineer, L & T Electrical and Automation LLC, UAE	BE, ECE
4	Mr. Altaf Siddiqui	IT Manager Hellman Logistics, Dubai.	MSc, Information Systems
5	Ms. Pooja	Civil Engineer, Shobha Contractors, UAE	BE, Civil
6	Mr. Ambuj Nagchaudhuri	University of Ottawa, Canada	BE, Mechanical
7	Ms. Surya Anjani Yedida	NANYANG TECHNOLOGICAL UNIVERSITY, Singapore	BE, ECE
8	Mr. Amit Kumar	University of Leeds, UK	BE, Civil
9.	Mr. Jay Tushar Dholakia	North Western University, USA	BE, ECE
10	Mr. Farzeen Hasharaf	University of Leeds, UK	B.E, Mechatronics

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

Jan 2012- Dec 2012
A seminar on "How to develop Credibility as a Professor" by Dr. Ajay Sudhir Radke was organized for the faculty members of the Department of Engineering & Information Technology. Dr. Ajay mentioned, as speaker credibility often has to be earned, unlike simple trust, which is often given until a person is found untrustworthy. Credibility is the extent to

which audience believes speaker, when he/she speaks.

A guest lecture on the topic “FROM ROBOTS ON WALLS TO ARTIFICIAL LIFE” was delivered by Mr. Dhananjay Ipparthi for the faculty and students of Mechanical and Mechatronics Engineering. Mr. Dhananjay Ipparthi worked with NASA on Geo Operation Environment Satellite (GOES) mission, which was about re-fuelling satellites in space using robots. He highlighted few things about final year B.E. projects including his own project of vertical and horizontal surface traverses, explaining its benefits and drawbacks, what problems they came across during the process to make a proper robot which had the purpose of cleaning glasses of high rise buildings.

Jan 2013- Dec 2013

Dr. Tirumagondanahalli Yella Reddy presented a lecture on “Design and analysis of collision resistant and blast proof structures” on 25-02-2013. Impact Energy Absorbers or IEAs are used primarily for military purposes, where they were used in combat gear, war ships, trains etc. The current application areas include transportation of hazardous goods, vehicle impact, blasts and explosions, protection against natural calamities etc.

Dr. John Jose, Assistant Professor addressed the students of Dept. Engineering & IT. During his speech, Dr. John shared about the growth and integration of chip density over time. He gave details on Multi core ‘Billion Transistor Era’ and introduced the students with the concept of Network on chip (NoC), which is an approach to exceed the limitation of communication and overcome the enormous wiring delay in future technology.

Department organized a guest lecture on Micromachining for the final year students of Mechanical and Mechatronics Engineering and was delivered by guest speaker Dr. Somashekhar S. Hiremath. The lecture was very informative and provided an insight into the field of micromachining. It was a great opportunity for the students to broaden their horizon and to gain in-depth knowledge in the evolutionary field of micromachining.

Mechatronics and Electronics & Communication Engineering students had an opportunity to attend a seminar on Robotics by Mr. Emil Oommen Varghese. Mr. Emil discussed about Arduino microcontroller and Raspberry Pi microprocessor by showing live working examples implementing the Arduino and Raspberry Pi. Students were shown a robot based on the Arduino which was programmed to follow a black line, a RFID card detector based on the Raspberry Pi and an Android app controlled vehicle based on the Arduino with the wireless shield add on.

A Guest Lecture was organized by the Dept. of Engineering and IT for the Pre-Final and Final Year students of B.E. - CSE and B.Sc. – ISM and was delivered by Mr. Stephen Fernandes. He explained the students about how an implementer's perspective on the industry is needed for transformation and how to achieve it? He also spoke about Disruptive Technology, Evolution of IT industries, Globalization, New ways of Working

(Virtualization), Cloud Computing etc. and few tips for today's students.

Dr. Scott Yam from Queen's University, Canada gave a lecture to our students on 5th December 2013 to explain about further study opportunities in Queen's University.

Jan 2014- Dec 2014

As a part of activities conducted in American Society of Civil Engineers student chapter, Dr. Gajanan M. Sabnis, Emeritus Professor, Howard University, US visited Manipal University along with Mr. Elias B. Sayah, President, ASCE International Section UAE, on 27th of February 2014 for giving a guest lecture titled: "Civil Engineers- Past, Present and Future" followed by half an hour interactive session with the civil engineering students of Manipal University. Prof Sabnis discussed about the importance of sustainable materials used for the construction of buildings. Through his lecture and interaction, students were greatly benefited and understood the importance the importance of sustainability. Followed by this lecture, Mr. Sayah had given a brief talk on the importance of activities conducted through ASCE.

The Manipal University, Dubai ASHRAE Chapter organized a seminar on Fundamentals of Air Conditioning for the students of B.Tech Mechanical Engineering on 5th March 2014. The seminar was conducted by an esteemed member of the ASHRAE Falcon Chapter, Mr. Rajat Upadhyay who is Area Manager – Sales and Marketing for a renowned European HVAC Manufacturer Maico Italia. Mr. Rajat presented about the Fundamentals of Air Conditioning and basic concepts of Air Conditioning, differences between Refrigeration and Air Conditioning processes and explained in detail about the Air Conditioning systems commonly used in the region and their working principles.

A guest lecture was organized for the engineering students on 18th March 2014 by Dr. B. Raghuvir Pai, Director (Research) - Technical, Manipal University, India. In his talk, he discussed about the THREE Cs an engineer should always keep in mind: 1) Creativity 2) Communication and 3) Collaboration. He also shared his concern over GLOBAL ENERGY CHALLENGES and its effects on the Environment. He laid stress on various available energy options in the future; namely: Wind, Solar, Tidal, Geothermal, Bio fuel and discussed their possible use as major energy resources which can replace Fossil fuels.

A guest lecture on "First Law of Thermodynamics and Energy Analysis" by Dr. Srinivas Kumar from Belgium was organized for II and III year Mechanical Engineering students on 8th April 2014. Dr. Kumar addressed the first law of thermodynamics with practical examples. The session was greatly interactive and all the students were enthusiastic and motivated to learn more about the energy analysis.

The students of Manipal University, attended a seminar on 10th April, 2014 on topic 'Going Green' delivered by Dr. Vish Kallimani, Professor in Computer Science Engineering, School of Science and Engineering, Manipal International University, Malaysia. He gave us an insight into carbon footprint and how we can contribute to conserve the environment we call

home. A 3% increase in global warming can cease all life; so its time to take immediate action to maintain the balance of nature. He went on to say that the Malaysian Campus of Manipal University has been LEED certified as it accentuates natural lighting and cooling throughout its vicinity.

A guest lecture on “Renewable Energy” was organized for the 3rd year Mechanical students on 7th May 2014. Mr. Jean Bellumat GLOBCOM representative explained the need for Renewable Energy. He discussed about different methods to save water, electricity, and had interactive technical discussions with students. Students were also shown the GLOBCOM products demonstration.

Dr. Vinod V. Thomas, Director, Manipal Institute of Technology, Manipal India conducted a lecture on “Opportunities and Challenger for Future Engineers” for the first year engineering students on 7th September 2014. He also elaborated the history of Manipal University and the various programs offered by Manipal Institute of Technology, Manipal, India. The session was greatly interactive and all the students were enthusiastic and motivated to learn more about engineering.

A Guest Lecture on “Digital Transformation - Challenge Convention with Code Halo Thinking” was organized for B.Tech. - CSE and B.Sc. - ISM on 10th November 2014. The Resource Person was Mr. Stephen Fernandes, Assistant Vice President and Head, Cognizant Technology Solutions Overseas Corporation (Middle East). Every digital click, swipe, "like", buy, comment and search produces a unique virtual identity, referred as Code Halo™. Code Halos are becoming increasingly vital to the success of every business. The session revealed how organizations can catalyze business with Code Halo thinking.

TECON Limited, as part of their ‘Corporate Social Responsibility’ provided training to final year engineering students on Career aspects on 9th November 2014. The head of HR Mr. Nuruddin Jethajiwala and HR Manager Mr. Osman Rohail of Albatha Engineering Group gave the seminar on Job Search Strategies, Preparing CVs and Resumes, Preparing Cover Letters and Interviews Skills. They taught the students, some of the common mistakes made by graduates in their resumes, helped them build their self-confidence, and cleared quite a few of their doubts and misconceptions.

A seminar on the role of autodesk for education by Mr. Renjith Krishnan - Business Manager, Al Suwaidi, Authorised training center of AUTODESK was organized for the final years of Civil Engineering, Mechanical and Mechatronics Engineering students on 24th of Dec, 2014. The speaker discussed about the relevance of different software adaptable for various disciplines of engineering. The advancement in the technology and the usefulness of software in the engineering design were discussed in the seminar.

The Manipal Dubai IEEE Student Branch conducted a workshop on 27th March 2014 on topic ‘Inside a Laptop’

The IEEE Manipal Dubai Student Branch organized an innovative and creative technical

workshop on 3rd April 2014.
Workshop on GRE Preparations was conducted by Mr. Rajesh, Founder and Director of V-Prov, Alumni of IIT –M and IIM –B on “GRE Preparations”
A one day workshop on “Finite Element Modelling using COMSOL Multiphysics” by Mr. Ahmad Gamal, from Elnady Engineering Agencies, Cairo- Egypt.
Workshop on “Finite Element Modelling using COMSOL Multiphysics focusing applications on MEMS ” by Mr. Ahmad Gamal, from Elnady Engineering Agencies, Cairo- Egypt
The Manipal Dubai IEEE Student Branch organized workshops on SolidWorks.
The Manipal Dubai IEEE Student Branch and 3-D Printing & Robotics Lab conducted a workshop on 11th December 2014 on topic ‘3-D Printing’

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

- Presentations
- Case Based Analysis
- Group Discussion
- Demos
- Directed Reading assignments
- Group Projects

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

- Learning outcomes are constantly monitored by periodical review of lesson plans prepared by the faculty at the beginning of every semester.
- The formal feedback from the students is collected on faculty and course. The feedback is discussed with the faculty individually by the Chairperson and corrective measures are being taken.
- The students have to take internships in the industry. The project/internship coordinator, internal guide and external guide from the industry ensure the quality of the work carried out.
- Performance of the students is constantly monitored with the help of internal assessment.

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

- A dedicated school committee looks into the cultural, sports and technical events of the students.

- The faculty members co-ordinate the student activities and are given responsibilities in organizing cultural and technical events together with student teams to assist them in developing their extracurricular skills.
- Cultural Events: Students from Engineering & IT department participated in various cultural activities organized by the university. Our students won prizes in eastern group dance, group singing, duet singing etc and also exhibited their talents in other events like Rangoli, Henna, and quizzes etc., organized by the university.
- Students from Engineering & IT department participated in sports activities of the university and interuniversity and have won many trophies. Our engineering students are part of our college table tennis, Volleyball, Throw ball, Badminton teams and have been constant winners at the various sports festivals held at BITS, Dubai. Gulf Medical University, UOWD, Skyline University.
- The faculty members of the school also actively participated in Bazooka organized by the University.
- Students from School of Engineering & IT have visited various schools in and around Dubai to deliver Career guidance at the school level.

Year 2012

Technovanza 2012 the UAE's largest annual Technological festival that provides a platform to students to showcase their talents in the field of science and technology was organized by the Department of Engineering , Manipal University- Dubai Campus in the newly built sprawling campus in the Dubai Academic city from May 1st to May 3rd -2012 which attracted students from American University , Herriot Watt, Emirates Aviation college, Middlesex ,Murdoch , BITS-Dubai, BITS-Ranchi ,University of Wollongong and school students from OOEHS- Sharjah and Dubai, DPS, JSS , Arab Unity School, Al-Ain Juniors School to name a few. The Mega Technical festival “ **MaryajTechnovanza 2012** “ was co sponsored by BCL Technologies ,E-Max, Jamboree, Kings Gold factory, Safety Services Group Limited ,Ocean King Survey Services FZC, Kurians Printing Press LLC ,Digitally Photo Centre comprising of both Technical and fun filled events –in total 23 events were designed for University and School students with amazing number of participants from 12 universities and 10 schools with an astounding number of participants rising to 1500 from allover UAE.

The events held included Technical events like: ELECTROVANZA, CLASH OF THE CODERS, BRIDGING THE GAP, CAR DESIGN, CONTRAPTION, TECHNICAL QUIZ, DESIGN AN AIR BUS, TECHNOCODE, CLAY MODELING, EXHIBITION AND REPLICA followed by events that were fun filled to keep enthusiasm of the young minds like: TREASURE HUNT, LASER MAZE, INNOVATIVE DRAWING, GRAFFITI, MEGA COUNT DOW and COMPUTER GAMING.

As it is the legacy to launch the Department of Engineering magazine “360” ,which aims at

bringing out the caliber of students in various skills like photography, drawing, painting, technical write up in constant quest for knowledge, the “360” was launched by Chief Guest- Mr. Talmiz Ahmed, Dr. Ramjee-Director (MU-Dubai), Dr. Kota Reddy- Chairperson, Mr. Vijay Kumar –Coordinator Technovanza 2012, Mrs. Uma Prasad- Students Services officer and Ms. Sumathy Chief Editor of the Magazine “360”.

Engineering students have volunteered as an act of social responsibility for the 14th “Blood Donation Camp” in collaboration with Latifa Hospital, Dubai on 4th & 5th November 2012 at Manipal University Campus conducted by Department of Biotechnology.

Participating and Volunteering at community services :

Blood Donation

Green IT walks

Gaza Relief Marathon

Special Needs Centers

On November 24, 2014 CISCO organized “CISCO Talent Connection 2014”. Cisco and its Channel partners are pleased to invite you to the Talent Connection Career event. The aim of this event is to give you direct access to jobs with Cisco's Channel Partners plus guidance on career. Student qualified with CISCO Networking Academy courses such as CCNA, IT Essentials were invited and are ready to work within next 6 months. More than 12 students from our academy participated in this event and 5 students qualified for final round interview after successfully qualifying group discussions, 2 rounds of interviews. Students qualified have been offered training and Internship opportunities and join them after completing their Undergraduate Degree Program. 5 CISCO Industry Partners presented preplacement talk, and organized group discussion and interview for students.

Year 2013

INNOVATIO CONCEPTIBUS -2013

Engineering & IT department under the Banner of SAE International Manipal University Dubai organized a technical event named “Innovatio conceptibus” which was held on 19th November 2013. This event was held to recognize the talents of SAE members and other engineering students. Students exhibited their knowledge in latest technologies in the field of engineering.

SAE activity -Visit to the DMC Aviation Lab

On 31st March 2013 SAE Manipal University Dubai, organized a field trip to DMC Aviation Hangar. The members of SAE and the faculty members took part in it. Mr Muftha who is a professor by profession and pilot by passion escorted the students to the Aviation Lab. Students witnessed various aircrafts. Mr. Muftha showed how the initial models of aircrafts are made and also how various materials are used for that purpose. He further explained Wind tunneling experiment which is used to study the behavior of different airfoil structure.

TECHNOVANZA 2013

The two day event Technovanza 2013, an inter university and school festival was conducted on

May 5th & 6th 2013 hosted by Department of Engineering, Manipal University, Dubai Campus. The festival showcased the talents of the young minds who aspire big dreams. More than 500 school students from 11 schools in UAE participated in events that were exclusively designed for them like the COGNISANCE quiz (Junior Level/senior Level), Budding Scientists Exhibition, gaming and 60 students from other universities took part in Competitions like Designation, Cinnovation, Electromaze, Gaming and won several luring prizes. The Chief guest Mr. Prabu Aruljothi, HR Manager, Scientech, gave an inspirational speech. All the events demanded acute engineering skills in competitions where the talents of the young competitors were the secret of success. As usual the school students responded with amazing turn in for competitions like the COGNISANCE quiz, Budding Scientists Exhibition and Gaming where exemplary performance was set as benchmark.

TECHNOLOGIC 2013

Technologic 2013, the student annual event of the Department of Information Technology and Computer Science Engineering was organized on May 5th and 6th, 2013. A talk on “Internship and Placement - Meeting the Employers Expectations”, was given by Dr. Deepak Kalra, CEO, AL ASAS Information Technology and on “Interview Skills”, conducted by Ms. Nimmi Shibu, Manager Corporate, Jurassic Group. The sessions gave valuable inputs and trained the students on queries that go unanswered at times as to, what the employers are looking for? The popular demand competition which drew a lot of attention and curiosity was the “Crime Stories - Do you have the instincts of a detective? Find the Culprit” The competition was designed to test the logical reasoning and deductive skills of the participants, it had three levels accomplishing each level successfully gave the clue that lead to identifying the culprit or the murderer.

Meet the Alumni

Department organizes meet the alumni event where alumnus are invited to address on the topics such as industry expectations, career profiling, their career journey etc. Students cash on this as an opportunity to know what to expect, plan accordingly and pave a way to a successful career whether it is in terms of working for an Organization or planning to set up a business related to the relevant field. This is also seen as opening an additional door for placements. The department has organized 6 such meets so far.

IEEE Student branch inauguration for Academic year 2013 – 2014 :

The IEEE Manipal University Dubai Student Branch conducted a poll for elections for the President, Vice-President and the supporting committee members. Interested students took part and members were nominated. The body with the new members was inaugurated on 10th Dec. 2013 and instantly has involved students for working on projects for the upcoming IEEE UAE Day.

American Society of Civil Engineers student Chapter inauguration

American Society of Civil Engineers Student Chapter was inaugurated by Mr. Elias B Sayah in May 2013. Mr. Elias Sayah is the founder and president of ASCE in the United Arab Emirates.

Year 2014**Establishment of Automobile Engineering lab**

School of Engineering & IT established a state of the art “Automobile Engineering Lab”. The lab is Sponsored by Nissan Arabian Automobiles Co. LLC. The inauguration of the laboratory was graced by Dr. Ramdas Pai, Chancellor, Manipal University, Dr.Ranjan Pai, Mr. Mohandas Pai, Mr. S. Vaitheeswaran, in the presence of Mr. K. Rajkumar, Director- After sales, Arabian Automobiles, Dubai on 16th October 2014.

Establishment of 3D Printing and Robotics Lab

School of Engineering & IT established a state of the “3D Printing and Robotics Lab”. The inauguration of the laboratory was graced by Dr. Ramdas Pai, Chancellor, Manipal University, Dr.Ranjan Pai, Mr.Mohandas Pai, Mr. S. Vaitheeswaran on 16th October 2014. The 3D Printing and Robotics Lab has brought with it an entire prospect of innovation for the students at Manipal Dubai. With the induction of the 3D Printer students will now be able to literally print out components, 3D models as well as prototypes

MOU with Emirates Aviation Services (EAS) LLC.

The purpose of this Memorandum of Understanding (MOU) between Manipal University Dubai Campus (MUDC) and the Emirates Aviation Services (EAS) is to provide the on the job Training (OJT) for the Engineering students of the Mechanical, Mechatronics, and Electronics and Communication Streams; this will enhance the practical knowledge of the MUDC students and pursue their career as Aircraft Maintenance Engineer. The MOU was signed between two parties on 15th April 2014.

MOU with Nissan Arabian Automobiles Co. LLC

The purpose of this Memorandum of Understanding (MOU) between Manipal University Dubai Campus (MUDC) and Nissan Arabian Automobiles Co. LLC is to Facilitate MUDC in setting up automobile engineering laboratories, with additional support of technical training, knowledge exchange and other academic activities. Arabian Automobiles will impart knowledge in the form of technical training to students of the school of Engineering & IT to bridge the gap between Automobile industry and the academia. The MOU was signed between two parties on 16th October 2014.

Participation in Wooden Bridge competition 2014 AUD ASCE Chapter

Students from ASCE Manipal student chapter had participated in Wooden bridge Making Competition held at American University of Dubai through ASCE chapter on 19th of April, 2014. For this competition, three teams consisting of 5 ASCE members each had participated to represent Manipal University at AUD.

Dimensions – Intra University Technical Event and competition

As a part of the technical event TECHNOVANZA, organized by the school of Engineering and Information Technology, ASCE Manipal Chapter organized an event called DIMENSIONS, a steel bridge making competition as an Inter University competition which was held on 14th of

May, 2014. Around 120 students from various departments had participated in this event.

MARVEL – An civil infrastructure expo 2014

An expo named MARVEL 2014 was organized by ASCE Manipal student chapter to exhibit the protocol of various civil infrastructures. Students of civil engineering made an effort to build models of various infrastructures which includes the design of siphon aquaduct, design of clover leaf design, geometric elements of airport design, design of dam, design of steel, wooden and spaghetti bridges etc. this expo gave an opportunity for the viewers to explore the various elements of the infrastructure design.

Minute to win it – An entertaining competition

As a part of activities conducted in ASCE Manipal Student chapter, an entertaining fun filled competition was organized for the students of Manipal University to participate. Around 50 students from various departments were participated in this event which was held on 15th of May 2014. 60 seconds fun filled target was given to the participants and it was a excited and fun filled show. The participant who won the final round was given a cash prize from ASCE chapter.

CivilMania – A Videoshow

A video show of interesting documentation of construction of various civil mega structures were screened for the students to understand the achievement of civil engineers and the importance of them in the overall development of the country. The viewers were admired by the civil engineers who had made the imagination into reality through various mega infrastructures. This show was screened for the students who were interested to explore the field of civil engineering and it was a great platform for the first year students of civil engineering to understand the role of civil engineering in the infrastructure development.

IEEE Day 2014: MUDC

On October 7, 2014 the IEEE Manipal Dubai Student Branch organized it's very first celebratory event for the IEEE day. For the first time since the inception of the MUDC student branch, our membership count grew to the extent where it was possible to come together and use the collective motivation to use the student force and faculty guidance at our disposal to plan this inaugural event The highlight of the event was the guest speaker Ms. Mariyam Althani – a long time standing member of IEEE UAE. Through her speech and presentation she enlightened us about the initial days of IEEE in the UAE and how they went about seeking memberships and building a vast membership portal for IEEE in the country.

IEEE Xtreme 8.0

The IEEE Manipal Dubai Student Branch too part in the Global 24 Hour Programming Contest: IEEE Xtreme 8.0. Almost 10 teams from Manipal University participated in the event, each team consisting of 2-3 students from the 2nd, 3rd and final year of Computer Science and Engineering and ISM batches.

Visit to BIG 5 Expo

The students of first year and final year of Civil Engineering had visited BIG-5 exhibition, largest construction exhibition in the Middle East, serving as a networking platform for construction product suppliers and buyers on 19th November 2014 at World Trade Centre (WTC), Dubai. The Big 5 featured around 2,750 international exhibitors showcasing 35,000 international construction products and was the best place for the students to source innovative technology and services in civil engineering industry. It was also a great platform for the students to be interconnected with the industrial experts.

Visit to Arabian Tunnelling Conference and Exhibition 2014

The final year students of civil and mechanical engineering from school of engineering and information technology attended the Arabian Tunnelling Conference and Exhibition-2014 in Abu Dhabi on 09th December 2014. Students were exposed to many practical applications as relates to the management of sustainable tunnels. Methods such as TBM and the concurrent difficulties faced in practical situations were discussed and analysed during the Young Engineer's forum.

Field Trip to CISCO

On 27th November 2014, First Year Students from B.Sc Information System and Management program went on Field Trip to CISCO, Dubai. The purpose of the visit was to learn about new technologies introduced by CISCO for more faster and effective communication.

Meet the Alumni

A session “Meet the Alumni” was organized for all the first year students on 22nd September 2014. Mr. Myron Gomes, B.E.-Mechanical Engineering (2012 passed out batch) from FG Wilson FZE, Dubai shared his with the students on water supply management. The insights he shared to everyone present during the workshop was touching and inspiring

‘Meet the Alumni’ session was organized for all the final year engineering students on 9th November 2014. Final year students are soon required to make transition from ‘student life’ into ‘corporate life’ and for most of them; this transition is mostly a mystery. This event gave them the opportunity to learn more about this transition from arguably the most successful graduate of the 2014 batch of graduates, Mr. Yunus Farhan. Yunus shared his experiences of interviews and job hunting, all of which were very helpful in preparing the final year engineering students to make similar efforts in the future.

UAE-SOE FIDIC Conference 2014

Third year Mechanical Engineering students and final year Computer Science & Engineering students participated in UAE-SOE FIDIC Conference 2014 on 24th November 2014. As part of the conference, there was a special workshop “Young Engineers Forum” created for engineering students of UAE. This workshop discussed the Excellence in FIDIC and Contracts Management through students perspective.

Deseno Avionica -2014

Engineering & IT department under the Banner of SAE International Manipal University Dubai

organized a technical event named “Deseno Avionica” which was held on 14th May 2014. This event was held to recognize the practical skills of SAE members and other engineering students. Students exhibited the model of a flying object based on the specification given by the organizers.

Innovatio conceptibus -2014

Engineering & IT department under the Banner of SAE International Manipal University Dubai organized a technical event named “Innovatio conceptibus” which was held on 11th December 2014. This event was held to recognize the talents of SAE members and other engineering students. Students exhibited their knowledge in latest technologies in the field of engineering.

Visit to Emirates Institute for Advanced Science and Technology [EIAST] ,Dubai

Visit to Emirates Institute for Advanced Science and Technology [EIAST] ,Dubai was arranged for the third and final year ECE students on 17th December 2014. Ms. Aisha Al Zaabi along with technical team, explained the satellite projects of EIAST. Models of Dubai Sat 1 and Dubai Sat 2 were on display and was explained by the team. Students visited the control center and testing zone to understand the duration of coverage and swath area. Mr. Karan Nand Kumar of final year ECE won the Paper presentation contest on Satellites, conducted inline on behalf of EIAST at Manipal University-Dubai, for the students visiting EIAST. He was awarded with a certificate and memento for the achievement. The visit proved to be the motivating experience for all the students in the area of space research.

TECHNOVANZA 2014

The two day event Technovanza 2014, an inter university and school festival was conducted on May 15th & 16th 2014 hosted by Department of Engineering & IT, Manipal University, Dubai Campus. The festival showcased the talents of the young minds who aspire big dreams. Many interesting events were designed like Apocalypse Now, Speed Zone, The vault, Green Quest, Domino etc gaming and many students from different universities and schools took part in Competitions & won several luring prizes. All the events demanded acute engineering skills in competitions where in the talents of the young competitors was the secret of success. The Technovanza 2014 perfectly showcased to the outside world the organizational, Technical abilities of the staff and students and provided a platform for industry Institute interaction in the pursuit of social responsibility.

48. Give details of “beyond syllabus scholarly activities” of the department.

Activity	Faculty members involved
Time Table	
Civil	Ramesh Vandanapu
Computer Science and IT	Ms. Sukhwant Kaur

Mechanical	Mr. Anil Antony Sequeira
ECE & Mechatronics	Mr. Abdulla K P
Basic Science	Dr. Vijaykumar
SAP Coordinators	
Civil	
Computer Science	Ms. Sukhwant Kaur
Mechanical	Mr. Sachidananda
ECE & Mechatronics	Dr. Ramaprasad Poojary
Humanities	
ISM	Zaheeruddin Ahmed
Professional Society Activities	
IEEE	Mr. Jawid Nazir, Mr. Abdulla K P
ASHRAE	Dr. S.V. Kota Reddy & Mr. S.Anil Babu
SAE	Mr. Sampath Suranjan
ASME	
ASCE	Ms. Susan John
ORACLE Advance CS	Mr. Zaheeruddin Ahmed
CIW	Mr. Zaheeruddin Ahmed
RAS	Mr. Abdulla K P, Dr. Roma Raina
SAP UCC	Mr. Zaheeruddin Ahmed
CISCO	Dr. Sophia Rahaman
Prometric Testing Center	
CISCO, EMC ²	Mr. Jawid Nazir
ICDL	Dr. Sophia Rahman
Internships	
Civil	Ms. Susan John
Mechanical	
ECE and Mechatronics	Mr. Suresha R, Sumathi, Dr. Roma Raina
CSE	Mr. Zaheeruddin Ahmed

B.Sc. ISM	Mr. Zaheeruddin Ahmed
Seminars	
Mechatronics	Dr. Roma Raina
ECE	Dr. Ramaprasad
Civil	
CSE	Ms. Sukhwant Kaur
Mechanical	
ISM	Mr. Zaheeruddin Ahmed
Industrial Visit	
Civil	Ramesh Vandanapu
Mechanical	
ECE	Mr. Suresh B
Mechatronics	
CSE and B.Sc. ISM	M I Jawid Nazir, Dr R Vijaya arjunan
CHE	Dr. Vijayakumar
Project Work	
Civil	Ramesh Vandanapu
Mechanical	Mr. Sampath Suranjan
ECE	Dr. Ramaprasad Poojary
Mechatronics	Dr. Roma Raina
CSE	Mr. Zaheeruddin Ahmed(In charge), Dr R Vijaya Arjunan
B.Sc. ISM	Mr. Zaheeruddin Ahmed(In charge)
Website	
www.mictm.com : Mr. Zaheeruddin Ahmed	
www.manipalitudubai.com : Zaheeruddin Ahmed	
www.manipaldubai.com : Mr. M.I Jawid Nazir (SOEIT Portal), Mr. Shamik Palit, Mr. Ganes Subramaniam, Mr. Anthony Anil	
Faculty Club	
Dr. Ramaprasad Poojary	
Guest Lectures	
Dr R Vijaya Arjunan, Mr. Zaheeruddin Ahmed	

Placements
Dr. Chithirai Pon Selvan
Mr. Zaheeruddin Ahmed (CSE, B.Sc. ISM and M.Sc.IS) Incharge
Examination
Dr. Raghavendra R (In-charge), Dr. Sophia Rahaman, Ms. Sukhwant Kaur, Dr. Roma Raina, Mr. Zaheeruddin Ahmed (M.Sc. & CGM)
Students Activities
Dr R Vijaya arjunan , Dr. Vijayakumar, Mr. Zaheeruddin Ahmed, M.I Jawid Nazir
University Magazine(Incharge School of Engg & IT)
Dr. Roma Raina
Magazine 360⁰
Mrs. Sumathi, Dr. Roma Raina, Zaheeruddin Ahmed, Dr. Sophia Rahaman
Cultural
Dr. Roma Raina
Sports
Advanced Training Program
GRE: Mrs. Sumathi, CISCO and EMC ² : M I Jawid Nazir, ICDL : Dr. Sophia Rahaman
International University affiliations
Dr. Sophia Rahaman
Open House
Mr. Suresha (In charge) Mr. Zaheeruddin Ahmed, Dr. Sophia Rahaman, Ms. Sukhwant Kaur, M.I Jawid Nazir
Mr. Ramesh Vandanapu (Civil Engineering)
NAAC and KHDA
Dr. Ramprasad Poojary, Dr. Sophia Rahman, Ms.Sumathi

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

Yes, the programs offered, the curricula, student performance and various paraphernalia of the department are assessed year after year by the local authority the Knowledge and Human Development Authority (KHDA) under their regulatory body UQAIB.

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

Certification Courses:

- a. CISCO – IT Essentials, CCNA
- b. EMC²
- c. ECDL/ ICDL
- d. CIW

Few certification courses like IT Essentials, ECDL/ ICDL, CCNA, EMC² are mapped into the curriculum of the B.Sc. ISM and B.Tech Computer Science and Engg. Programs

- a. Nissan Arabia Automobile conducted workshop & seminar
- b. Emirates Aviation Certificate & Training Program

51. Future plans of the department.

- New courses planned:
 - B.Sc in Applied Science
- Strengthening the research activity in the department.
- Increase the student intake in all the programmes of engineering.
- Enhancing the placement activities and internship for students.
- Tie up with new industries to have better Industry-Institute interaction.
- Organizing National and International Conferences to provide a common platform for researchers.
- Enhancing Professional Society Activities.
- Training to Industry Professionals.

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

Strength	Weakness
<ul style="list-style-type: none"> • Value added & Job-oriented Industry certification/ training programs. • Portfolio of courses ranging from certificate, undergraduate to advanced Master's program with specialization. • Commitment to quality, dedication, positive morale, and work ethics • Attractive Campus • Strong relationships with professional societies in the region like IEEE, ASHRE, ASCE, SAE, etc. • Strong brand identity in Indian community. • State of the art lab facilities & Industry sponsored lab 	<ul style="list-style-type: none"> • Lack of partnership with community agencies. • Lack of diversity in enrollment and work force. • Less flexible program structure compare to western Universities. • At present hostel facility is not available on campus.

Opportunity	Challenges
<ul style="list-style-type: none"> • Strategic geographic position in Middle east. • Increase International recognition. • Expand partnerships with other Universities/ Higher education Institutions to add more value in the programs. • Alternative budgeting/funding models with the help of Alumni, and Industry partner. • Opportunity to interact with reputed universities from across the globe. 	<ul style="list-style-type: none"> • Limited options of external research funding. • Transitional nature of the expatriate population. • Alternative education providers i.e. distance learning education, online educations. • The current immigration policy tends to make harder the stay of graduating students (no extension of VISA after graduation). • Growing competition with foreign universities.

1. **Name of the Department:** School of Media & Communication
2. **Year of establishment:** 2005
3. **Is the Department part of a School/Faculty of the university?**
Yes
4. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**
 1. (UG) Bachelor of Arts in Media & Communication with majors in:
 - a. Advertising & Event Management
 - b. Graphics & Animation
 - c. Print & Electronic Journalism
 - d. Television & Video Production
 2. (PG) Master of Arts in Media & Communication with majors in:
 - a. Journalism (Print & Electronic Media)
 - b. Printing Technology & Publishing
 - c. Advertising, Corporate Communication & Event Management
 - d. Electronic Programming: Production & Media Planning

5. Interdisciplinary courses and departments involved

Courses	Departments Involved
Information Technology Competency Certification (ITC 101)	School of Engineering & Information Technology
Web Development (GRA 305)	
Economics: Fundamentals (ECN 101)	School of Business
Business & Financial Journalism (PEJ 314)	
Principles of Media Management (MGT 201)	
Event Management: Theory & Policy for Planned Events (AAM 313)	
Consumer Behaviour: Theory & Principles (AAM 303)	
Functional Arabic (LNG 101)	
Arabic – Interview Technique: Principles & Practices (LNG 112)	
Media Economics & Enterprise Management (MMC 103)	

Initiated second level talks to explore inter-school tie-ups for Master of Business Administration (MBA) in Media & Entertainment with the School of Business, Manipal University Dubai Campus.

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

There exists an academic tie-up with EICAR, The International Film and Television School of Paris for our BA and MA Courses.

However, the school is negotiating a similar tie-up with the School of English and Foreign Languages and Centre for Cultural Studies, Institute of English, University of Kerala (India); while, exploring possibilities with the School of Arts & Creative Industries, Edinburgh Napier University (UK).

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

- Discontinued certain courses (see Annexure 01.) because of redundancy/becoming obsolete due to technological, societal, and industrial paradigm shifts/praxis
- Due to the above reason and based on student, faculty, adjunct faculty, industry, employer, internship provider feedback programmes/courses have undergone minor/major revision/s in 2005, 2008, 2011, and 2013.
- The revision for year 2015 is being undertaken to evolve common course structure, syllabus, and pedagogical parameters for our Parent Institution of Higher Learning (School of Communication, Manipal University, India) and Branch Institution of Higher Learning (School of Media & Communication, Manipal University Dubai Campus)

8. Annual/ Semester/Choice Based Credit System

The new Semester based credit system leading to calculation of Cumulative Grade Point Average on a 10 point scale. Grade 'E' being minimum pass grade. Grade 'F' stands for failing to secure minimum pass grade i.e. below grade value '5'; 'I' is used for 'absent' or failing to show up for Exams; and, 'NE' implies that the student was 'not eligible' for evaluation/exam.

S. No.	Grade	Grade Value
1	A+	10
2	A	9
3	B	8
4	C	7
5	D	6
6	E	5
7	F or I or NE	0

The Old Semester based credit system (for the out going students of September, 2013 and

September, 2012 batches) leading to calculation of Cumulative Grade Point Average on a 4 point scale. Grade 'C' being minimum pass grade. Grades 'D+' and 'D' are academic probations only, therefore, not considered pass grades. Grade 'F' stands for failing to secure even academic probation; 'I' is used for 'absent' or failing to show up for Exams; and, 'NE' implies that the student was 'not eligible' for evaluation/exam.

S. No.	Grade	Grade Value
1	A	4.0
2	B+	3.5
3	B	3.0
4	C+	2.5
5	C	2.0
6	D+	1.5
7	D	1.0
8	F or I or NE	0

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
Professors	1	1
Associate Professors (Senior)	1	0
Associate Professors	1	0
Assistant Professors (Selection)	2	1
Assistant Professors (Senior)	3	3
Assistant Professors	4	3

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

#	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided for the last 4 years
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1	Rashid Narain Shukul	Doctorate (PhD.); MA Mass Communication; BA (Hons.) English Literature; PGD in Multi-Camera Direction;	Professor	Cinematography; Direction; Film & Television Production; Film & Television Studies; Media Research & Management; Photojournalism; Visual Communication; Visual Designing; Writing for Media;	32	Nil
2	Joseph John Nalloor	MA English; MA Communication Studies; Pursuing PhD	Asst. Prof. (Senior)	Journalism; Media Research; Corporate Communication; Interview Skills; Print Design & Layout	13	Nil
3	Sabir Haque	M.A. Mass Communication ; Pursuing PhD	Asst. Prof. (Selection)	Film & Television Studies; Media Aesthetics; Graphic Design; Studio Production; Script Writing; Visual Communication; Photography; Video Editing	11	Nil
4	Megna Kalvani	MA International Journalism; BA Media & Communication	Asst. Prof.	Journalism; Print & Social Media: Edit & Design; Writing for Media; International Relations; Media & Society;	04	Nil
5	Elsa Ashish	MS	Asst. Prof.	Journalism;	07	Nil

	Thomas	Communication ; BA Communicative English	(Senior Scale)	Writing for Media; Media psychology; Public Relations; Copywriting		
6	Sivaprasad Nandakumar	MA Sound Production BA Music Diploma in Audio Engineering	Asst. Prof.	Studio Sound, Screen Sound & Radio Production. Avid Pro Tools HD 8 Certified Expert	9	Nil
7	Sujith Gopalkrishnan	MA Personnel Management; BCom; PG Dip Arena Multimedia; Diploma in Animation; Certification in Audodesk, 3Ds Max	Asst. Prof. (Senior Scale)	3D Animation, 2D Animation, Visual effects, Video Compositing, Editing & Design for Print	14	Nil
8	Sambhram Pattanayak	MA in Journalism and Mass Communication with Television specialization; BA History (Hons); Diploma in Videography; Adobe after effects certification; Final Cut pro certification; Avid Liquid Pro certification	Asst. Prof.	Photography, Visual Communication, Television and film production, DVD authoring, Sports Journalism, Photo Journalism.	15	Nil

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

Name	Credentials
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Dimo Valev	Avid Certified Professional; Graphic designer; GM Polyform Ads
Dr. Ziaurrahman Azmi	Assitant Professor (Selection Grade) School of Business, Manipal University Dubai; Arabic Linguist and tranlaster; Islamic Studies expert
Mahana Ismail	Linguist, Strategic Arabic Translator, Visiting Faculty at Dubai Government' recognised Arabic Institutes
Prince Arora	Marketing & Advertising Consultant; CEO Sea Shell Advertising
Karthikeyan Lenin	Assistant Professor, School of Business, Manipal University Dubai; Professional Trainer; Previously isiting Faculty at Amity, Skyline, SZABIST and Sharjah University for Economics, International Business, HR
Sanjay Nair	Creative Consultant & Advertising Professional; Director Brand Services, Full Circle Advertising; CEO Iron Eagles
Siddharth Seth	Professional Radio Broadcaster
Venkat Iyer	Journalist, Corporate Communication Specialist
Khyati Shetty	Assistant Professor (Senior), School of Business, Manipal University Dubai; Marketing specialist
Vijay Mohan	Najmul Hassan Fellow at Oxford UK, Masters in English, Bachelor of Journalism; leading journalist and media consultant from Amrita & Maa TV
Taramol K.G.	Assitant Professor (Senior), School of Business, Manipal University Dubai; Economics, Research Methologies, Media Management
Sophia Rahman	Assistant Professor (Senior), The School of Engineering & Information Technology; Information Technology realted soft skills expert, Data processing and basic Computer Software specialist.

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

- UG: 13.69%
- PG: 16.21%

14. Programme-wise Student Teacher Ratio

- UG: 1:6.28 (incl. adjunct faculty); 1:16.5 (for core faculty)
- PG: 1: 1.5 (incl. adjunct faculty); 1:2.75 (for core faculty)

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

	Sanctioned	Filled
Technical	2	1
Administrative	1	Nil

16. Research thrust areas recognized by funding agencies

Presently, the school is deliberating on/in process of identifying principal research areas recognised by various funding agencies in the Middle East and North Africa region:

- Advertising Impact Studies
- Media Framing
- Media Consumption Habits
- Mediated Message related Studies
- News Dissemination in the age of Social Media
- Online News Reading Patterns
- Reading Habits among Youth
- Social Media Marketing

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.

Presently, none, however, please refer to answer no. 16.

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
- national recognition
- international recognition

None - The school has established Media & Communication Research and Analysis Wing (MCRAW) for the MENA region. The school has approached various industry players and governmental agencies for tie-up and/or grants. The process of recognition is

going to be a slow process and dependent on quality of work. The quality is a gateway to most financial grants. Thus, to achieve the desired goals MCRAW took its first steps by organising two seminars, encouraging faculty to pursue terminal degrees, and write academic papers. The next academic year (2014-2015) MCRAW aims to organise first international conference with its faculty and students presenting academic papers.

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

None, however, the department has established on its own initiative state-of-the-art facilities and is presently holding discussions and deliberations with various industry players/patrons like Adobe Labs, Avid, Canon, and Nikon.

22. Publications:

- **Number of papers published in peer reviewed journals (national / international)-** Two
- **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.)-** Nil
- **Citation Index – range / average -** Nil
- **SNIP-** Nil
- **SJR-** Nil
- **Impact Factor – range / average -** Nil
- **h-index-** Nil

Rashid NarainShukul:

- Issues and Challenges of Television Advertising: Empowering the Future Generation through Education. Paper presented at the Eighth AIMS International Conference on Management (AIMS-8) jointly organized by Indian Institute of Management Ahmedabad (www.iimahd.ernet.in) and AIMS International-The Association of Indian Management Scholars (www.aims-international.org) January-1-4, 2011
- Born Lucky (105 episodes);
- One Crore Question (56 Episodes);
- Shopping Hangama (105 Episodes + 2 Seasons),and

- Terra Quiz (54 episode + 2 Seasons) as Multi Camera Director for Fremantle Inc. Sabir Haque:
- “SHIFTING NEWS CONSUMPTION - the future of news aggregators,” paper presented at The International Search Conference, May 2011, Taylor University, Kuala Lumpur, Malaysia
- “Heroes of the UAE” audit film for EWS-WWF
- “The Week That Was” & “Big Fish”. – weekly shows for NDTV ARABIA, 2010
- “Working at Heights” Fall Protection Film for National Drilling Company, Abu Dhabi, 2011
- Scripted and Directed “*The Land of the Tall*” – Durban Film Festival, South Africa, 2010

23. Details of patents and income generated

Nil

24. Areas of consultancy and income generated

- Publicity material for Admission & Marketing Department (In-house, income generated is notional)
- Documentation for Sports & Facilities Department (In-house, income generated is notional)
- Social Media Content & Management for the University in Dubai (In-house, income generated is notional)
- Social Media Content & Management for the Dubai International Film Festival; Gulf Film Festival; Sharjah International Book Fair; INDEX; CABSAT; Consulate General of India (for External Agencies to provide active industrial/professional experience and earn goodwill & undertake brand positioning for the University and the department, income generated is notional, however, based on conservative industry based figures, notional income exceeds AED 3.5 million)
- Children International Film Festival Jury on categories: Direction, Script, Cinematography, and Best Film Awards (it generated brand awareness about the School, University – the income generated is notional.)

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

Within UAE:

- Studio TwoFour54, Government of Abu Dhabi
- American University of Sharjah Studio in Sharjah University Studio
- Arabian Radio Network, Radio Spice, and Radio Mirchi Studios in Dubai

- Gulf News Newspaper & Publishing facilities
- Khaleej Times Newspaper & Magazine facilities
- Radio Four Recording facilities
- Graphest Adobe Center in Dubai
- Eiffel Printing Press

26. Faculty serving in

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

Rashid NarainShukul:

- Dubai Press Club
- Press Club of India
- Manipal Board of Studies
- Committee of Children International Film Festival 2014 Jury

Joseph John:

- Dubai Press Club

27. Faculty recharging strategies

Industry interface and tie-ups as media partners with:

- Intra-university departments
- Media Industry project based tie-ups
(for details see answer no. 24)
- Workshops & Conferences on Student Evaluation Approaches; latest industrial practices; Arab Media Forum initiated seminars; CABSAT, PhotoWorld, GITEX initiated workshops and symposiums.
- Intra-department discussions and reviews
- Faculty Development Programme (FDC) and Faculty Learning Training and Quality Committee (FLTQC)

28. Student projects

- **percentage of students who have done in-house projects including inter-departmental projects -100%** of students undertake in-house projects

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

100% of students carry out projects in collaboration with industry partners in their final year i.e. Dubai International Film Festival, Sharjah International Book Fair, and Gulf Film Festival. Further, the end-semester-projects are often in collaboration with various independent and government agencies like Dubai Road Transport Authority; Dubai Travel and Tourism Authority; Sharjah Museum; Dubai Ministry of Labour & Immigration; Al Noor Foundation; Motivate Val Morgan Cinema; Dubai Festival City; Nayomi Abaya; Emirates Wildlife Society (a wing of World Wildlife Fund for Nature); NGOs like Tasmena and Al Noor; Magrudy's Emirates Literature Festival; and Global Youth Empowering Movement – Dubai United Arab Emirates

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

- Faculty:**

- Sabir Haque:
 - Best Film Award at Water and Development Film Festival, Madurai, 2008 for “Delhi – the 24x7 story”
- Rashid Narain Shukul:
 - Two (2) Pinnacle Awards for Multi-camera Direction.
 - Special mention for cinematography at National Film Festival, New Delhi 2002-03.

- Doctoral / post-doctoral fellows:** NA

- Students**

- Four students nominated for ‘Young Journalist Award’, Dubai International Film Festival 2014
- Two films shortlisted for the Michelin Film Competition 2014
- Final year postgraduate student, Neha Kalvani wins prestigious Young Journalist Award at the 10th edition of Dubai International Film Festival (December 2013) for her outstanding talent, commitment and promise for a future career in the industry.
- Four students were among the top 10 shortlisted candidates for the DIFF Young Journalist Award 2013. Disha Dadlani (BA first year), Nikita Wadkar (BA, 2nd year), Lavanya Narayan (BA, 3rd year) and Neha Kalvani (MA, 2nd year) were mentored by Colin Brown, Screen’s former editor-in-chief. The award aims to encourage and promote journalism within the media industry and offers unique and exciting opportunities for students in the UAE.
- Zubair Ahsan was awarded the Safe Driving Award organized by FedEx

Express, Ciel Marketing and Events and endorsed by Dubai Police and the Emirates Motor Sports Federation, the driving skills challenge was organized to share safe driving habits among the youth of the UAE. The awareness campaign was conducted across Dubai-based universities between March 17 and 25.

- Evangeline Jessica Johnson is ranked the top rated Indie artist and second in Alternative Charts in the Middle East on ReverbNation, a website that helps independent musicians get recognition.
- Department awards aspiring student filmmakers, Hileri Bilakia, Natasha Khiara and Gurjeet Kaur for their film, “Shadows” at the Graduation Film Screening on 20th June 2013.
- Postgraduate student, Evangeline Jessica Johnson was among the top 10 semi-finalists at the student entrepreneur competition, Big Start 2013, an opportunity to turn student business ideas into reality.
- Scribe, which is principally a media writing club, has facilitated many a students like Suha Sabith, Joanna Samuel and Madhumita Ragahavan to publish their works under opinion journalism.
- Final year graduate student Brendan Lopes, a talented Disc Jockey has been featured on Radio Frequency, an international online radio station. Lopes has over ten radio shows added to his portfolio that displays his skills as a house and electronic DJ.
- In the same vein, final year graduate student, Aayush Kewalramani has also created a niche for himself as a Disc Jockey. He has been featured on radio show, “Fire & Spice” on Radio Spice, 105.4 FM with over nine sessions to his credit that demonstrates his skills as a house, electronic DJ with a desi twist.
- Second year media student, Vikyath Poojary won the Men’s category at Dubai’s Dancing Sensation on 29th November 2013.

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

- Seminar on “The Birth of an Author in You” by Dr. A.P.J. Kalam, sponsored by the Government of Sharjah, Department of Culture and Information in association with DC Books was held on 7th November 2013.
- TEDx University Conference 2014 “Student 2.0” to discuss what makes an ideal student in today’s post digital revolution age on Thursday, November 27, 2014.
- MCRAW 2014: Two Day Symposium titled “Media & Social Responsibility” on 20th and 21st May 2014.
- MCRAW Seminar 2014 along with a Film Screening, ‘The Brain That Sings.’ The

seminar encouraged discourse on the role of media as an effective tool for public and social awareness.

- MCRAW Panel Discussion on “Role of Women in Media” organised on 29th October 2015.

31. Code of ethics for research followed by the departments

The codes of ethics followed are as dictated by the Office of International Science & Engineering (National Science Foundation, USA)

32. Student profile course-wise

Bachelor of Arts – Media and Communication	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
Academic Year 2005 - 2006	69	26	43	92.3	97.67
Academic Year 2006 - 2007	64	18	46	94.44	97.82
Academic Year 2007 - 2008	63	22	41	95.45	97.56
Academic Year 2008 - 2009	46	14	32	92.85	100.0
Academic Year 2009 - 2010	70	12	44	91.66	97.72
Academic Year 2010 – 2011	28	9	19	44.44	94.74
Academic Year 2011 - 2012	36	12	21	83.33	85.71
Academic Year 2012 - 2013	41	22	19	na	na
Academic Year 2013 - 2014	84	28	46	na	na

Master of Arts – Media and Communication	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
Academic Year 2008 - 2009	7	2	5	50.0	80.0
Academic Year 2009 - 2010	7	2	5	100.0	80.0
Academic Year 2010 – 2011	6	2	4	100.0	100.0
Academic Year 2011 - 2012	11	5	6	100.0	100.0
Academic Year 2012 - 2013	8	0	8	na	87.5
Academic Year 2013 - 2014	14	5	9	na	na

33. Diversity of students

Bachelor of Arts – Media and Communication	% of students from the same university	% of students from other schools/ universities within Dubai	% of students from schools/ universities outside the Emirate	% of students from other countries
Academic Year 2013 - 2014	NA	58.33	34.73	6.94

Master of Arts – Media and Communication	% of students from the same university	% of students from other schools/ universities within Dubai	% of students from schools/ universities outside the Emirate	% of students from other countries
Academic Year 2013 - 2014	14.28	0.0	0.0	85.72

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

Details of Competitive Examination	No of Students cleared
Civil Services & Defence Services	Data not available*
NET, SET, GATE	Data not available*
IELTS	Data not available*
TOEFL	Data not available*

* Primarily, due to highly mobile immigrant nature of majority population of the United Arab Emirates and alumni's peculiar dynamics of vertical and horizontal movement in this part of the world, it is difficult to acquire reliable data on the same.

35. Student progression

Student progression	Percentage against enrolled
UG to PG	14.28%
PG to M.Phil.	NA

PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed <ul style="list-style-type: none"> • Campus selection • Other than campus recruitment 	<ul style="list-style-type: none"> • 80.0% • 15.0%
Entrepreneurs	5.0%

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	12.5%
from other universities within the Emirate	-
from universities from other Emirates	-
from universities outside the country	87.5%

37. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period

One

38. Present details of infrastructural facilities with regard to

a) Library

School	Books	No. of Periodicals	AV Resources	Thesis	E-Journals (EbscoHost)	E-Books (EbscoHost)
School of Media & Communication	1438	12	700	-	2000	1635

b) Internet facilities for staff and students

c) Total number of class rooms

d) Class rooms with ICT facility

e) Students' laboratories

f) Research laboratories

Infrastructure Facilities	Details
b) Internet facilities for staff and students:	Free Internet Facility for staff and students by LAN & WiFi
c) Total number of class rooms	Four
d) Class rooms with ICT facility	Four
e) Students' laboratories	Six: <ul style="list-style-type: none"> • Multi-Media Lab with high end Computers for Graphics & Animation • Print Media Lab • Sound Recording Lab • Electronic Media Post Production Lab • Television Studio • Production Control Room • Digital Photography Room
f) Research laboratories	All of the Seven Labs of the above mentioned facilities are equipped with requisite paraphernalia to carry out media related production and research based studies.

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

a) from the host university

b) from other universities

NA

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.

Time-line	Institution - Accreditation Body	Description
2005 - 2011	Manipal University Dubai Board of Studies; Manipal University Senate Committee;	Student, Alumni, Industry, Internship Provider, Prospective Employer, Subject Experts, Faculty feedback and Parent Institution are the principal players who deliberate on what Industry expects from graduating students in terms of skill
2013	Combined School of Communication (Manipal India) and School of Media & Communication Board of Studies; Manipal University India Senate	

	Committee.	sets, knowledge level, and proficiency levels. This forms the benchmark for all programmes/courses evaluation/s. A general comparison is also made with some of the leading universities' curriculum.
2014	<p>Combined School of Communication (Manipal India) and School of Media & Communication Board of Studies; Manipal University India Senate Committee.</p> <p>The process has been initiated in January 2014 for changes for Academic Year 2015-2016.</p>	<p>Further, it may be noted that all courses are constantly evaluated, irrespective of feedback, for continual refinement in an ever-changing global as well as regional environment and faculty members in tandem with the Board of Studies, collectively make a decision. The feedback mechanism is an important tool used by the school. The evaluation process is based on a three year cycle basis in order to avoid changes that are biased and cosmetic in nature.</p>

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, the school discusses the feedback in its regular internal meetings. The feedback may be bounced before the students, alumni, industry members, adjunct faculty, and subject experts for a healthy debate and deliberation.

The department has established Faculty Learning, Training and Quality Committee (FLTQC) which oversees administration, collection, tabulation, analysis, and inference of all 'feedback' related activities. Feedback helps the FLTQC, in consultation with the Chairperson, to effectively counsel-mentor and guide faculty to develop 'good teaching practices.'

The Course Coordinators also use feedback mechanism to address any issue ranging from arrangement of extra-classes and re-scheduling lectures to providing intervention in case student starts to lag behind in her/his studies or assignments and provide for general academic and general ambience, in consultation with the

Chairperson, for student's optimum performance.

The school follows time honoured tradition of 'Mentors'. These mentors are assigned to students at the time of their joining the programme till they pass out. These mentors, also, use data from the feedback mechanism.

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

Yes, the FLTQC collects feedback in order to collect and discuss the issues in a transparent manner to improve the learning environment. The data is then extensively discussed and deliberated with the Chairperson, who in turn may confer with the Academic President (if the need be). Some suggestions may be dealt in 'close-door' sessions. Please see the answer to 42.a question, as well.

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

Yes, any feedback by the alumni, employers, internship providers, subject expert, or industry partner is seriously, democratically, and rigorously deliberated in an intra-departmental forum vis-à-vis efficacy of programmes/ courses.

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

Name of Alumni	Details
Aditi Malhotra	Defence Analyst, The Centre for Land Warfare Studies (CLAWS), New Delhi
Afshan Ahmed	Senior Reporter, The National, Abu Dhabi
Ateeb Ahmed	Media Scheduler, MBC Group, Dubai
GeetKandya	Music Video Director, New York
Japinder Kaur	Film Producer, Bombay
Karen Monsy	Assistant Editor, Wknd Magazine, UAE
Lavanya Narayan	Sub-editor, Business Line, The Hindu
Nikita Arora	Senior Correspondent, NDTV
Rachel Lewis	Account Manager, Edelman Public Relations
Rehaab Daud	CEO, MuseDubai Talent Agency
SajanSkandakumar	Art Director, Saatchi & Saatchi, Bangalore

44. Give details of student enrichment programmes (special lectures / workshops /

seminar) involving external experts.

Participation in Extension activities	Significance For the Dept
Alex Boden, Producer, Pistachio Pictures	Visiting Dignitaries and Guest Lectures of International Repute
Amal Agroobi: Emirati, Filmmaker	
Amish Tripathi, International Author	
Amitav Gosh, International Author	
Ashok.V, National Store LLC	
Atul Tiwari, Special Correspondent, Press Information Bureau	
Bob Swaim, acclaimed Hollywood filmmaker	
Bryan Peterson, internationally renowned photographer, Nikon School	
Chetan Bhagat, Author and Critic	
Chris Bosco, COO, IM Global	
Dan Brown, International Author	
Deepak Jain, Director of Children International Film Festival	
Dr. Franziska Apprich, Dean, School of Communication, Canadian University, Dubai	
Dr. Meena T. Pillai, Director, School of Cultural Studies, Kerela University, India	
Ehtesham Ahmed, National Store LLC	
Fadi Ismail, Group Director of Services, O3 Production/MBC Group	
Fasial Hashmi, UAE based Filmmaker	
Federico Beja, Director/Cinematographer, Concept View Media	
Gary Adcock, CEO & CTO, Studio37 Inc	
Guneet Monga, CEO & Producer, Sikhya Entertainment	
Hayley Norgan, Student Awards Manager, Dubai Lynx Advertising	
Jayant Bhargava, Head of Digital Media & Entertainment, Middle East and Strategy, PricewaterCoopers Middle East	
Jerusha Sequeira, Online Journalist, CPI Group	
Joana Hadjithomas, Artist & Filmmaker	
John Quinn, Presentologist, Satellite Visual Communication	
Joshua John, Quays News, University of Salford	
Kim Magnusson, CEO & Producer, M&M Productions	

Kris Iyer, Radio ME	
Lubna Kabir, Director of PricewaterCoopers Middle East	
Lutfi Bin Sheikh the co-founder of Aflamnah.com	
Maha Husain, Josh FM 79.8	
Nikita Arora, NDTV 24X7	
Paddy Bird, Editor, Inside The Edit	
Prof. Abderrahmane Azzi, Dean, College of Communication, University of Sharjah	
Raed Al Abbas, National Store LLC	
Raul Gabat, Canon Middle East	
Sanjay Raina, General Manager & Vice President, FOX International Channels, Middle East, North Africa & Pakistan	
Santosh Sivan, Film Director and Cinematographer	
Sashi Kumar, International Author	
Shiv Khera, International Author	
Sonia Filinto, Indian Independent Filmmaker	
Timo Vuorensola, Filmmaker	
Venkat Iyer: PR & Media Department at Dubai Investments	
Vipin Jeejo: Digital Content Manager, Arabian Radio Network	
Wasif AlHakem, Canon Middle east	
Children International Film Festival 2014	Student Participation as Media Partners with major regional media players:
Dubai International Film Festival 2014, 2013, 2012 & 2011 provided news, blog, print, electronic media & documentary support.	
Gulf Film Festival 2011, 2012, 2013, 2014	
Sharjah International Literature Festival 2014, 2013, 2012 – documented, pocast, blogged on behalf the prestigious Literary Body	
Blackmagic Design, Middle East	Student Visits (based on invitation) to Media Events organised by:
Cable and Satellite Exhibition, International Electronic Media and Satellite Communication event 2014	
Dubai International Film Festival 2014	
Dubai Lynx 2014 - International Advertising Awards for the Middle East and North Africa, presented by Cannes Lions International Advertising Festival.	

Khaleej Times (Newspaper offices and printing press)	
NewTek	
Nikon Middle East	
Sony Middle East	
Studios and offices of various Radio Channels under the Arabian Radio Network	

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

Following Teaching Methods have been successfully used by the School of Media & Communication:-

- Case Studies.
- Group Discussions and Debates.
- Hands on Job approach for ‘Student Controlled Media Service Opportunities’ as during prestigious and high impact international events like Dubai International Film Festival and Sharjah International Literature Festival; regional events like Gulf Film Festival; national events like PhotoWorld or Autism Awareness Drives; Inter-college events and intra-university events
- Hands-on training in Laboratories, indoor & outdoor locations
- Industry Attachments Programme (Internships: as and when applicable)
- Industry Visits
- Power Point Presentations and Audio Visual Presentations.
- Seminars and Symposiums
- Training Workshops & Sensitization Interactive Modules conducted by Industry Professionals

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

- Each student is assigned a faculty member as ‘Mentor’. The responsibility of the Mentor is to address the student’s academic issues, counsel the students on issues which may affect his/her class performance, attendance, grades, extra-curricular activities, career options, social adaptability and conflict resolution.
- Student undergoing an internship (Industry Attachment Programme) is assigned an Industry Attachment Programme (IAP) faculty guide. The primary responsibility of the IAP faculty guide is to guide the intern to approach IAP with positive attitude and re-acquaint the student with pre-requisite tools and skill sets necessary for the Internship. The IAP faculty guide also oversees the student regularity issues, maintain a rapport with the respective Industry Representatives, monitor and assess the progress made by the student.

- Student working on a Graduation Project is attached to a faculty member, who guides the student through his/her research and other academic guidelines.
- Student working on an Under-Graduate Project is guided by a core-specialization faculty member, who guides the student through his/her research and other academic guidelines.
- The Mentors sends a mid-semester report on the progress of the students under their care. The report is based on the attendance/ academics/ health problems/ disciplinary action & abnormal behaviour, if any.
- Names of students whose report are unsatisfactory are sent to the Student Services officer/ Career & Personal Councilor for action deemed fit.
- In addition, the weak students are identified and special coaching is given to them.
- Mentors have been identified for taking care of / motivating multi casual students. This has had a positive effect on the students. It has helped in many of them taking their studies seriously and clearing their backlogs thereby progressing well academically.
- Further, at the end of each academic semester each student has to submit a Project, which in reality is a natural culmination point for all the courses taught, theory elaborated, and skill sets acquired. Successful completion of the project is a strong indication of assessing whether all the learning outcomes have been met or not.
- Also, the viva that follows the submission and assessment of the project is intended to cross check if the student has acquired the stipulated skill sets, knowledge and is capable of praxis.
- As an added measure, Continuous Assessment of the course participants through their class work, assignments, seminars, tests, viva-vocas, and end-semester examination is undertaken. The continuous assessment components weight-age is for 50% of the marks and end-semester examination marks constitute the other 50% of the total final marks. Evaluation has two components, namely:
 - Continuous assessment
 - End-semester examination
- Equal weight-age is accorded to both the above-mentioned components. However, in the courses having practical component the theory to practical weight-age may vary from 40:60 to 60:40.
- The continuous assessment of all Media-Laboratory sessions take place based on performance, observations, viva-vocas, logbooks, competency tests, and grading on a four-point scale. The grading schema is given below:

S. No.	Percentage of Marks	Grade	Grade Value
1	90 % and above	A+	10
2	80 %-89%	A	9

3	70 %-79%	B	8
4	60%-69%	C	7
5	50%-59%	D	6
6	40% - 49%	E	5
7	Below 40%	F or I or NE	0

Also, see answer to Section 8 above.

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

The School has actively pursued up-gradation of facilities encompassing both academic and as well as extra-curricular activities since its inception. The tasks include:

- Designing and Commissioning of a Multi Camera Live Studio with Production Control Room (Lab) support. This has directly resulted in launching of Manipal Dubai TV and a video magazine titled ‘Campus Beat’
- Designing and commissioning of Post-production Lab with state of the art equipment for non-linear video edit systems.
- Designing and commissioning of Visual Communication / Multi-media Lab with latest software and hardware. This has been a hotbed of many a creative and promising visual expressions in the field of animation, kinetic typography, and poster designs
- Designing and commissioning of Print Media Lab with latest software and hardware that a journalist/magazine editor is likely to encounter in the industry. This facility has triggered numerous student print project initiatives like ‘Campus News Letter,’ ‘University Student Blog,’ and individual based ‘Citizen Journalism Blogs
- Designing and commissioning of Sound-Recording/Radio Lab with state of the art digital equipment for non-linear track compilation system and recording booth. This augmented launching of Manipal Dubai Student Radio, JIGSAW in 2012.
- Our initiative to give our students exposure and work experience with leading media publications and broadcast agencies has helped students to get industry experience
- Our efforts to encourage students to participate in various national and international forums like Ibda'a Media Student Awards initiated by Dubai Media City in association with the International Advertising Association has brought recognition apart from showcasing talent of our students at international level
- Further, students of the department, our brand ambassadors, have been the best asset in ‘brand positioning’ exercise and establishing the university’s reputation, its academic integrity, and capacity to disseminate knowledge and skills.
- The department considers forming of a formal Alumni Body as an essential extension activity as it will help the students (both current and former) to network

and contribute their mite towards the cause of departmental and student progress.

48. Give details of “beyond syllabus scholarly activities” of the department.

- The department conducts and initiates various workshops, seminars, field trips, industry visits, and symposiums from time to time for the benefit and intellectual stimulation of the student (as well as for the faculty) community
- Students are encouraged to identify, plan, and even organize similar events on their own initiative to address their specific needs for acquiring / refining skills sets, knowledge base, gain fresher perspective or getting acquainted with new technology/process /techniques
- Students are encouraged to participate in most industry sponsored workshops, symposiums, and seminars to be able to address contemporary issues and challenges in academic, professional, and industry sphere
- students undertake supervised and quasi-supervised projects in collaboration with industry partners like:
 - Al Noor Training Centre for Children with Special Needs
 - Dubai International Film Festival
 - Gulf Film Festival.
 - Sharjah International Book Fair
 - The Dessert Group
 - The Rolling Stone ME Magazine
 - The UAE Exchange
- Further, the end-semester-projects, often in collaboration with various independent, government, and quasi-government agencies lead to added learning beyond what class-room or workshop scenarios can impart towards human and public relations, real-time project management, out-of-box-thinking, thinking-in-one’s-shoes, crisis management, and evaluate need for extensive research and planning. Some of the agencies that students often land up working for are:
 - Al Noor Foundation
 - Association Internationale des Étudiants En Sciences Économiques et Commerciales (French: International Association of Students in Economics and Management) Dubai & International Chapter
 - Dubai Festival City
 - Dubai Ministry of Labour& Immigration
 - Dubai Road Transport Authority
 - Dubai Travel and Tourism Authority
 - Emirates Literature Festival
 - Emirates Wildlife Society (a wing of World Wildlife Fund for Nature)

- Global Youth Empowering Movement - Dubai United Arab Emirates
- Magrudys
- Motivate Val Morgan Cinema
- Nayomi Abaya
- Ogilvy & Mather
- Sharjah Museum

49. State whether the programme/ department is accredited/ graded by other agencies?

If yes, give details.

The department enjoys recognition from:

- a. Dubai Entertainment and Media Organisation (DEMO)
- b. Dubai Media City, member of TECOM (DMC),
- c. Dubai Press Club
- d. Dubai Studio City, member of TECOM
- e. Dubai Technology and Media Free Zone Authority, premier media nodal authority in Dubai (TECOM)
- f. Knowledge and Human Development Authority (KHDA)
- g. The Dubai Film and TV Commission (DFTC)
- h. TwoFour 54 (Abu Dhabi Media Organisation)

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

Presently, the department is seeking to instill higher levels of skill sets, creative audio-visual expression, and deeper knowledge base among its student community. The department is working towards gearing young generation of media professionals to acquire skills to comprehend, analyze, and draw inference from challenges that they are likely to meet when they step out into the real everyday world. Despite, our initial conservative approach, student, as well as faculty, community has been able to generate a large body or original intellectual property which has encouraged the department to contemplate on planning research based approach and define standards of praxis, where ever possible.

51. Future plans of the department.

1. Become an established seat of influence in the fields of Visual Expression, Creativity, and Academic Discourse
2. Campus Recruitment Drive which is most beneficiary to the students
3. Establish and acquire the status of premier Media Research Institute
4. Establish credentials as a reputed hub of higher learning in field of media studies and

- media praxis
- 5. Initiate Doctoral Study programmes
- 6. Instill a strong and rigorous academic atmosphere and conducive environment for a culture of research and academic pursuit
- 7. Institute an internationally recognised research journal under the aegis of the department
- 8. Procure national and international projects and research & development grants for the department
- 9. To establish the department as a recognised *Center of Excellence*

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

Strength	Weakness
<ul style="list-style-type: none"> • Positive experience with those who interact with the department <ul style="list-style-type: none"> ○ Positive reputation in the external community ○ Proactive Partnerships with industry partners, corporations, and agencies ○ Strong, active industry interface approach • Impressive Past performance <ul style="list-style-type: none"> ○ Impressive 5 year graduation rates ○ Potential for Enrollment Growth ○ University Grant’s Commission (India) & Knowledge and Human Development Authority (Dubai) recognised U.G. & P.G. Programs ○ Industry recognition of our students’ capability & knowledge base • Proactive student support <ul style="list-style-type: none"> ○ Access to services ○ Faculty involvement with students ○ Student mentorship/leadership programs • Department Characteristics 	<ul style="list-style-type: none"> • Less flexible program structure compare to western Universities • Unable to convince students to accept research & statistics as a part of media studies • Creating interest in students towards social research.

- Department wide involvement in planning & execution
- Facilities include new and well-maintained labs, attractive building and grounds with growth potential
- Faculty & staff support the campus mission
- Friendly and safe environment
- Healthy shared administration
- Multi-ethnic student body
- Potential for growth
- Service support to marketing and other departments & campus
- Small size area with small class & lab size
- Quality Academic Program
 - Artistic and Cultural Performances (Screening/seminars/exhibits/events)
 - Dedicated, qualified faculty & staff
 - General trends indicate student satisfaction
 - Learning forum developing to augment learning and student-faculty interaction
 - National (India) and Emirate (Dubai) recognition
 - Quality of students are diverse
 - Technology-rich Environment in the department
 - Tutoring and Learning resources in place
- Campus Collegiality
 - Collaborative culture with faculty, administrators and staff
 - Personalized interactions between faculty and students
 - Student Activities

Opportunity

- Development of Alumni Body
- Diversity of region (students – industry)
- Expanded trans-national possibilities for the workforce in the region
- External Community and Department relationships
- Growth potential
- Increase demand for mid-career redirection and lifelong learning
- Increased focus on higher education
- Increased interest in global initiatives
- Interest in academic program expansion
- Interest in expansion of cultural activities
- New construction
- Partnership opportunities
- Partnerships in support of department initiatives
- Potential to establish credentials as a leading international research center.
- Societal trends
 - Increased value of higher education completion
 - Growing demand for graduates with critical & analytical media skills
 - Match between curricular & societal interests
- Latest Technological advances be made intergral part and parcel of the academic curriculum through partnerships with media industry

Challenges

- UAE students seeking admission are often weak in statistics and show lack of general reading habit
- Public perception of being Indian University as opposed to a western university
- Student perception of degree education is solely a means to a obtain a job not enhance critical skill sets
- Convince some of our industry partnes of the benefits of critical & analytical approach in media studies

<p>stakeholders</p> <ul style="list-style-type: none">• Convince some of our industry partners of the benefits of critical & analytical approach in media studies	
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Annexure 1

B.A. - Media & Communication

Specializations: a) Advertising & Event Management; b) Graphics & Animation; c) Print & Electronic Journalism; d) Television & Video Production

Courses Revised/Dropped from year 2005		In favour of 2008 Course Curriculum	
First Year: First Semester (Common to All)			
C 101	Introduction to Communication Studies	BMC 101	Introduction to Human Communication
COA 101	Computer Applications for Journalism (Pre-requisite to COA 102)	BMC 102	Computer Applications in Media (Pre-requisite to BMC 111)
ENG 104	Writing Skills	BMC 104	Basic Writing Skills for Media
HIST 101	Contemporary History of the World	HST 101	History: Contemporary World & Media
J 101	Reporting and Writing (Pre-requisite J 302)	BMC 103	Basic Journalistic Reporting and Writing (Pre-requisite to POJ 312)
M 101	History of the Media (including Internet and New Media)	Discontinued	
PSY 101	Introduction to Cognitive Psychology	PSY 201	Fundamentals of Cognitive Psychology for Media
COA 102	Basic Media Graphics (Pre-requisite COA 101)	BMC 202	New Media Tools and Practice (Pre-requisite to VCN 302 & POJ 303)
		ADDED	
		LNG 101	Functional Arabic I
First Year: Second Semester (Common to All)			
ENG 105	Presentation Skills	LNG 112	Presentation & Public Speaking Skills
M 102	Introduction to Broadcast Media	BMC 113	Introduction to Electronic Media

		ADDED	
		LNG 111	Functional Arabic II
<u>Second Year: Third and Fourth Semester (Common to All)</u>			
M 203	History of Film and Major Film Makers	BMC 213	Film Appreciation
<u>Year Three, Fifth Semester Common subjects</u>			
C 301	Audience Survey and Research Techniques	BMC 303	Audience Survey & Research Techniques
M 301	Media Laws and Ethics	Discontinued	
M 302	Media Criticism	BMC 301	Media Criticism & Literacy
<u>Year Three, Fifth & Final Semester (Specialisation: Advertising and Public Relations)</u>			
APR 301	Elements and Principles of Graphic Design	BMC 302	Elements & Principles of Graphic Design & Layout
APR 302	Promotional Writing and Graphics	Discontinued	
APR 306	Advanced Public Relations Writing and Design	APR 302	Copy Writing Skills and Techniques
APR 307	Research Methods for Promotional Communication	Discontinued	
APR 308	Advertising and Public Relations Campaign Planning (the subject is revised as two course titles: APR 315 & APR 313)	APR 315	Advertising Campaign: Planning & Execution
		APR 313	Public Relation Campaign: Planning & Execution
<u>Year Three, Final Semester (Specialisation: Television and Video Production)</u>			
M 306	Creative Video for Advertising	Discontinued	
M 307	Video Field Production	TVP 314	Video Field Production

M 308	Advanced Writing for Television (Pre-requisite M 204)	TVP 313	Writing for Television (Pre-requisite BMC 214)
M 309	Programme Planning	Discontinued	
Year Three, Fifth and sixth Semester (Specialisation: Print Media)			
J 308	Web News Portal	POJ 303	Introduction to On-line Journalism (Pre-requisite BMC 202)
Year Three, Final Semester (Specialisation: Print Media)			
J 305	Writing and Editing for the World Wide Web	POJ 312	News Reporting and Editing (Pre-requisite BMC 103)
J 306	Computerized Publication Design	BMC 302	Elements and Principles of Graphic Design & Layout
J 301	Contemporary Literature and Communication	POJ 315	Contemporary Literature and Journalism
Year Three, Fifth and sixth Semester (Specialisation: Visual Communication)			
APR 301	Elements and Principles of Graphic Design	BMC 302	Elements and Principles of Graphic Design & Layout
APR 302	Promotional Writing and Graphics	Discontinued	
VC 306	Web Design and Production	VCN 302	Web Design, Programming and Production
VC 302	Photographic Design and Composition	VCN 301	Photographic Design and Composition (Pre-requisite BMC 205)
VC 304	Computer Graphics Programming	DROPPED	
VC 305	Digital Media Applications	VCN 313	Digital Art and Illustrations
VC 301	Digital Media and Communication	VCN 311	Online Media & Communications
VC 307	Computer Animation and Design	VCN 314	3D Computer Animation and Design
VC 308	Multimedia for Entertainment	Discontinued	
		ADDED	

		VCN 304	2D Computer Animation and 3D Modelling
		VCN 312	Interactive Arts & New Media Installation
		VCN 313	Digital Art and Illustrations
		VCN 315	Video Compositing
Courses Revised/Dropped from year 2008		In favour of 2011 Course Curriculum	
First Year: First Semester (Common to All)			
BMC 101	Introduction to Human Communication	BMC 101	Introduction to Human Communication & Presentation Skills (Pre-requisite to BMC 219)
BMC 102	Computer Applications in Media (Pre-requisite to BMC 111)	BMC 105	ECDL/ICDL: IT Competency Certification (Pre-requisite to BMC 111 & BMC 116)
BMC 104	Basic Writing Skills for Media	BMC 108	Writing for Media & English for Media Professionals (Pre-requisite to BMC 117, AAM 302 & TVP 313)
HST 101	History: Contemporary World & Media	HST 102	Contemporary History: World & Art Movement
BMC 103	Basic Journalistic Reporting and Writing (Pre-requisite to POJ 312)	BMC 117	Introduction to Journalistic Reporting and Writing (Pre-requisite to POJ 312)
PSY 201	Fundamentals of Cognitive Psychology for Media	BMC 115	Introduction to Psychology for Media
BMC 202	New Media Tools and Practice (Pre-requisite to VCN 302 & POJ 303)	BMC 116	New Media: Tools & Practice (Pre-requisite to GRA 302 & GRA 305)
ADDED			
LNG 101	Functional Arabic I	LNG 101	Functional Arabic (Pre-requisite to LNG 112)
First Year: Second Semester (Common to All)			
LNG	Presentation & Public Speaking	BMC	Introduction to Human

112	Skills	101	Communication & Presentation Skills (Pre-requisite to BMC 219)
BMC 113	Introduction to Electronic Media	BMC 209	Fundamentals of Multi-Media Systems
		ADDED	
LNG 111	Functional Arabic II	LNG 112	Arabic: Interview Technique - Principles & Practices (pre-requisite to BMC 208, PRJ 211, & TVP 316)
Second Year: Third and Fourth Semester (Common to All)			
BMC 213	Film Appreciation	BMC 107	Film Appreciation (Pre-requisite to BMC 215 & TVP 306)
Year Three, Fifth Semester Common subjects			
BMC 303	Audience Survey & Research Techniques	Discontinued	
BMC 301	Media Criticism & Literacy	Discontinued	
BMC 302	Elements & Principles of Graphic Design & Layout	Discontinued	
Year Three, Fifth & Final Semester (Specialisation: Advertising and Public Relations)			
APR 302	Copy Writing Skills and Techniques	AAM 302	Copy Writing: Skills and Techniques
APR 307	DROPPED	Discontinued	
APR 315	Advertising Campaign: Planning & Execution	AAM 311	Advertising Campaign: Planning & Execution
APR 313	Public Relation Campaign: Planning & Execution	AAM 305	Public Relations: Planning & Execution of PR Exercise
Year Three, Fifth and Final Semester (Specialisation: Television and Video Production)			
M 306	DROPPED	TVP 317	Creative Video for Advertising
TVP 314	Video Field Production	Discontinued	
TVP 313	Writing for Television (Pre-requisite BMC 214)	TVP 306	Writing for Documentaries & Short Films
M	DROPPED	Discontinued	

309			
TVP 311	Television Genres	TVP 305	Film & Television Studies
		ADDED	
		TVP 301	Sound for Moving Images
		TVP 316	Electronic News Gathering
Year Three, Fifth and final Semester (Specialisation: Print Media)			
POJ 303	Introduction to On-line Journalism (Pre-requisite BMC 202)	PEJ 302	Fundamentals of On-line Journalism
POJ 312	News Reporting and Editing (Pre-requisite BMC 103)	PEJ 301	Print: News Reporting and Editing
BMC 302	Elements and Principles of Graphic Design & Layout	Discontinued	
POJ 315	Contemporary Literature and Journalism	DROPPED	
		ADDED	
		PEJ 303	Development Journalism
		PEJ 304	Political & Current Issues in Journalism
		PEJ311	Broadcast Journalism: Writing, Reporting & Producing
		PEJ312	Sports Journalism
		PEJ313	Entertainment Journalism
		PEJ314	Business & Financial Journalism
Year Three, Fifth and final Semester (Specialisation: Visual Communication)			
BMC 302	Elements and Principles of Graphic Design & Layout	GRA 301	Design Basics (pre-requisite to GRA 311)
APR 302	DROPPED	Discontinued	
VCN 302	Web Design, Programming and Production	GRA 305	Web Development (Pre-requisite to GRA 302 & GRA 305)
VCN	Photographic Design and	GRA	Principles of Animation & Video

301	Composition (Pre-requisite BMC 205)	304	Compositing
VC 304	DROPPED		
VCN 313	Digital Art and Illustrations	GRA 311	Digital Art & Movie Making Tools
VCN 311	Online Media & Communications	Discontinued	
VCN 314	3D Computer Animation and Design	GRA 313	3D Animation & Rendering
VCN 315	Video Compositing	GRA 304	Principles of Animation & Video Compositing
VCN 312	Interactive Arts & New Media Installation	Discontinued	
VCN 313	Digital Art and Illustrations	Discontinued	
VCN 204	2D Computer Animation and 3D Modelling	GRA 303	3D Modelling
		GRA 302	2D Animation & Graphics
VC 308	DROPPED		
		ADDED	
		GRA 312	Story Telling Techniques for Animation
		GRA 314	Pre-Production for Animation
Courses Revised/Dropped from year 2011		In favour of 2013 Course Curriculum	
First Year: First Semester (Common to All)			
BMC 101	Introduction to Human Communication & Presentation Skills (Pre-requisite to BMC 219)	BMC 101	Introduction to Human Communication & Presentation Skills (Pre-requisite to BMC 219)
BMC 105	ECDL/ICDL: IT Competency Certification (Pre-requisite to BMC 111 & BMC 116)	ITC 101	Information Technology Competency Certification (Pre-requisite to BMC 111 & BMC 116)

			(Code & Name Changed due to technical reasons ECDL/ICDL are registered trademarks. The course is still the same.)
BMC 106	Visual Communication: Principles & Practice (Pre-requisite to BMC 115 & BMC 206)	BMC 106	Visual Communication: Principles & Practice
BMC 107	Film Appreciation (Pre-requisite to BMC 215 & TVP 306)	BMC 107	Film Appreciation (Pre-requisite to BMC 215 & TVP 306)
BMC 108	Writing for Media & English for Media Professionals (Pre-requisite to BMC 117, AAM 302 & TVP 313)	BMC 108	Writing for Media & English for Media Professionals (Pre-requisite to BMC 117, AAM 302 & TVP 306)
ECN 101	Economics: Fundamentals	ECN 101	Economics: Fundamentals (Pre-requisite to PEJ 314)
HST 102	Contemporary History: World & Art Movement	HST 102	Contemporary History: World & Art Movement
LNG 101	Functional Arabic (Pre-requisite to LNG 112)	LNG 101	Functional Arabic (Pre-requisite to LNG 112)
First Year: Second Semester (Common to All)			
BMC 111	Basic Graphics & Design for Media (Pre-requisite to BMC 206)	BMC 111	Basic Graphics & Design for Media (Pre-requisite BMC 105) (Pre-requisite to BMC 206)
BMC 114	Fundamentals of Event Management	BMC 114	Fundamentals of Event Management
BMC 115	Introduction to Psychology for Media	BMC 115	Introduction to Psychology for Media
BMC 116	New Media: Tools & Practice (Pre-requisite to VCN 302 & POJ 303)	BMC 116	New Media: Tools & Practice (Pre-requisite to BMC 105) (Pre-requisite GRA 302 & GRA 305)
BMC 117	Introduction to Journalistic Reporting and Writing (Pre-requisite to POJ 312)	BMC 117	Introduction to Journalistic Reporting & Writing (Pre-requisite BMC 108) (Pre-requisite to PEJ 312)
LNG 112	Arabic: Interview Technique - Principles & Practices (pre-	LNG 112	Arabic - Interview Technique: Principles & Practices (Pre-requisite

	requisite to BMC 208, PRJ 211, & TVP 316)		LNG 101) (Pre-requisite to BMC 208, PRJ 211, & TVP 316)
PIR 111	Political Science and International Relations	PIR 111	Political Science & International Relations
Second Year: Third Semester (Common to All)			
AAM 201	Fundamentals of Advertising & Public Relations (Pre-requisite to AAM 301)	AAM 201	Fundamentals of Advertising & Public Relations (Pre-requisite to AAM 301)
BMC 206	Graphics & Design for Media (Pre-requisite to BMC 216)	BMC 206	Graphics & Design for Media (Pre-requisite BMC 111) (Pre-requisite to BMC 216)
BMC 208	Radio Production & Drama: Theory & Practice	BMC 208	Radio Production & Drama: Theory & Practice (Pre-requisite to LNG 112)
BMC 209	Fundamentals of Multi-Media Systems	BMC 209	Fundamentals of Multi-Media Systems
MGT 201	Principles of Media Management	MGT 201	Principles of Media Management
PTG 201	Introduction to Photography	PTG 201	Introduction to Photography
RST 201	Introduction to Mass Media Research (Pre-requisite to RST 211)	RST 201	Introduction to Mass Media Research (Pre-requisite to RST 211)
PRJ 201	Project I (Basic Photography)	PRJ 201	Project I (Basic Photography)
Second Year: Fourth Semester (Common to All)			
BMC 215	Basic Film and Video Production (Pre-requisite to TVP 304 GRA 311& PEJ 311)	BMC 215	Basic Film & Video Production (Pre-requisite BMC 107) Pre-requisite to TVP 304 & PEJ 311)
BMC 216	Print: Editing, Design & Layout (pre-requisite to PRJ 303)	BMC 216	Print: Editing, Design & Layout (Pre-requisite BMC 206) (Pre-requisite to PRJ 303)
BMC 218	Contemporary Literature & Media Criticism	BMC 218	Contemporary Literature & Media Criticism (Pre-requisite to PEJ 313)
BMC	Human Communication: Media	BMC	Human Communication: Media &

219	and Society	219	Society (Pre-requisite BMC 101)
RST 211	Application of Research & Survey Techniques for Media	RST 211	Application of Research & Survey Techniques for Media (Pre-requisite RST 201)
PRJ 211	Project II (Magazine: Content & Layout)	PRJ 211	Project II (Magazine: Content & Layout) (Pre-requisite LNG 112)
Third (Final) Year: Fifth Semester (Advertising & Event Management)			
AAM 301	Advertising: Account Planning and Management	AAM 301	Advertising: Account Planning & Management (Pre-requisite AAM 201)
AAM 302	Copy Writing: Skills and Techniques	AAM 302	Copy Writing: Skills & Techniques (Pre-requisite BMC 108)
AAM 303	Consumer Behaviour: Theory & Principles	AAM 303	Consumer Behaviour: Theory & Principles
AAM 304	On-line & Social Media Advertising	AAM 304	On-line & Social Media Advertising
AAM 305	Public Relations: Planning & Execution of PR Exercise	AAM 305	Public Relations: Planning & Execution of PR Exercise
PRJ 301	Project III (Social Service Advertising)	PRJ 301	Project III (Social Service Advertising)
Third (Final) Year: Sixth (Final) Semester (Advertising & Event Management)			
AAM 311	Advertising Campaign: Planning & Execution	AAM 311	Advertising Campaign: Planning & Execution
AAM 312	Advertising: Media Planning and Buying	AAM 312	Advertising: Media Planning & Buying
AAM 313	Event Management: Theory & Policy for Planned Events	AAM 313	Event Management: Theory & Policy for Planned Events
AAM 314	Fundamentals of Integrated Marketing Communications	AAM 314	Fundamentals of Integrated Marketing Communications
PRJ 311	Final Project (Event Management: Planning, Marketing and Execution)	PRJ 311	Final Project (Event Management: Planning, Marketing & Execution)
Third (Final) Year: Fifth Semester (Graphics & Animation)			
GRA 301	Design Basics (pre-requisite to GRA 311)	GRA 301	Design Basics (Pre-requisite to GRA 311)

GRA 302	2D Animation & Graphics (pre-requisite to GRA 312)	GRA 302	2D Animation & Graphics (Pre-requisite BMC 116) (Pre-requisite to GRA 312)
GRA 303	3D Modelling	GRA 303	3D Modelling
GRA 304	Principles of Animation & Video Compositing	GRA 304	Principles of Animation & Video Compositing
GRA 305	Web Development	GRA 305	Web Development (Pre-requisite BMC 116)
PRJ 302	Project III (Graphics & Web Design)	PRJ 302	Project III (Graphics & Web Design)
Third (Final) Year: Sixth (Final) Semester (Graphics & Animation)			
GRA 311	Digital Art & Movie Making Tools	GRA 311	Digital Art & Movie Making Tools (Pre-requisite GRA 301)
GRA 312	Story Telling Techniques for Animation	GRA 312	Story Telling Techniques for Animation (Pre-requisite GRA 302)
GRA 313	3D Animation & Rendering	GRA 313	3D Animation & Rendering
GRA 314	Pre-production for Animation	GRA 314	Pre-production for Animation
PRJ 312	Final Project (Animation)	PRJ 312	Final Project (Animation)
Third (Final) Year: Fifth Semester (Print Media & Electronic Journalism)			
PEJ 301	Print: News Reporting and Editing	PEJ 301	Print: News Reporting & Editing
PEJ 302	Fundamentals of On-line Journalism	PEJ 302	Fundamentals of On-line Journalism
PEJ 303	Development Journalism	PEJ 303	Development Journalism
PEJ 304	Political & Current Issues in Journalism	PEJ 304	Political & Current Issues in Journalism
PEJ 305	Photojournalism	PEJ 305	Photojournalism
PRJ 303	Project III (Citizen Journalism Blog: Layout & Content)	PRJ 303	Project III (Citizen Journalism Blog: Layout & Content) (Pre-requisite

			BMC 216)
Third (Final) Year: Sixth (Final) Semester (Print Media & Electronic Journalism)			
PEJ 311	Broadcast Journalism: Writing, Reporting & Producing	PEJ 311	Broadcast Journalism: Writing, Reporting & Producing (Pre-requisite BMC 215)
PEJ 312	Sports Journalism	PEJ 312	Sports Journalism (Pre-requisite BMC 117)
PEJ 313	Entertainment Journalism	PEJ 313	Entertainment Journalism (Pre-requisite to BMC 218)
PEJ 314	Business & Financial Journalism	PEJ 314	Business & Financial Journalism (Pre-requisite ECN 101)
PRJ 313	Final Project (Magazine: Content, Layout & Design)	PRJ 313	Final Project (Magazine: Content, Layout & Design)
Third (Final) Year: Fifth Semester (Television & Video Production)			
TVP 301	Sound for Moving Images	TVP 301	Sound for Moving Images
TVP 304	Television Studio Production	TVP 304	Television Studio Production (Pre-requisite BMC 215)
TVP 305	Film & Television Studies	TVP 305	Film & Television Studies
TVP 306	Writing for Documentaries & Short Films	TVP 306	Writing for Documentaries & Short Films (Pre-requisite to BMC 107 & BMC 108)
TVP 307	Video Editing & Re-Directing	TVP 307	Video Editing & Re-Directing
PRJ 304	Project III (Video Magazine)	PRJ 304	Project III (Video Magazine)
Third (Final) Year: Sixth (Final) Semester (Television & Video Production)			
TVP 315	Lighting & Visual Effects for Video	TVP 315	Lighting & Visual Effects for Video
TVP 316	Electronic News Gathering	TVP 316	Electronic News Gathering (Pre-requisite LNG 112)
TVP 317	Creative Video for Advertising	TVP 317	Creative Video for Advertising
TVP	Video Compositing & DVD	TVP	Video Compositing & DVD

318	Authoring	318	Authoring
PRJ 314	Final Project (Docu- drama/Documentary)	PRJ 314	Final Project (Docu- Drama/Documentary)

1. **Name of the Department : School of Business**
2. **Year of establishment:** 2003
3. **Is the Department part of a School/Faculty of the university?:** Yes. Part of University Dubai campus
4. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**
 UG: BBA (Three Years)
 BHMTT (Three Years)
 PG: MBA (Two Years)
5. **Interdisciplinary courses and departments involved:**

<u>School</u>	<u>Course</u>
Engineering & IT	Business Application
Engineering & IT	Organizational Behaviour
Engineering & IT	Principles of Management
Engineering & IT	Buying Behavior
Engineering & IT	Engineering Economics and Management
Interior Design & Arch	Principles of Management
Interior Design & Arch	Marketing
Interior Design & Arch	Advertising and Brand Management
Media & Commn	Introduction to Mass Media Research
Media & Commn	Economics, Introduction to management
Media & Commn	Application of Survey Techniques
Media & Commn	Psychology of Advertising
Media & Commn	Events Management
Media & Commn	Public Relations

6. **Courses in collaboration with other universities, industries, foreign institutions, etc.**
 The school has collaboration with Fraser Valley University in, Canada; for credit transfer.
 The school has collaboration with Edinberg Napier University offering students to do one term with them and earn credits to get an additional MBA degree from the University
7. **Details of programmes / courses discontinued, if any, with reasons:** Nil.

8. Annual/ Semester/Choice Based Credit System :

Semester and Trimester (from Sept. 2014 for MBA)

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

School	No. of courses handled by our faculty
Engineering & IT	4
Interior Design & Arch	3
Media & Commn.	6

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

1:2:6)<http://www.mlids.org/images/com/Faculty.pdf>

	Sanctioned (as per AICTE norms)	Filled
Professor	3	2
Associate Professors	6	3
Assistant Professors	18	10

11. Faculty profile with name, qualification, designation and specialization

#	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided for the last 4 years
1	Dr.Nilanjan Chattopadhyay	PhD - IT	Professor and Chairperson	IT,	20	Not Applicable
2	Dr. Aftab Haider Rizvi	PhD - OR	Professor	Statistics, OR, TQM	17	3
3	Dr. Sameena Khan	PhD – Eco	Assoc. Prof.	Economics	13	Not Applicable
4	Dr. B. Sudhakar	PhD – Management	Assoc Prof.	HRM	17	Not Applicable
5	Dr.Sangeetha Vinod	PhD - Management	Assoc Prof.	HRM	15	1
6	Ms. Shahzia	PhD –	Asst. Prof.	Marketing	11	Not

	Khan	Marketing	(Senior Grade)			Applicable
7	Dr. Ziaurrahman Azmi	PhD - Arabic	Asst. Prof. (Selection Grade)	Arabic, Islamic Finance	13	Not Applicable
8	Ms. Julie Vardhan	MBA - Marketing	Asst. Prof. (Senior Grade)	Marketing	14	Not Applicable
9	Ms. Khyati Shetty	MBA – Marketing, PGDHRM	Asst. Prof. (Senior Grade)	Marketing & HRM	10	Not Applicable
10	Mr. P. Anantharaman	MCom, MBA, MPhil. (Com)., BEd,	Asst. Prof. (Senior Grade)	Accounting & Finance	24	Not Applicable
11	Ms. Taramol	MA., (Eco) MEd, MPhil (Eco)	Asst. Prof. (Senior Grade)	Economics	11	Not Applicable
12	Mr. S. Satishkumar	MBA – Marketing	Asst. Prof. (Senior Grade)	Marketing	17	Not Applicable
13	Mr. L. Karthikeyan	MBA	Asst. Prof. (Senior Grade)	Operations Management	15	Not Applicable
14	Ms. Sunitha Haneef	MA (Tourism)	Asst. Prof. (Senior Grade)	Hospitality & Tourism	9	Not Applicable
15	Mr. Rajesh Pai	MCom, ACA, MPhil,	Asst. Prof. (Senior Grade)	Accounting & Finance	14	Not Applicable

As on current records.

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

#	Name of the Visiting Faculty	Qualification	Profession
1	Mr. Navin Kapoor	PGDM (IIM-A)	Consultant & Academician
2	Ms. Renu Avasthi	MBA	HR Consultant
3	Ms. Nita Chakravarthy	MBA (Finance)	Academician
4	Ms. Manjula V	MA (Eco), MBA (HRM), DBM (IIM-Bangalore)	Academician

5	Mr.Ashok Chopra	MBA (HRM)	HR Consultant
6	Mr.Sudarsan	CA., MBA	Finance Consultant
7	Mr.Anamitra Roy	MBA	Consultant
8	Mr.Najam Ahmed	MBA	Marketing Consultant
9	Mr. Dinesh Agrawal	MCom,CA	Finance Consultant
10	Dr. Naseem Abidi	PhD (Operations)	Academician
11	Mr. Clement Jubilant	MBA (INSEAD)	Entrepreneur, Consultant
12	Ms.Manjusha Mathew	MBA	Marketing Consultant
13	Mr.Rakesh Singh	MBA (HRM)	HR Consultant
14	Dr. Hussam Abu Azab	PhD	Consultant & Academician
15	Mr. Sajith Somnath	MBA (Operations)	PMP Consultant
16	Mr.Somnath Mitra	MBA	IT Consultant
17	Mr.Riaz Khan	MBA	Consultant
18	Dr.Sajeev George	PhD	Academician
19	Dr.Mrinalini Shaw	PhD	Academician
20	Sina Aneesh	MCom, MBA, MPhil	Academician

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

Programme	Total courses	Courses handled by temp. faculty	Percentage of Classes (Temporary Faculty)
BBA	29	6	21% *
BHMTT	12	3	25% *
MBA	26	9	42% *

* Data pertains to current-session only.

14. Programme-wise Student Teacher Ratio

Programme	Student Teacher Ratio
BBA	1:20 *
BHMTT	1:20 *
MBA	1:15 **

* For BBA- the above Ratio has been worked out taking into consideration the fact that the teacher is conducting lectures in batches, considering the maximum size of the class-room being 30 students a class.

** For MBA- the above Ratio has been worked out including the industry faculty-teacher who are conducting lectures as visiting faculty, and also the max. Size of the class-room being 30 students a class.

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

Academic Support Staff	Sanctioned	Filled
Technical- Computer Lab. administrator	1	1
Administrative	1	1

16. Research thrust areas recognized by funding agencies –

Faculties of the Department have identified the following areas of research within their core domain and are working in the same as their Research thrust areas:-

1. Dr. Nilanjan Chattopadhyay – IT and Finance
2. Dr. Aftab. Haider Rizvi -Operations Research and Total Quality Management.
3. Dr. B. Sudhakar - Emotional Intelligence and Entrepreneurship
4. Dr.Sameena Khan - Economics
5. Dr.Sangeetha Vinod - Organizational Culture, Stress, Leadership,
6. Dr.Shahzia Khan - Marketing
7. Dr. Ziaurrahman Azmi – Islamic Finance
8. Ms.Julie Vardhan – Marketing, Corporate Entrepreneurship
9. Mr. L.Karthikeyan – Logistics and Supply Chain Management
10. Mr. P.Anantharaman - Accounting, Investment Management
11. Ms.Taramol – Economics
12. Mr. Rajesh Pai - Accounting and Finance
13. Ms.Sunitha Haneef – Tourism Management
14. Mr. S.Satishkumar - Marketing

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.

Dr. Sameena Khan, Associate Professor, received the grant of AED 10000,funded by Manipal University for the research work entitled “An Evaluative Framework To Measure The Competitiveness Of The Uae Tourism Industry: Redefining Tourism In The Perspective Of Expo 2020 For The Economic Development”

18. Inter-institutional collaborative projects and grants received - 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 / national recognition /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)**
– 20 papers published(as per list below)

#	Publication details
1.	Sangeetha Vinod et al., Talent Management among UAE National Women, Journal of Emerging Trends in Economics and Management Sciences, Volume 5, Issue 5, (Pg.474-479), December 2014
2.	Taramol.K.G., Economic Empowerment of Rural women-A study from Ernakulam district of Kerala, India, The International Journal Research Publication's Research Journal of Economics&Business Studies, Volume4,No.2,pg.8-9 , December 2014
3.	Taramol.K.G. Eradication of Poverty and Women Empowerment - A Study of Kudumbashree Projects in Ernakulam District of Kerala, India, International Review of Research in Emerging Markets and the Global Economy, International Review of Research in Emerging Markets and the Global Economy, Vol1, Issue5.ISSN:2311-3200, December 2014
4.	Sangeetha Vinod & B.Sudhakar, A Review on the Yoga Way of Life for the Reduction of Job Burnout of Managers, Global Journal for Research Analysis, Volume 3, Issue 11, (Pg.100-105, November 2014
5.	Sangeetha Vinod, Sudhakar, et al., A Study on the Impact of Ethnocentric Traits on the Level of Emotional Intelligence among Managers, Dubai, UAE, International Journal of Emerging Research in Management & Technology, Volume 3, Issue 11, (Pg.73-79), November 2014

6.	Sangeetha Vinod , Sudhakar, et al., Workplace Spirituality an Attribute of Organizational Culture: A New Paradigm, International Journal of Advanced Research in Computer Science & Software Engineering, Volume 4, Issue 10, (Pg.119-122), October 2014.
7.	Karthikeyan Lenin, The impact of procurement in the construction industry, South Asian Academic Research Journals, Volume:4, Issue:6, ISSN No 2249 - 877X, October 2014
8.	Karthikeyan Lenin, Measuring service quality in the U.A.E Banking Industry using SERVQUAL, Global Journal for Research Analysis, Volume 3; Issue 10; ISSN No 2277-8160, October 2014
9.	Karthikeyan Lenin, Measuring supply chain performance in the healthcare Industry, Science Journal of Business and Management, Volume: 2, Issue: 5, ISSN No 2331-0626, October 2014
10.	Khyati Shetty Datta, Measuring Service Quality in the U.A.E Banking Industry, Global Journal for Research Analysis, Volume 3; Issue 10 ;ISSN No 2277 – 8160, October 2014
11.	Shah M, Chattopadhyay Nilanjan, Innovation in procurement from rural India using enterprise mobility strategy: a case study, World Journal of Entrepreneurship, Management and Sustainable Development”, Emerald Publication, Vol. 10.No. 2, June 2014
12.	Karthikeyan Lenin, The impact of inventory on organizational performance, South Asian Academic Research Journals, Volume: 4, Issue: 6, ISSN No 2249 – 877X, June 2014
13.	Karthikeyan Lenin, Digital documentation processes involved in the insurance sector, South Asian Academic Research Journals, Volume: 4, Issue: 4, ISSN No 2249 – 877X, April 2014
14.	Chattopadhyay Nilanjan, Shah Mrinalini, Exploring positive effects of innovation on business performance of restaurants in India, International Journal of Business Innovation and Research, Inderscience Publication, Vol.8, No.3, 2014, pp252-264, April 2014
15	Karthikeyan Lenin, A Study on the Impact of Training in Al Futtaim Motors, Dubai, GJRA Global Journal for Research Analysis, Global Journal for Research Analysis, Vol : 2,Issue :3,ISSN: 2277 – 8160, March 2014
16	Karthikeyan Lenin, A study on the impact of IPL on the operation of trading and logistics companies in UAE, The Indian Management Researcher, HBS, Gitam University, Volume: 1, Issue: 2, • ISSN No 2349-2090, Jan., 2014
17	Karthikeyan Lenin, “Analysis on the Warehouse Management and Practices – A Case study in UAE”, FC No: FC 1553, Dec 2013

18	Karthikeyan Lenin, “Analysis on the Warehouse Management and Practices – A Case study in UAE”, FC No: FC 1551, Dec 2013
19	Khan, Shahzia and Sarkar, A K. (2013). “A critical evaluation of the FMCG market environment in the United Arab Emirates”, Mumukshu Journal of Humanities ISSN 0976-5085), Vol. 5(1) Issue of June 2013.
20	Ms. Seena Biju , Dr. Sreekumaran Nair ‘An Internal Audit of Student Satisfaction using Multilevel Models Based on Prioritized Explanatory Variables’, International Journal of Information Processing and Management, Vol.4 , No.1 pp. 15~28, Jan 2013.

- * **Monographs** – Nil.
- * **Chapters in Books:** NIL

23. Details of patents and income generated–Nil

24. Areas of consultancy and income generated–Nil

25. Faculty selected nationally/ internationally to visit to present research papers in India and abroad.

1. Taramol.K.G., Poverty Alleviation through Neighbourhood Groups - A study in Ernakulam District of Kerala State, India, International Conference in Technology, Science, Social Science and Humanities, Flora Grand Hotel, Dubai, UAE, December 2014
2. Nilanjan Chattopadhyay, Mrinalini Shah, Strategic Balancing between Service Quality and Innovation: Evidence from Banking Industry, INFORMS Annual Conference, San Francisco, USA, November 2014
3. Mrinalini Shah, Nilanjan Chattopadhyay, Shipping Cost Optimization for an E commerce Retail Company, INFORMS Annual Conference, San Francisco, USA, November 2014
4. Taramol.K.G., Eradication of Poverty and Women Empowerment-A study of Kudumbashree Projects in Ernakulam District of Kerala, India, First Middle East Conference on Global Business, Economy, Finance and Banking, Al Rotana Hotel, Dubai, UAE, October 2014
5. Karthikeyan Lenin, Understanding the role of packaging in the supply chain activities- A Case Study, Proceedings of ARC 2014 II International conference on Applied Research in Business, Management, Economics and Finance, Pattaya, Thailand, August 2014.

6. Karthikeyan Lenin, A study on the impact of IPL on the operation of Trading and Logistics Companies in UAE, One day conference on Emerging Issues and Challenges in Supply Chain Management, Hyderabad business school, Hyderabad, India, March 2014.
7. Sangeetha Vinod & Sudhakar.B., Workplace Spirituality as an Attribute of Organizational Culture: A New Paradigm, International Conference on Technology and Business Management (ICTBM-14), March 2014

26. Faculty serving in

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

1. Dr.Nilanjana Chattopadhyay serving as Member of Board of studies- Department of Management Studies, Manipal University, Manipal - India.
2. Dr.B.Sudhakar, Editorial Advisory Board Member for the International Journal of Trade and Global Business Perspective, by PEZZOTTAITE Journals
3. Dr.B.Sudhakar, Editor, Ancient Science, (Open, Online Scientific Journal), VRI Press, Vedic Research Inc, Seaford, NY 11783 USA., ISSN 2373-7964.
4. Dr. Sangeetha Vinod registered Ph.D Foreign Examiner for Bharathiar University, and Bharadidasan University, Tamilnadu, India.
5. Dr. B. Sudhakar registered Ph.D Foreign Examiner for Bharathiar University, and Annamalai University, Tamilnadu, India.

27. Faculty recharging strategies

1. Faculty Development Programme on “Academic Leadership” conducted by Dr. Ramnarayan, Vice-Chancellor, Manipal University, India, organized by Manipal University, Dubai, United Arab Emirates, October 2014.
2. Faculty Development Programme on “Examination Assessments” conducted by Dr.L.N.Rao, Registrar- Evaluation, Manipal University, India, organized by Manipal University, Dubai, United Arab Emirates, June 2014.
3. Faculty Development Programme on “Pedagogy and Interpersonal Effectiveness”, conducted by Dr.K.Ramnarayan, Vice-Chancellor, Manipal University, India, organized by Manipal University, Dubai, United Arab Emirates, Jan 2014.

28. Student projects

- **Percentage of students who have done in-house projects including inter-**

departmental projects (BBA)

Year	Total. No. of projects	No. of Internship projects	%
2014	70	55	78%
2013	71	40	56%
2012	96	50	52%

- **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–**

1. Dr. Nilanjan Chattopadhyay chaired a session on Innovation in Service Delivery at the 2014 INFORMS Annual Conference, held at San Francisco, USA.
2. Ms. Taramol KG was honored by Excellent Paper Award for the research paper presented at the International Conference on Technology, Science, Social Sciences and Humanities held in Dubai.
3. Dr. Sameena Khan mentored 9 teams to write research papers. All nine papers were accepted for publication by CGI.
4. Dr. Sangeetha Vinod as a Foreign examiner reviewed 3 PhD dissertations during 2013 and 2014 for Bharathiar University, and Bharadhidasan University, Tamilnadu, India.
5. Dr. B. Sudhakar as a Foreign examiner reviewed 4 PhD dissertations during 2013 and 2014 for Bharathiar University, and Annamalai University, Tamil Nadu, India

- **Doctoral / post-doctoral fellows–Nil**

- **Students**

1. BBA III year students scored the top position in the business event ‘ORBIS’ 2014 at the SP Jain School of Global Management in DIAC, Dubai.
2. BBA I year students won the first position at PHOENIX, the Business Event at ‘Vaudeville’ 2014 at the IMT Dubai Campus.
3. 3 Students from BBA 2nd year won the second prize of AED 30,000/= each in Business4Better competition conducted by Western Union and Al Ansari Exchange.

4. BBA third year students participated in The 2014 CIMA GLOPBAL BUSINESS CHALLENGE in partnership with BARCLAYS.
5. BBA 1st year students took part in TAPMI Quiz on the Beach Dubai round held in Dubai Chamber of Commerce.
6. Fiona Mathias, Syed Ali Naqvi and Abhilash Leeladharan students of BBA III year won a commendable second prize at the CIMA case study competition in May 2013.

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

31. Code of ethics for research followed by the departments

This Code of ethics prescribes standards of responsible and ethical conduct expected of all persons (academic staff, students, technical and other support staff) engaged in research in the department based on the following guiding principles.

1. Research is an honest and original investigation undertaken in order to gain knowledge and understanding and make this widely available
2. Research workers should, in all aspects of their research -
 - i. demonstrate integrity and professionalism;
 - ii. observe fairness and equity;
3. Research data and records should be accurate, complete and in sufficient detail to enable verification of research results and to reflect what was communicated, decided or done;
4. Research misconduct is constituted by a failure to comply with the principles or specific provisions of the code and includes but is not limited to conduct in, or in connection with, research that is (a) dishonest, reckless or negligent and (b) seriously deviates from accepted standards within the scholarly community for proposing, conducting or reporting research, such as following, includes -
 - a. the fabrication or falsification of data or results,
 - b. the use of another person's ideas, work or data without appropriate acknowledgement,
 - c. Misleading ascription of authorship to a publication including the listing of authors without their permission, attributing work to people who have not in fact contributed to the publication, the lack of appropriate acknowledgement of work primarily produced by a research student/trainee or associate.

32. Student profile course-wise:

Name of the Course (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
BBA 2013	NA	63	59	68%	85%
MBA 2013	NA	75	65	88%	68%
BBA 2014	NA	52	31	95%	90%
MBA 2014	NA	55	34	95%	78%

33. Diversity of students

Name of the Course (refer to question no. 4)	No. of residential students accepted within UAE	No. of transnational students accepted outside UAE	% of students from other countries
BBA	236	20	5%
MBA	292	15	3%

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

Not Available

35. Student progression

BBA

Student progression	Percentage against enrolled		
	2012	2013	2014
UG to PG	32%	23%	23%
PG to M.Phil.	0%	0%	0%
PG to Ph.D.	0%	0%	0%
Ph.D. to Post-Doctoral	0%	0%	0%
Employed	55%	64%	65%
<ul style="list-style-type: none"> • Campus selection • Other than campus recruitment 			
Entrepreneurs	13%	13%	12%
Total	100%	100%	100%

MBA

Student progression	Percentage against enrolled
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Student progression	Percentage against enrolled		
	2012	2013	2014
PG to M.Phil.	0%	0%	0%
PG to Ph.D.	0%	2%	0%
Ph.D. to Post-Doctoral	0%	0%	0%
Employed <ul style="list-style-type: none"> • Campus selection • Other than campus recruitment 	98%	93%	94%
Entrepreneurs	2%	5%	6%
Total	100%	100%	100%

36. Diversity of staff:

All the full-time faculty members are from India, working for Manipal, Dubai, United Arab Emirates

Percentage of faculty who are graduates	No	%
of the same university	1	7%
from other universities within the State	0	0
from universities from other States	0	0
from universities outside the country	14	93%

37. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period

- Ms. Seena Biju defended research on the “The 6- σ strategy in quality metrics of services in academic institutions” in partial completion for the Doctoral degree at the Manipal University Manipal India, June 22nd 2013. The PhD Degree was conferred on Nov 9th 2013.
- Ms. Shahzia Khan submitted her PhD thesis entitled "A Critical Evaluation of Business Practices of FMCG MNCs in UAE. (With special reference to Dubai)" to MJP Rohilkhand University, Bareilly(UP) India in August, 2013.
- Mr. Vishwanathan Bharathan Submitted his doctoral thesis (PhD) titled “ Study on Auditors’ and chartered Accountants ‘perception on Accounting Standards and works values” to Manonmaniam Sundaranar University, Tirunelveli, TN, India on 14th June 2013.

38. Present details of infrastructural facilities with regard to

a) Library

There is a central library that houses the latest international journals, magazines and periodicals besides relevant subject matter text books. Total No. of books available are 4432 and there are 22 management related journals / periodicals available. Other resources like audio visuals (342) and Referred thesis (1356) are also available for ready reference. Apart from that 11,855 ebooks and 2000 ejournal are available.

b) Internet facilities for staff and students

The school has 18 Computers and One Printer. Internet facility is available with each of the 18 systems and the campus is Wi-Fi active too, that enables the students and staff to be hands-on with information.

c) Total number of class rooms

9 Classrooms

d) Class rooms with ICT facility

All the 8 Classrooms are equipped with LCD projectors, computers, and internet and are LAN networked.

e) Students' laboratories

There is an IT lab with 32 computers and functional software like; MS Office, Turbo C and Photoshop that are state-of-the-art and applicable to BBA students.

f) Research laboratories : Not Applicable**39. List of doctoral, post-doctoral students and Research Associates**

a) From the host university : 1

b) From other universities : 5

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.**

- The faculty members conducted a structured undisguised Questionnaire-based survey among the BBA-Fresher's of 2013-2014 batches and submitted a report on Fresher's perception of the Program to the management.

- The faculty conducted a structured undisguised Questionnaire-based survey among the BBA-Final year students to obtain their feedback on Faculty, curriculum, infrastructure etc., and submitted a report to the management.
- The faculty conducted a comparative study on the curriculum of competitor institutions in Dubai offering MBA program.

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?

Currency of information for every course title taught over the semester is a critical success factor that is identified as one of the key performance areas for the team of faculty members in the School of Business. The school meets periodically to discuss about coursework, syllabus and its utility, textbooks and reference books. Thereby, the chair generates a list as per the faculty members recommendations pertaining to the latest editions of textbooks, new titles of reference books, which is diligently passed on to the librarian for purchase. Faculty members on an individual basis collect written or oral feedback of students' expectations regarding course content and what they would like to listen and learn more of. This practice has definitely elevated the morale of our students as they get the satisfaction of learning up-to-date information. Faculty member too feel enriched by this practice, as they make sure they stay at the edge to impart value-addition to the students.

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

The chairperson has an open-door policy towards student feedback and he encourages them along with a team of senior faculty members to share their thoughts regarding the level of classroom satisfaction. This is done at regular intermittent levels, besides, as and when situational needs demand. A systematic survey was conducted with a structured undisguised questionnaire and data collected from the students to know their satisfaction level as well as expectations. As performance is an indicator of student satisfaction, when there is a swing towards good/poor performance, the faculty members navigate students' performance through supportive counseling and mentoring process. The performance of the students is an indicator towards the need for the teachers to step in for counseling the students and is also subject to the grades scored by the student. What started with counseling for academic reasons has

presently extended to mentoring process wherein every faculty member is an allocated mentor for a specific class of 25-30 students and guides them on internships, major and minor research work pertaining to specific courses, as well as the graduating projects, personality development, resume-building etc. This rapport building effort, ensure that the teacher-student relationship is just not confined to the four walls of the classroom but is an extended relationship. This also enables the faculty members to understand many issues and challenges faced by students and interact with parents of the respective wards as when need arises.

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

- The Inaugural Meet of MBA Alumni was held in the auditorium on the 12th July 2012. Alumni from past batches attended and actively participated in the meet and gave their feedback on:
 - Enhancing alumni- department relationship by inviting alumni to give guest lectures, seminars, conduct workshops
 - Facilitate the current students with internships/placement
 - University facilitate the alumni by conducting periodic skill development programs according to their requirements
 - Conduct an annual get-together for alumni and their families for better bonding
 - Incorporate few members of the alumni into course curriculum development board of the university to update the courses according to industry requirements

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

Name	Year of Passing	Occupation & Designation
Ms.Virali Shah	2013	Sr Executive,Accounts Payble,AL-Tayer Group,Dubai
Dipak Shodhan	2013	Financial Analyst, Century Financial Brokers,Dubai
Victor	2014	Asst.manager, ADCB, Dubai
Sharon De	2014	Accountant, EMIRATES Airlines, Dubai
Guru Prasad	2014	General Manager, Gandoot Steel, Dubai
Shreya Devaraj	2014	Accountant, NMC Hospitals, Dubai
Thomas D'souza	2014	Accounts officer, Dyna Trade,Dubai.
Dinesha Shetty	2014	Supervisor, Accounts-Baker Hughus, Dubai
Srinivas	2014	Sr. Engineer, ABB, Abudhabi.
Abhijeet Kumar	2013	Accounts Officer, Getz Pharma, Dubai.

Libin Sidharan	2013	Asst. Manager Accounts, Baker Hughus, Dubai
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44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

Guest Lectures

1. Prof. A.G. Amrutha Kumari- retired professor of English from Mahatma Gandhi University - Kerala . “ Guidelines of Effective Business Letter writing”, April , 2014
2. Dr. N Ravichandran Professor, IIM Ahmedabad. “On Career Planning and Decision Making”, March 17, 2014
3. Dr. Navneet Gera, Associate Professor at Bharathi University Institute of Management and Research, New Delhi. “International Trade and the Challenges”, 11th March 2014
4. Mr. Asif Challawala, Advertising in UAE , Apr 28th, 2014
5. Mr. Horst Simon, Director, Horwath MAK Limited, Risk Management, 14th Nov 2014
6. Mr. Durai, Financial Controller, AL-Santoz Group, Dubai, “Real Estate Finance” , 17 Dec 2014,
7. Dr. Muhyuddin Ghazi, Shari’a Department, Dubai Islamic Bank, “Takaful vs Conventional Insurance”, 24th of Dec 2014
8. Mr. Dipak Shodhan, Financial Analyst, Century Financial Brokers ,Dubai, “Technical Analysis-Investment” Dec 13th, 2014
9. Mr. S. Sudarshan, Chief Financial Officer , Green Coast Enterprises G, roup on the importance of Corporate Ethics and how it helps in enhancing the image of the organization on 11th November 2013 for the MBA students.
10. Mr. Ravi Panchanadan, Chief Executive Officer, Manipal Global Education Services delivered a guest on the the topic Impact of Social Media on Communication Mix MBA students on 26th and 30th November
11. Mr. Siddharth Sonik, Research executive, TNS Global Dubai delivered a guest lecture on the topic “Business Research and its Challenges” with a special reference to business research in Dubai on 4th December 2013.
12. Ms. Lina Hourani, CSR Division Director, Al Ahli Group and Mr. Geoffrey Roe, Education Manager, Al Ahli Group presented on University Initiatives that they have for students in the UAE on 12TH December 2013.
13. Dr. M. Selvam, Professor and Head of Department of Commerce and Financial Studies, Bharathidasan University, Tiruchirappalli, Tamil Nadu, India and Founder - Publisher & Chief Editor of SMART Journal of Business Management Studies, A guest lecture was organized for BBA 4th Semester students on the topic “Principles of Financial Management”, 5th March 2013

Management Workshops

1. Two Days Management Workshop for the third year BBA students, in order to prepare them for the corporate world. The main highlights of the event are resume writing, preparing for the interview, group discussions, and mock interviews. Apr. 2014
2. Workshop on “Media Buying and Planning” conducted by Ms. Noori Imamuddin, Media Buyer & Planner, Ikon Advertising, Management (BBA), on Dec. 2014.
3. A motivational workshop on “BREAKTHROUGH! Achieving Personal Mastery” was conducted by Dr. Anand Menon, CEO, Empowered Performance FZ LLC for the BBA I semester students on Nov. 2013.
4. Statistics Workshop on SPSS for the BBA students, conducted by Ms. Seena Biju, Faculty Member, School of Business on Apr 2013.
5. Statistics Workshop on SPSS for the MBA students, conducted by Ms. Seena Biju, Faculty Member, School of Business on Apr 2013.
6. Management Workshop was organized for the third year BBA students, in order to prepare them for the corporate world on May 2013. Resource person Mr. Arun Kumar, Project Manager-IBMS for Bilt Middle East LLC speaking to the BBA students on “Attending an interview with an insight into corporate culture and etiquettes.”. Mr. Jaideep Sathe, Head of Human Resources, Ensha PSJC spoke on the topic “Resume Writing, Cover Letter Writing & Interview Preparation.”

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

The school is indebted to the management for providing some of the latest and in-trend teaching aid equipment's that enable the faculty members to utilize them for classroom instruction for both BBA and MBA programmes, making the whole experience of teaching and learning more productive. Some of the equipment's and aids are as listed below that enable in effective pedagogy:

- a) Computers (Desktop/ Laptop)
- b) LCD Projectors
- c) Power Point Slides
- d) Overhead Projectors
- e) Demonstrating videos, flash presentations, animated tutorials etc.

The pedagogy includes:

- a) Case studies with documentaries and videos
- b) Role play
- c) Group discussions
- d) Industrial visits and scenario analysis with report writing

- e) Class assignments
- f) Self-directed studies
- g) Group presentations
- h) Projects/Seminars /Workshops

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

The School of Business, Manipal University, Dubai believes in maintaining its competitive advantage by closely observing and adapting to the regional market requirements for our graduates by timely adoption of market trends and practices, be it in the area of Finance, Marketing, International Business, Operations management, Banking, Accounting and last but not the least Human Resources Management.

This advantage is made possible only through our Chairpersons' and faculty member's efforts to build a synergistic association with industry experts in the capacity of hiring visiting faculty members for select courses for both BBA and MBA students, purposeful one-time guest lectures, resume-building and mock interview workshops, student internships, research projects and final placements.

These are the multifold benefits the department has been able to reap because of such an association:

- BBA students get an opportunity to sit through lecture sessions from various functional specialists from the industry and therefore, are able to relate to the theoretical perspectives taught in class to trends and practices of the UAE market.
- UAE based real-time scenarios and case analysis are introspected and discussed upon which enables the students to sharpen their problem-solving and decision-making skills out of textbooks.
- MBA graduates have an opportunity for active discussions with the industry experts and even arrive upon alternative solutions to their organizational challenges and constraints.
- Corporates' understand the dynamism of our students and appreciate our educational practices that help in establishing an impressive image of the Department of Management Studies and Manipal University in the recruitment market.
- Industrial visits are arranged by our full-time faculty by building networks through the visiting faculty with the varied organizations in UAE and this gives ample opportunity for students to have a close snapshot of the organization be it

manufacturing or service based one's and they in turn appreciate the concepts discussed in classrooms.

- Our students bag research projects and internship opportunities through this industry interaction and it is well-supported and guided by our experienced and able full-time faculty team.
- Last, but not the least, the school on the whole elevates its image for its students, management and industry by consistently fine-tuning itself to academic and industry requirements with the currency of knowledge and practices.

The school is consistently striving towards its growth and development by holistic concentration on quality of teaching, elevation of student satisfaction every year by catering to their needs of up-to-date curriculum, real-time case and scenario analysis, industrial visits, guest lectures, internships and placements.

The school also attempts to keep its internal customers – its potential resource – faculty members satisfied with the competitive pay packages and faculty development programs that caters to their knowledge, skill and abilities to be up-to-date. This is in compatibility with the Manipal Group of Institutions strong belief that satisfaction of internal customers – our faculty members will truly lead to the satisfaction of our external customers – our Students. The school with its 15 full time faculty members and 20 visiting faculty members aims at excelling as a school of excellence that offers state-of-the-art management courses and project at Manipal University, Dubai as a top quality service provider in the field of education. This synergy of full-time and part-time faculty has enabled us to get a third rank for the MBA programme, according to the research survey done by Forbes MiddleEast 2012.

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

Community association and instilling a sense of social responsibility in the minds of youth, especially our student community is one of the core issues that Manipal University has always concentrated upon and to keep up this vision, the department takes varied efforts like motivating students to act as volunteers at various Trade Fairs, Exhibitions, like Gitex, Education fairs, Pink Walkathon (Breast Cancer Awareness Campaign), Go Green, Environment Cleaning Campaigns by Emirates Environmental Group, UAE etc. This definitely has instilled in in our students' mind the attitude to think not for themselves but in the interest of others too.

48. Give details of “beyond syllabus scholarly activities” of the department.

Annual Event

School of Business organized its annual event HORIZONS 2014 on May 14th and May 15th, 2014. This two-day event was a perfect blend of mesmerizing management games and other co-curricular fun filled activities and competitions like Live Monopoly, Business Auction, Impossible Marketing, Heel the World - Corporate Fashion show, Hunt It Down - Treasure Hunt, The Great Big Give- Corporate Social Responsibility, What's the Scenario? -Case study, The Publisher -Print Ad, Let's Get Ridiculous -Mad Ad. It provided the students with ample opportunity to showcase their talents as well as prove to be a self-assessment. The event was sponsored by the region's leading companies like Joy Alukas, Marks & Spencer, Liestyle, Tetrahedron Consulting LLC, Sugarholic, Telephony and many more.

Industrial Visits organized in the School of Business

1. First year BBA students visited Sharjah Museum of Islamic Civilization and learnt a lot about the rich heritage of Islamic Civilization.
2. First year BBA students visited Marmum Dairy as part of their industrial visit. The visit made it possible to learn about the state of art production, breeding and marketing techniques.
3. A visit to Dubai Financial Market was organized for third year BBA students and MBA day program students. The visit helped students learn about stocks and trading in UAE.
4. A plant visit was arranged for MBA students to Al Ahlia Gulf-Line General Trading Co. (PVT) Ltd, Al Ain (Bottlers of Coca Cola) for UAE and Oman.
5. During a visit to Yateem Optical & Rivoli stores at Dubai Mall, General Manager of the Yateem group addressed the students of MBA students.
6. A visit was arranged for BHMTT students to Hotel Hilton and to Halal food and Kitchen Equipment Exhibition – 2014
7. An educational visit to the Dubai Mall was organized for the BBA – Marketing specialization students.
8. An educational visit to the Wafi Mall was organized for the BBA – Marketing specialization students.
9. The BBA Vth semester students Finance specialization students visited the Dubai Financial Market, Oct. 2013
10. An industrial visit to Gulf Oil Plant, Jebel Ali, Dubai was organized for BBA V semester students of marketing and international business management, Dec 2013.

11. An Industrial Visit to Ashok Leyland, Ras Al Khaimah was organized for the BBA II year students. All the three sections were taken for this visit as a part of their practical orientation for the course “Principles of Operations Management” they were doing in the third semester during Dec 2013.
12. The students of Bachelor of Hotel Management, Travel and Tourism semester I have attended the exhibition - Kitchen equipment & Technology Exhibition Middle East 2013 at the Expo Centre, Sharjah on 18th December 2013.
13. The students of Bachelor of Hotel Management, Travel and Tourism semester I visited a professional hotel management training Centre - International Centre for Culinary Arts (ICCA), Dubai, Dec 2013.
14. The students of BBA had visited the Marmum Dairy , April 2013.

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

The Knowledge and Human Development Authority (KHDA) is the agency that monitors periodically the departments/universities academic and administrative records to evaluate the quality of teaching, Student satisfaction, Infrastructure facilities and standardized course curriculum in comparison with the parent campus to ensure quality education in the Free Zone – Dubai International Academic City.

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

The faculty members in the department motivate the students to apply their knowledge, skills and abilities acquired through classroom learning in Business Plan competitions conducted by other Business Schools, Global Business Plan Competitions conducted by Chartered Institute of Management Accountants etc., Many of the students have also won laurels for the department by applying their skills in competitions like Best Manager, Impossible Marketing Plan, Business Debates etc. Therefore, by encouraging the students to participate in business competitions, the department enables them to get an exposure of the competition outside, as well make an assessment of their strengths and weakness. The department believes this will increase their need to improve the basic fundamentals on theory and vociferously think more on the application of the same knowledge into business scenarios.

51. Future plans of the department.

- a. Setting up of a Placement cell and active networking of faculty members, alumni and students in pursuit of potential opportunities
- b. Intensify purposeful Counseling and Mentoring for students'
- c. Guidance for PhD candidates
- d. Motivate existing faculty members to take up their PhD
- e. Adding better resources and facilities to the library.
- f. To enrich faculty skill development by providing timely faculty development programmes
- g. Motivate faculty members to involve themselves in conferences/article publications to enhance their research skills
- h. Improvise existing programmes according to the market requirements
- i. Offer new modules / courses in areas like finance, accounting, operations etc.,
- j. Enhance interphase with industry and simultaneously improve the quality of the students
- k. Conducting National and International Conferences
- l. Starting Management related Training Programmes
- m. Formulating Job-Oriented Training Programmes
- n. Delivering Soft-Skills Programmes

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

Strengths:

1. Experienced faculty members
2. Structured curriculum mapped with the industry needs
3. Own Campus with well-equipped infrastructure facilities
4. The trustworthy and quality education brand name "Manipal"
5. Availability of industry experts as part-time faculty/guest lecturers/resource person for seminars/workshops etc.,

Weakness:

1. Less consultancy work by faculty members
2. Less certification acquired by faculty members
3. Less number of faculty members as referees and editorial board members /committees
4. Lack of multinational professors
5. Absence of UAE Ministry of Higher Education and Scientific Research Accreditation

Opportunity:

1. Scope of tie-up with more western universities as part of twinning programme
2. Undergraduate student retention strategies for Postgraduate programme of the department
3. Strategize to set up campuses in other GCC countries
4. Attracting the sub-continent population for admissions
5. Explore means to attract the Indian population who are influenced by the popular western universities

Constraints:

1. Indian universities setting up their campus in Dubai International Academic City
2. Mushrooming of small Indian/Non-Dubai educational institutions
3. Depleting Indian community strength in UAE
4. Entry of large number of western universities in UAE
5. Fad among Indian community to acquire western degrees

1. **Name of the Department:** Melaka Manipal Medical College, Manipal Campus
2. **Year of establishment:** 1997
3. **Is the Department part of a school/faculty of the university?**
Yes
4. **Names of programs offered**
-UG (MBBS, BDS)
5. **Interdisciplinary programs and departments/institutions involved:**
NIL
6. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** NIL
7. **Details of programs discontinued, if any, with reasons:** NIL
8. **Examination System:** Annual
 - a. Participation of the institution in the courses offered by other institutions: The faculty of MMMC teaches the basic medical sciences for the Manipal School of allied health sciences.
9. **Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)**

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	35	35	35
Associate Professor/Reader	24	24	24
Assistant Professor	35	35	35
Lecturer	45	45	45
Tutor / Clinical Instructor	6	6	6
Senior Resident	4	4	4

10. **Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance**

Melaka Manipal Medical College (Manipal Campus)					
Sl.No	Name	Qualification	Designation	Specialization	No. of years of Experience

1	Dr. Mohandas Rao KG	MSc, PhD	Professor & Head	Anatomy	17
2	Dr. Somayaji S N	MSc , PhD	Professor	Anatomy	38
3	Dr. Satheesha Nayak B	MSc , PhD	Professor	Anatomy	21
4	Dr. Deepthinath R	MSc, PhD	Professor	Anatomy	17
5	Dr. Prakashchandra Shetty K.	MSc, PhD	Assoc. Prof.	Anatomy	14
6	Dr. Bincy M. George	MSc, PhD	Assoc. Prof.	Anatomy	11
7	Dr. Prasad A. M.	MSc, PhD	Assoc. Prof.	Anatomy	15
8	Dr. S. Sudarshan	MSc, PhD	Assoc. Prof.	Anatomy	12
9	Dr. Vasavi Rakesh Gorantla	MSc, PhD	Asst. Prof.	Anatomy	07
10	Dr. P. Vasanthakumar	MSc, PhD	Asst. Prof.	Anatomy	08
11	Dr. Raghu Jetti	MSc, PhD	Asst. Prof.	Anatomy	07
12	Mr. Venumadhav Nelluri	MSc	Senior Grade Lecturer	Anatomy	07
13	Dr. Srinivasa Rao S.	MSc, PhD	Lecturer	Anatomy	05
14	Ms. Snigdha Mishra	MSc	Lecturer	Anatomy	06
15	Dr. Surekha Devadasa Shetty	MSc, BAMS	Lecturer	Anatomy	06
16	Mr. Naveen Kumar	MSc	Lecturer	Anatomy	05
17	Ms. Sapna	MSc	Lecturer	Anatomy	05
18	Ms. Ashwini L.S.	MSc	Lecturer	Anatomy	05
19	Dr. Swamy Ravindra	MSc, BAMS	Lecturer	Anatomy	05

	Shantakumar				
20	Ms. Anitha Guru	MSc	Lecturer	Anatomy	05
21	Ms. Abhinitha P.	MSc	Lecturer	Anatomy	05
22	Ms. Jyothsna	MSc	Lecturer	Anatomy	04
23	Dr. Rajesh T.	BHMS , MSc	Lecturer	Anatomy	04
24	Mrs. Gayathri S. Prabhu	BPT, MSc	Lecturer	Anatomy	04
25	Ms. Melanie Rose D'Souza	BSc, MLT, MSc	Lecturer	Anatomy	04
26	Ms. Ashwini Aithal P.	MSc	Lecturer	Anatomy	04
27	Dr. Shyamala Hande	MSc, PhD	Professor	Histology & Cell Biology	18
28	Dr. Sharmila Torke	MSc, PhD	Professor & Head	Physiology	21
29	Dr. Kiranmai S. Rai	MSc, PhD	Professor	Physiology	25
30	Dr. Surekha R Kamath	MSc, PhD	Professor	Physiology	18
31	Dr. Reem Rachel Abraham	MSc, PhD	Professor	Physiology	13
32	Dr. Archana P.R.	MSc, PhD	Assoc. Prof.	Physiology	20
33	Dr. James Gonsalves	MSc, PhD	Assoc. Prof.	Physiology	15
34	Mrs. Liegelin Kavitha	MSc	Selection Grade Lectuer	Physiology	16
35	Dr. Sareesh N.N.	MSc, PhD	Asst. Prof.	Physiology	07
36	Dr. Prathap M Baby	MSc, PhD	Asst. Prof.	Physiology	09
37	Mr. Ganesh Kamath M.	MSc	Senior Grade Lecturer	Physiology	11
38	Mr. ShreevatsaBhat	MSc	Senior Grade	Physiology	10

	M.		Lecturer		
39	Mr. Ramesh Babu	BPT, MSc	Senior Grade Lecturer	Physiology	09
40	Mr. Jay Prakash	MSc	Senior Grade Lecturer	Physiology	07
41	Ms. Preethi Lavina Concessao	MSc	Senior Grade Lecturer	Physiology	06
42	Ms. Aparna Tripathy	MSc	Lecturer	Physiology	05
43	Dr. Prathibha Maria D'Almeida	MSc, BAMS	Lecturer	Physiology	05
44	Dr. Asha V.	MSc, BAMS	Lecturer	Physiology	05
45	Ms. Sujatha Prabhu P.	MSc	Lecturer	Physiology	04
46	Dr. Chandrika D. Nayak	MSc, PhD	Professor & Head	Biochemistry	17
47	Dr. Ullas Kamath	MBBS, MD	Professor & Dean	Biochemistry	21
48	Dr. Madhukar Mallya	MSc, PhD	Professor	Biochemistry	23
49	Dr. Maya Roche	MSc, PhD	Professor	Biochemistry	19
50	Dr. Guruprasad Rao	MSc, PhD	Professor	Biochemistry	18
51	Dr. Somashekar Shetty B	MSc, PhD	Professor	Biochemistry	16
52	Dr. Indira Adiga K.	Msc, PhD	Professor	Biochemistry	09
53	Dr. Rajashekar Rao Barkur	MSc, PhD	Assoc. Prof.	Biochemistry	15
54	Mr. B. Vivekananda Shenoy	MSc	Selection Grade Lecturer	Biochemistry	09
55	Ms. Takkella Nagamma	MSc	Selection Grade Lecturer	Biochemistry	10

56	Mr. Babi Dutta	MSc	Senior Grade Lecturer	Biochemistry	06
57	Mr. Sambit Dash	MSc	Senior Grade Lecturer	Biochemistry	06
58	Mr. Bijay Kumar Barik	MSc	Lecturer	Biochemistry	05
59	Ms. Akshatha G. Nayak	MSc	Lecturer	Biochemistry	03
60	Mr. Abhishek Chaturvedi	MSc	Lecturer	Biochemistry	03
61	Dr. Shaila T. Bhat	MBBS, DCP, DNB	Professor & Head	Pathology	11
62	Dr. Annamma Kurien	MBBS, DCP, MD	Professor & Associate Dean	Pathology	20
63	Dr. K Ramnarayan	MBBS, MD	Professor	Pathology	38
64	Dr. Brahmaiah Chari K.R.	MBBS, MD	Asst. Prof.	Pathology	02
65	Dr. Archana S.	MBBS, MD	Asst. Prof.	Pathology	01
66	Dr. Roumina Hasan	MBBS, MD	Asst. Prof.	Pathology	01
67	Dr. Sushmitha M.G.	MBBS, MD	Asst. Prof.	Pathology	01
68	Dr. Panna P. Shetty	MBBS, MD	Asst. Prof.	Pathology	01
69	Dr. Tanvi Shetty	MBBS, MD	Asst. Prof.	Pathology	< 01
70	Dr. Arijit Bishnu	MBBS, MD	Asst. Prof.	Pathology	< 01
71	Dr. Shephali Sharma	MBBS, MD	Asst. Prof.	Pathology	< 01
72	Dr. Varun Kumar Singh	MBBS, DCP	Speciality Medical Officer	Pathology	< 01
73	Dr. Vasudha Devi	MBBS, MD	Professor & Head	Pharmacology	11
74	Dr. Yeshwanth	MBBS, MD	Professor	Pharmacology	11

	Rao K.				
75	Dr. Durgaprasad S	MBBS, MD	Professor	Pharmacology	10
76	Dr. Vishal B.	MBBS, MD	Asst. Prof.	Pharmacology	05
77	Dr. Anoocha P. Bhandarkar	MBBS, MD	Asst. Prof.	Pharmacology	01
78	Mr. Ganesh Shenoy	MSc	Senior Grade Lecturer	Pharmacology	11
79	Mr. Ujjal Bose	MSc	Lecturer	Pharmacology	06
80	Ms. Smita Khandelwal	MSc	Lecturer	Pharmacology	05
81	Ms. Debasree Deb	MSc	Lecturer	Pharmacology	05
82	Ms. Tatiyana Mandal	MSc	Lecturer	Pharmacology	05
83	Ms. Devasrita Dash	MSc	Lecturer	Pharmacology	05
84	Dr. Arul Amuthan L.	MSc, BSMS	Lecturer	Pharmacology	04
85	Mr. Shakta Mani Satyam	MSc	Lecturer	Pharmacology	01
86	Mr. Manjunath S. Shetty	MSc	Lecturer	Pharmacology	01
87	Dr. Girija Ratna Kumari	MBBS, MD	Professor & Head	Microbiology	21
88	Dr. Indira Bairy	MBBS, MD	Professor	Microbiology	24
89	Dr. Shobha K L	MBBS, MD	Professor	Microbiology	19
90	Dr. Ciraj A M	MSc, PhD	Professor	Microbiology	20
91	Dr. Amita Shobha Rao	MSc, PhD	Assoc. Prof.	Microbiology	27
92	Dr. Sujatha Bhat	MSc, PhD	Assoc. Prof.	Microbiology	07
93	Mr. Gowrish Rao S	MSc	Selection Grade Lecturer	Microbiology	17
94	Mr. Anand K M	MSc	Selection Grade Lecturer	Microbiology	16
95	Dr. Vinod	MSc, PhD	Asst. Prof.	Microbiology	10

	Pallath				
96	Dr. G. Sreejith	MSc, PhD	Asst. Prof.	Microbiology	10
97	Mr. Nishanth B Bhat	MSc	Senior Grade Lecturer	Microbiology	09
98	Ms. Jessica Sushma D'Souza	MSc	Senior Grade Lecturer	Microbiology	09
99	Mrs. Rituparna Chakraborty	MSc	Senior Grade Lecturer	Microbiology	06
100	Ms. Nagalakshmi N.	MSc	Lecturer	Microbiology	05
101	Dr. Upendra Santosh Pai	MBBS, MS	Professor & Head	Surgery	34
102	Dr. M.G. Shenoy	MBBS, MS	Professor	Surgery	39
103	Dr. Sarita Kanth	MBBS, MS	Assoc. Prof.	Surgery	14
104	Dr. K. Vinayaka Shenoy	MBBS, MS	Assoc. Prof.	Surgery	12
105	Dr. Bal Krishna Kumar	MBBS	Junior Resident	Surgery	01
106	Dr. Rajaram Prabhu H.	MBBS	Junior Resident	Surgery	< 01
107	Dr. Manas B.R.	MBBS, DPM	Speciality Medical Officer	Psychiatry	< 01
108	Dr. Abhishek M.L.	MBBS, DPM	Speciality Medical Officer	Psychiatry	< 01
109	Dr. Nymisha Dangeti	MBBS, DPM	Speciality Medical Officer	Psychiatry	< 01
110	Dr. Varalakshmi Chandrasekaran	MBBS	Lecturer	Community Medicine	02
111	Dr. Shashikiran U.	MBBS, MD	Professor & Head	Medicine	14
112	Dr. C.	MBBS, DVD,	Professor	Medicine	29

	Balachandran	MD			
113	Dr. SeemaShetty M.	MBBS, MD	Assoc. Prof.	Medicine	11
114	Dr. Afsal P.M.	MBBS, MD	Senior Resident	Medicine	04
115	Dr. Pushwinder Dhunputh	MBBS, MD	Senior Resident	Medicine	02
116	Dr. AlladaVenkata Srikar	MBBS	Junior Resident	Medicine	< 01
117	Dr. RohiniGopal	MBBS	Junior Resident	Medicine	< 01
118	Dr. Dinesh M. Nayak	MBBS, DCH, DNB	Professor & Head	Paediatrics	17
119	Dr. Asha P. Hegde	MBBS, DCH, MD	Professor	Paediatrics	15
120	Dr. Nagesha K.M.	MBBS, DCH, DNB	Asst. Prof.	Paediatrics	01
121	Dr. RamyaNayak	MBBS, DCH, DNB	Senior Resident	Paediatrics	01
122	Dr. P.A.V. Lakshmana Sai	MBBS, DCH, MD	Senior Resident	Paediatrics	01
123	Dr. Acharya Asha Venkatramana	MBBS	Junior Resident	Paediatrics	< 01
124	Dr. Rajaram Pai T.	MBBS, DORTHO, DNB	Assoc. Prof.	Orthopaedics	04
125	Dr. Sandeep Goud	MBBS, MS	Asst. Prof.	Orthopaedics	01
126	Dr. Sathisha Nayak	MBBS, MD, DNB	Professor & Head	OBG	15
127	Dr. Parvathi V. Bhat	MBBS, DGO, MD, DNB	Professor	OBG	15
128	Dr. Shashikala K. Bhat	MBBS, MD	Professor	OBG	14
129	Dr. Rajeshwari G. Bhat	MBBS, MD	Assoc. Prof.	OBG	13

130	Dr. Sujatha J.	MBBS, DGO, MD, DNB	Assoc. Prof.	OBG	12
131	Dr. Sanjay Kumar K.R.	MBBS, DGO DNB	Assoc. Prof.	OBG	10
132	Dr. Krupa H. Shah	MBBS, DGO MD	Assoc. Prof.	OBG	11
133	Dr. Sandhya Aletty	MBBS, MD	Asst. Prof.	OBG	03
134	Dr. Vinutha	MBBS, DGO, DNB	Asst. Prof.	OBG	02
135	Dr. Jyoti M. Bali	MBBS, MD	Senior Resident	OBG	< 01
136	Dr. Nida Zahoor	MBBS, MD	Senior Resident	OBG	< 01
137	Dr. Vineela Medapati	MBBS, MS	Senior Resident	OBG	< 01
138	Dr. Thiencherry Rema	MBBS	Junior Resident	OBG	02
List of faculty members (Faculty of Dentistry)					
1	Dr. Arun Prakash C.	MDS	Assoc. Prof.	Prosthodontics	05
2	Dr. Arunima Chauhan	MDS	Assoc. Prof.	Oral Pathology	05
3	Dr. Smitha Sammith Shetty	MDS	Asst. Prof.	Oral Pathology	05
4	Dr. Bharath Rao K.	MDS	Asst. Prof.	Oral Pathology	05
5	Dr. Swapna B.V.	MDS	Asst. Prof.	Prosthodontics	04
6	Dr. S. Karthik	MDS	Asst. Prof.	Prosthodontics & Crown & Bridge	02
7	Dr. Sheetal Shetty	MDS	Asst. Prof.	Conservative Dentistry & Endodontics	01
8	Dr. Sandhya Yelamali	MDS	Asst. Prof.	Conservative Dentistry & Endodontics	01
9	Dr. Narmatha V.J.	MDS	Asst. Prof.	Conservative Dentistry	< 01

10	Dr. Runki Saran	BDS, MSc	Lecturer	Dental Material	05
11	Dr. Arul Amalan L.	BDS, MSc	Lecturer	Dental Material	04

11. List of senior Visiting Fellows, adjunct faculty, emeritus professors – One

Dr. ShashidharVenkatesh Murthy, Professor, Department of Pathology, School of Medicine and Dentistry, James Cook University, Brisbane, Australia

12. Percentage of classes taken by temporary faculty – program-wise information –

None

13. Program-wise Student Teacher Ratio

Year	Students		TOTAL	Total Faculty	Student Teacher Ratio
	MBBS	BDS			
2012	868	141	1009	131	8:1
2013	1030	146	1176	149	8:1
2014	1000	154	1154	152	8:1
2015	887	154	1041	150	7:1

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

sanctioned, filled and actual– 65

15. Research thrust areas as recognized by major funding agencies

- Radiation Induced Damage
- Neurophysiology
- Bleeding disorders
- Molecular epidemiology of infectious agents
- Rotaviral gastroenteritis prevention
- Antenatal health
- Adolescent health
- Anti-inflammatory activities of newer drugs

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.

Sl. No.	Title	Principal Investigator	Funding agency	Total amount received
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1	Therapeutic Effect of Thymol/Zingerone, Dietary Polyphenols on Radiation Induced Damage in Swiss Albino Mice- A Pilot Study	Dr. Archana P.R	BRNS	Rs.5,21,500/-
2	Analysis of neurobehavioral performances, brain morphology and biochemical indexes in radio-frequency electromagnetic radiation exposed rats	Dr. Sareesh N. N.	Indian Council of Medical Research (ICMR)	3,36000.00
3	'IDEAA: Identification, Diagnosis, Education & Empowerment for Action of people with bleeding disorders in South India	Dr. Annamma Kurien	Nova Nordisk Hemophilia Foundation, Switzerland	Rs. 1 Crore
5	Open Labeled Phase III multicentric study on Pharmacokinetics efficacy and safety evaluation of Kedrion Factor VIII concentrate EMOCLOT in 50 previously treated Hemophilia A children (Clinical trial)	Dr. Annamma Kurien	Sintesi Research, Italy & Max Neeman	
6	Behavioral, biochemical and histological analysis of the effects of ACEIs and ARBs on learning and memory in Wistar rats	Dr. Veena Nayak, Co-investigator – Debasree Deb	ICMR	Rs. 12 lacs
7	Canakinumab Anti-inflammatory Thrombotic Outcome Study	Dr. Tom Devasia (sub-I: Dr. Yeshwanth Rao K	Novartis	INR 10 Lacs
8	Clinical, Geographical, Epidemiological and Molecular Characterization of Scrub	Dr. Indira Bairy	ICMR	Rs 29.12 lakhs

	Typhus in South Karnataka			
9	Dr. Dinesh M . Nayak: 'Assessment of risk factor and predictor for spontaneous preterm birth in a South Indian antenatal cohort. Grant amount Rupees 50 lakhs, 2012	Dr. Dinesh M Nayak, Co-Investigator	ICMR	Rs 50 Lakhs
10	Phase III, multicenter, randomized, double-blind, placebo-controlled study to evaluate the efficacy and safety of live attenuated bovine-human rotavirus reassortant pentavalent vaccine (brv-pv) against severe rotavirus gastroenteritis in healthy indian infants	Dr. Dinesh M Nayak, Study Pediatrician	PATH & Serum Institute	Rs 5 crores
11	Extension Study for Patients who completed GENA-05 (Nu Protect) – to Investigate Immunogenicity, Efficacy and Safety of Treatment with <i>Human-cl rh FVIII</i> . 2015	Dr. Dinesh M Nayak, Principal Investigator	Max Neeman Clinical trial	
12	Adolescent Health Care in two districts of Coastal Karnataka- An Exploratory Study	Dr. Asha Hegde, Principal Investigator	ICMR	Rs 21 Lakhs
13	The lost focus on males in Adolescent friendly health care services - A qualitative analysis	Dr. Asha Hegde, Co Investigator	ICMR	Rs 25 Lakhs

17. Inter-institutional collaborative projects and associated grants received

a) National collaboration

Sl. No.	Title	Principal Investigator	Collaborating institutes	Grants received
1	Behavioral, biochemical and histological analysis of the effects of ACEIs and ARBs on learning and memory in Wistar rats	Dr. VeenaNayak, Co-investigator – Debasree Deb	Kasturba Medical College, Manipal and Melaka Manipal Medical College, Manipal	Rs. 12 lacs
2	CanakinumabAntiinflammatory Thrombosis Outcome Study	Dr Tom Devasia (sub-I: DrYeshwanthRao K	Kasturba Medical College, Manipal and Melaka Manipal Medical College, Manipal	INR 10 Lacs

b) International collaboration

Sl. No.	Title	Principal Investigator	Collaborating institutes	Grants received
1	'IDEEA: Identification, Diagnosis, Education & Empowerment for Action of people with bleeding disorders in South India	DrAnnammaKuri en	Melaka Manipal Medical College, Manipal, Manipal College of Nursing, School of Allied health scincesand Nova Nordisk Hemophilia Foundation, Switzerland	Rs. 1 Crore
2	SIPPET (Survey of Inhibitors in Plasma-Product exposed Toddlers) study (Clinical trial)	Dr Dinesh M. Nayak	Melaka Manipal Medical College, Manipal, Sintesi Research, Italy and Max Neeman	

3	Open Labeled Phase III multicentric study on Pharmacokinetics efficacy and safety evaluation of Kedrion Factor VIII concentrate EMOCLOT in 50 previously treated Hemophilia A children (Clinical trial)	DrDinesh M. Nayak	Melaka Manipal Medical College, Manipal, Sintesi Research, Italy & Max Neeman	
4	Phase III, multicenter, randomized, double-blind, placebo-controlled study to evaluate the efficacy and safety of live attenuated bovine-human rotavirus reassortant pentavalent vaccine (brv-pv) against severe rotavirus gastroenteritis in healthy indian infants	Dr. Dinesh M Nayak,	Melaka Manipal Medical College, Manipal and PATH & Serum Institute	Rs 5 crores
5	Extension Study for Patients who completed GENA-05 (Nu Protect) – to Investigate Immunogenicity, Efficacy and Safety of Treatment with <i>Human-cl rh FVIII</i> . 2015	Dr. Dinesh M Nayak,	Melaka Manipal Medical College, Manipal and Max Neeman	

18. Institutional projects funded by ICMR; DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.

Same as 16 and 17

19. Research facility / Centre with

- **state recognition** : NIL
- **national recognition** : NIL
- **international recognition** : NIL

20. Special research laboratories sponsored by / created by industry or corporate bodies : NIL

21. Publications last three years

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

Department	2012				2013				2014			
	Publications		Conference Publications		Publications		Conference Publications		Publications		Conference Publications	
	Int.	Nat	Int.	Nat	Int	Nat	Int	Nat	Int	Nat	Int.	Nat
Anatomy	48	1	6	15	82	1	5	18	82	0	11	13
Physiology	5	2	6	1	10	8	5	6	5	11	6	8
Biochemistry	2	4	3	1	8	2	8	4	4	4	2	2
Pathology	11	3	0	0	26	3	4	1	6	1	3	1
Pharmacology	13	1	5	1	10	3	14	4	9	2	5	3
Microbiology	7	2	3	6	9	0	1	8	26	0	3	5
Medicine	3	0	1	1	3	0	0	0	1	0	1	0
OBG	0	0	1	0	0	0	0	0	6	0	0	1
Pediatrics	1	1	0	1	0	0	0	0	2	0	1	0
Com. Medicine	0	0	0	0	0	0	0	0	0	8	0	3
Faculty of Dentistry	1	1	0	2	4	7	6	1	0	4	0	3
TOTAL	88	15	25	28	149	24	43	42	140	30	32	39

* Monographs: NIL

* Chapters in Books: NIL

* **Books published**

Sl No.	Title	Faculty	Publisher
1	'MCQs in Biochemistry with explanatory answers' First Edition(2012)	Mrs. Nagamma	Jaypee Publishers, New Delhi
2	Biochemistry -1 (BLT-301A) (2013)	Dr.MadhukarMallya H	SMU-Directorate of Distance Education

3	Basics of Biochemistry (BLT 201) (2013)	DrMadhukarMallya H	SMU-Directorate of Distance Education
4	Biochemistry and Biophysics (MBT 102) (2014)	DrMadhukarMallya H	SMU-Directorate of Distance Education

- * Books edited : **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, Medline, etc.) 446 papers
- * Citation Index – range / average: Data Not Available
- * SNIP: Data Not Available
- * SJR: Data Not Available
- * Impact Factor – range / average - 0.1-2.6
- * h-index – 0–5

22. Details of patents and income generated : **NIL**

23. Areas of consultancy and income generated

Areas: laboratory management, diagnostic services

Income generated: Nil

24. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad

- Dr.Ciraj AM
 - Received the Indian Society of Periodontology award for contributions in the field of dental education
 - Was recognized for his outstanding contributions in field of online mentoring and microbiology education by the American Society of Microbiology
 - Completed the international FAIMER fellowship
- Dr. ShyamalaHande
 - Visited Sydney, Australia to avail Australian Endeavor Fellowship- 2015 held at University of Western Australia and University of Sydney from February 28, 2015 to April 13, 2015
- Ujjal Bose
 - Is pursuing Ph.D. Programme at University of Nottingham , UK from May 2013 – Aug 2015

- Ms. RitupranaChakraborty
 - Has availed International Visiting Fellowship at the University of Nottingham , UK from April – July 2015

25. Faculty serving in

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

Details of faculty served or serving in National Committee/ International Committee/ Editorial Boards. In the years 2012, 2013, 2014 and 2015		
1	Dr. SatheeshaNayak B	1. Senior Editor in the Journal of Clinical and Diagnostic Research 2. Member of Scientific Advisory board of OA Publishers, London 3. Member of Scientific Advisory board of the journal International Journal of Anatomical Variations 4. Member of Editorial board, Journal of Case Reports and Clinical Research Studies
2	Dr. ShyamalaHande	Member of International editorial advisory board for the Journal for Educational Technology in Health Sciences
3	Dr. SwamyRavindra S	1. Member of advisory board in the journal of OA case report 2. Section editor in Journal of Case Reports and Clinical Research Studies
4	Mr. Naveen Kumar	1. Editorial board member of Scholars Journal of Medical case reports, SAS Publishers. 2. Advisory board member of OA Case report (OA publishing, London) 3. Editorial Board member/Reviewer in Journal of Case Reports and Clinical Research Studies
5	Dr. Arul Amuthan	1. Chairman, Scientific Committee, Indian Siddha Medical Graduates Association 2. Associate Editor, International Journal of Pharmacology and Clinical Sciences 3. Editorial Board Member, Journal of Ayurvedic and Herbal Medicine
6	Dr. Vasudha Devi	Editor-in-Chief of International Journal of Pharmacology and Clinical Sciences
7	Dr. Ciraj A.M	Executive Committee member, Indian Academy of Health professional educators
8	Mr.Ramesh Babu	1. Association of Physiologists and Pharmacologists of India 2. Indian Association of Physiotherapists

9	Dr.Sareesh N.N	1. Journal of New Science Biotechnology 2. Frontiers in Public Health-Radiation and Health
10	Dr.Reem Rachel Abraham	1. American Physiological Society 2. International Association of Medical Science Educators
11	Dr.KiranmaiS Rai	<p>National Committee/Association</p> <ol style="list-style-type: none"> 1. Association of Physiologists and Pharmacologists of India (APPI) 2. Indian Academy of Neurosciences (IAN) 3. Manipal University Press, Manipal 4. Cognitive Study Forum' Manipal <p>International Committee/Association</p> <ol style="list-style-type: none"> 1. Science Direct, Scopus - American Association for the Advancement of Science (AAAS) -2004-present. 2. International Society for Stem Cell Research (ISSCR) 3. Society for Neurosciences (SfN), USA. 4. International Brain Research Organization (IBRO) <p>Editorial Board</p> <ol style="list-style-type: none"> 1. Journal of Physiology and Pathophysiology
12	Dr. Barathi Subramaniam	National Journal of Physiology and Pharmacology
13	Mr. Jay Prakash	Association of Physiologists and Pharmacologists of India
14	Dr. Chandrika D Nayak	Member of the National Advisory board of Editorial Committee of Journal of Neurology and Neurosurgery

26. Faculty recharging strategies (Refresher / orientation programs, workshops, training programs and similar programs).

The institution and the University provides financial support to the faculty members for attending national and international workshops, training programs and other continuing professional development activities

The institution also conducts in house professional development programs and orientation programs regularly

27. Student projects

- **percentage of students who have taken up-in-house projects including inter-departmental projects**

All students of MMMC completes one research project in Phase I

- **percentage of students doing projects in collaboration with other universities / industry / institute** : NIL

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

- **Faculty**

1. Dr. Bincy- Dr.M.M.Cooper memorial award for best paper presentation in the faculty category during the 36th Annual conference of the Association of Anatomists, Tamil Nadu in October 2013
2. Dr. Sudarshan- Best poster award for a poster titled “Learning approaches of first year medical students and their academic performance in anatomy” presented at the 2nd Dubai international conference: sustaining success through innovation, organized by Michigan State University, Dubai campus in January, 2014.
3. Dr.Reem Rachel Abraham was the recipient of the ‘**TEACHING CAREER ENHANCEMENT AWARD**’ by the **American Physiological Society** in the year 2014
4. Dr. Prathibha M D Almeida won best poster award on ‘Ethics in laboratory medicine’ organized by SOAHS, Manipal University, April 2013
5. Dr. Sareesh N. N. was the recipient of T.M.A. Pai Gold Medal for Outstanding Medical Research from Manipal University in the year 2013
6. Dr. Sareesh N. N. was the recipient of T.M.A. Pai Gold Medal for Outstanding Medical Research from Manipal University in the year 2012
7. Dr. Asha V received best paper award for the oral paper presentation in International conference ‘2013 IEEE international conference on MOOC, Innovation and Technology in Education (IEEE MITE 2013) during Dec 20 – 22, 2013 at Jaipur.
8. Dr. Asha V. won third prize in the oral presentations at South East Asian Regional Association for Medical Education (SEARAME 2014) conference held in Colombo, Sri Lanka from 12th to 15th November, 2014.
9. Dr.Reem Rachel Abraham received first prize for the audiovisual teaching material titled “Hypothyroidism: The Silent Intruder” , in the audiovisual teaching material competition conducted by Melaka Manipal Medical College, Manipal Campus, Manipal University, India, in 2014.
10. Dr.Reem Rachel Abraham won first prize in the poster competition held in conjunction with the National workshop on ‘Assessment in Higher Education’ conducted by Manipal Centre for Professional Development, Manipal University, India in January 2013
11. Dr UllasKamath received the Distinguished Alumni Award as the first PG student in Department of Biochemistry, KMC, Mangalore, 2014
12. DrAnnammaKurien was honoured with the ‘Civic Leader’ Award by the Hemophilia Federation of India for the Hemophilia Community in July 2011
13. Dr. AnnammaKurien won .Project of the year award for IDEEA project by Novo Nordisk hemophilia foundation , Switzerland in 2014
14. Dr. AnnammaKurien won the second prize for the best audio visual material titled “The power packed neutrophils” in December 2013

15. Dr. AnnammaKurien First prize for best audio visual material titled “Life and achievements of Rudolf Virchow in 2014
16. Dr. Shaila T. Bhat won the best teacher award in November 2014
17. Second prize for Audio Visual Material ‘preparing drug for parenteral administration and setting up an intravenous infusion’: Awarded during MMMC annual day in 2012- Dr. Vasudha Devi
18. Best Poster award for the poster entitled ‘Impact of Mentored student project on students’ knowledge, skills and attitude regarding research at National Workshop on “Assessment in Higher Education” by Manipal Centre for Professional and Personal Development (MCPD) , Manipal University, Manipal 10th – 12th January, 2013- Dr. Vasudha Devi
19. Best poster award for ‘Tender coconut water enhances the activity of hydrochlorothiazide in rates: in reducing renal excretion of calcium and uric acid’ in Symposium on ‘Food as Medicine’ jointly organized with Indo-Queensland Research Initiative Project Fund and Department of Pharmacy Practice, at MCOPS, Manipal University – Oct. 2013- Dr. Arul Amuthan.
20. Best poster award for the paper “ Reflective Summaries in assessing students’ attitudes towards end-of-life care” at National Workshop on “Assessment in Higher Education” by Manipal Centre for Professional and Personal Development (MCPD) , Manipal - January, 2013- Ms. TatiyanaMandal
21. Second prize in poster competition on “Ethics in laboratory medicine” organized by School of Allied Health Sciences, Manipal University, Manipal - April, 2014- Ms. TatiyanaMandal
22. The International Educators Award by the American Society for Microbiology & UNESCO for outstanding contribution in microbiology education. – Dr. Ciraj AM
23. Ms. Nagalakshmi N, Lecturer in Microbiology received a travel award to attend 1st Global Forum on Bacterial infections at New Delhi in October, 2011
24. Dr. Krupa Shah received award of “Fellowship in Medical Genetics” at KMC, Manipal in 2014.

- **Doctoral / post doctoral fellows**

- Mr. Munegowda K C
Has attended training programme in advanced diagnostics for rickettsial diseases at the Australian rickettsial reference laboratory, Australia during February 2 - 27 2015

- **Students:** NIL

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

2012:

❖ CME on ‘Antibiotic resistance: current challenges’ in February 2012. Funding: ICMR grant for seminars

❖ An “Update & Panel discussion on Thromboelastography (TEG) – A comprehensive

analysis of hemostasis” was also conducted on 25th October 2012-**Organized by Dr.**

AnnammaKurien, funded by NNHF , Kasturba hospital.

2013

❖ One day CME on bleeding disorders for health care professionals in Shimoga. District Surgeon - 13.08.2013- **Organized by Dr. AnnammaKurien, funded by NNHF , Kasturba hospital**

2014:

❖ Workshop held: Organised ‘Hands-on workshop on basic techniques of molecular biology’ on 11/10/2014. Training was provided to 24 faculty members from Melaka Manipal Medical College, Manipal Campus and Kasturba Medical College, Manipal, India. Funded by the Department.

Organized by Dr. AnnammaKurien, funded by NNHF , Kasturba hospital.

❖ Various activities were organized throughout the week starting from October 11th to October 18th 2014 as part of World Thrombosis Day on October 13th 2014.

- ‘Path Theater’ a drama competition for medical students
- “Free Clot Screening programme” health check up, testing for thrombosis for public was held from October 13th to 18th.
- “Update & case discussion of thrombosis – 18th October 3.00pm.

❖ Hands on workshop for nurses on management of hemophilia was conducted on 11th July 2014 - Dr.PratimaChowdary, Consultant hematologist from Royal Free hospital , London.

❖ A lecture on “management of complications of bleeding disorders” was organized for the medicine faculty and post – graduate students .The resource person was Dr.PratimaChowdary, Consultant hematologist from Royal Free hospital , London on 12.07.2014.

❖ A one day CME on rehabilitation of Hemophilia was organised – 12.12.2014

❖ Workshop conducted by Department of Physiology, MMMC, Manipal Digitized lab-based learning teaching in Human Physiology on 25th October 2014

Sponsors and details of funding:

- Higginbothams, Manipal : Rs.5000/-
- Jyothi Computers, Manipal: Rs.3000/-
- AD Instruments: Rs.15,000/-

2015:

Organized by Dr. AnnammaKurien, funded by NNHF , Kasturba hospital

- ❖ The basic coagulation training & hands on workshop was held from 23rd – 26th October 2015 participants were trained. Dr.Sukesh C Nair , CMC Vellore was the resource person.
- ❖ Women's meet of care givers of hemophilia of the Manipal chapter along with women's from neighboring chapters of Kerala & Karnataka was held on 17th January 2015.
- ❖ Southern Regional Council Meeting of HFI was held for the first time in Manipal.

30. Code of ethics for research followed by the departments

As per Manipal University guidelines

31. Student profile program-wise:

Sl. No	Year	Applications Received	
		MBBS	BDS
1	2012	569	194
2	2013	528	121
3	2014	397	94
TOTAL		1494	409

February & March MBBS University Examination 2014-2015			
	Appeared	Passed	Percentage (%)
I Year (Batch 34)	150	118	79%
II year (Batch 32)	197	170	86%
BDS University Examination 2013-2014			
I Year (Batch 5)	79	78	99%
II year (Batch 4)	68	67	99%

MBBS 2014-2015 University Exam				
Year	Appeared		Passed	
	Male	Female	Male	Female
Year 1 Batch 34	61	89	49 (80.33%)	69 (77.53%)
Year 2 Batch 32	78	119	67 (85.90%)	103 (86.55%)

BDS 2013-2014 University Exam				
Year 1	21	58	20	58
Batch 5			(95.24%)	(100%)
Year 2	18	50	17	50
Batch 4			(94.44)	(100%)

32. Diversity of students

Name of the Program (refer to question no. 4)	Total Admissions	% 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
Batch 30 - March 2012	128	Nil	Nil	Nil	7
Batch 31 - September 2012	272	Nil	Nil	Nil	6
Batch 32 - March 2013	165	Nil	Nil	Nil	5
Batch 33 - September 2013	252	Nil	Nil	Nil	1
Batch 34 - April 2014	106	Nil	Nil	Nil	--
Batch 35 - October 2014	164	Nil	Nil	Nil	13
Total	-	-	-	-	32

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.

Data Not available

34. Student progression.

Student progression	Percentage against enrolled
UG to PG	20 % (Batch 1 to 15)
PG to M.Phil, DM / M Ch / DNB	
PG to Ph.D.	

Student progression	Percentage against enrolled
Ph.D. to Post-Doctoral	
Employed	
<ul style="list-style-type: none"> • Campus selection • Other than campus recruitment 	
Entrepreneurs	

35. Diversity of staff.

Percentage of faculty who are graduates	Numbers	Percentage (%)
of the same university	97	64
from other universities within the State	38	25
from universities from other States	10	6
from universities outside the country	7	5
TOTAL	152	100

36. Number of faculty who were awarded M.Phil., DM, M Ch, Ph.D., D.Sc. and D.Litt. during the assessment period.

Number of faculty who were awarded Ph.D.	
Male	21
Female	12
Total	33

37. Present details of institutional infrastructural facilities with regard to:

a) Library

MMMC Library Facility

The Melaka Manipal Medical College (Manipal Campus) Library is equipped with approximately 1600 books and other resources. It can accommodate 50 users at a time. The faculty library's collection includes books on Anatomy, Physiology, Biochemistry, Pathology, Pharmacology, Microbiology, General Medicine and Medical Education & Training. New material, in paper is constantly being purchased for the library. It is accessible to all the faculty members during departmental hours on all working days. The faculty can also borrow books between 9.00 am to 4.00 pm during working days. Faculty members and students have access to the air conditioned Health Sciences Library of the University which has large numbers of latest editions of textbooks, journals, e-journals, internet facility, photocopying and e-books

b) Internet facilities for staff and students

Staff: Available in cabins and office (Academic section)

- Students: In Health sciences library
- Total number of class rooms–9 Class rooms (Each with 200 capacity)& 12 PBL rooms (each with 25 capacity)
 - Class rooms with ICT facility and ‘smart’ class rooms- 9
 - Students’ laboratories - 7
 - Research laboratories – 1

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

- from the host institution/university:
Doctoral students: two
- From other institutions/universities:NIL

39. Number of post graduate students getting financial assistance from the university :NIL

40. Was any need assessment exercise undertaken before the development of new program(s)? If so, highlight the methodology: NIL

41. Does the institution obtain feedback from

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

Informal feedbacks from faculty are taken regularly from faculty on teaching ,learning and curriculum related aspects. Review and actions are initiated during the Curriculum development committee meetings

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

Annual feedbacks on course, faculty and infrastructure are taken from students. Necessary actions on these will be initiated during the Curriculum development committee meetings.

c. Alumni and employers on the programs offered and how does the institution utilize the feedback?

Visiting alumni are requested to provide feedback, which is recorded and reviewed periodically

42. List the distinguished alumni of the institution (maximum 10)

Sl. No	Name	Current Status
1	Dr. JaspreetKaurSidhu	MRad/FRCR
2	Dr. Raja Jasmin Begum Bt Raja Mahamed	Rheumatologist (UK)
3	Dr. RishyaManikam	Masters – Emergency Medicine

4	Dr. Rajveer Singh Saren	ENT Surgeon
5	Dr. Ding Sook Ling	MRCPCH (UK) MMED (NUS)
6	Dr. UmayaalShalini	Plastic Surgeon
7	Dr. Woo Yen Yen	Masters – Pathology
8	Dr. SangeetaMohanadas	MRCGP (UK)
9	Dr. Thinesh Kumar Jayaraman	Neurosurgeon
10	Dr. ReynuRajan	General Surgeon

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

No.	Topic	Faculty	Institution
1	Radiodiagnosis of genito urinary pathology	Dr. PoornimaBigge	Dept. of Radiodiagnosis, KMC, Manipal.
2	Neonatal meningitis	Dr. Leslie Lewis	Dept. of Pediatrics & Neonatologist, KMC, Manipal.
3	Clinical case studies in anemia	Dr. KarthicRao	Dept. of Medicine, KMC, Manipal
4	Influenza	Dr. Arunkumar G	Manipal Centre for Virus Research, MU
5	Tuberculosis (panel discussion)	Dr. ChiranjayMukhopadhay Dr. Shashikiran U Dr. KirthinathBallala	Dept. of Microbiology, KMC, Manipal Dept. of Medicine, MMMC, Manipal Dept. of Community Medicine, KMC, Manipal.
6	Clinical update on cardiovascular system	Dr. Padmakumar	Dept. of Cardiology, KMC, Manipal

44. List the teaching methods adopted by the faculty for different programs including clinical teaching.

- Didactic lectures
- Problem based learning
- Case based learning
- Laboratory based learning
- Bed side teaching
- Case discussions

- Clinical skills learning through simulation

45. How does the institution ensure that program objectives are constantly met and learning outcomes are monitored?

The learning objectives are provided to students and faculty members at the beginning of the academic year. The curriculum is constructively aligned so that the teaching learning activities and assessment ensures the attainment of the objectives envisaged. The institution also collects extensive feedback from students time to time. These feedbacks are analyzed and necessary actions are taken to ensure attainment of program objectives.

46. Highlight the participation of students and faculty in extension activities.

- Some faculty members are members of the Hemophilia Society, Manipal. The institution encourages the participation of students and faculty in the activities conducted by the society. Every summer, the society conducts a camp called ‘AshaKiran’ for persons with hemophilia in Manipal.
- Hukurankasih, a voluntary initiative by our students is involved in reaching out to the disadvantaged sections of the local community such as visits to orphanages, schools and old age homes.
- The student council organizes blood donation camps
- Students and faculty members also participates in the activities of voluntary services organization
- Students are involved in community service in conjunction with community postings as well as camps organized by department of public health of Manipal University.
- Institution supports community services by students through the student council

47. Give details of “beyond syllabus scholarly activities” of the institution.

Path theatre, Microfest

- Microfest: The faculty of the Department of Microbiology, MMMC (Manipal Campus) organizes Microfest every year with the aim to encourage the talents, knowledge, skills and creativity of undergraduate students. This Fest is comprised of two events i.e., Model Your Microbe Contest and Probe. Model Your Microbe is an institutional event in which students design a model of existing or non existing microbe of their choice. Probe is an intercollegiate quiz competition.
- Path theater
The Faculty of the Pathology organizes Path Theatre on an annual basis from the year 2013 which lends a platform for students to creatively present core

pathological concepts in a dance drama format. This program is an intercollegiate drama competition involving all the constituent colleges of the Manipal University

48. State whether the program/ institution is accredited/ graded by other agencies?

If yes, give details.

- MQA: The institution is accredited by Malaysian Qualifying Agency. In the year 2010, MMMC obtained 5 years accreditation from MQA
- ISO: MMMC has ISO certification along with the Manipal University, for Integrated management system
- MyQuest: MMMC obtained 6 star ratings from MyQuest, Malaysia, in the category of private institutions in Malaysia in the year 2012/2013
- MMMC is also listed in the WHO and Foundation for advancement of international medical education and research (FAIMER) directories

49. Briefly highlight the contributions of the institution in generating new knowledge, basic or applied.

Faculty members of MMMC are actively involved in research in the core areas of Radiation Induced Damage, Neurophysiology, Bleeding disorders, Molecular epidemiology of infectious agents, Antenatal health Adolescent health and Anti-inflammatory activities of newer drugs etc. Many MMMC faculty members are also fellows of Foundation for advancement of international medical education and research (FAIMER). They contribute in faculty development activities in India and abroad by functioning as faculty for FAIMER.

50. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the institution.

Strengths

- Six stranded integrated curriculum including modules on Doctor, Patient, Health, Community and Environment (DPHCE) and personal and professional development (PPD).
- Hybrid curriculum incorporating conventional and active learning strategies such as problem-based learning (PBL), self-directed learning (SDL) and case-based learning (CBL)
- Unique model of sustainable Indo-Malaysian collaboration for health professions education
- Clinical exposure in both the campuses, giving diverse international clinical perspective
- Accessibility to well-equipped clinical skills laboratory, state of the art Anatomy and Pathology museums and simulation lab
- Mentorship scheme for supporting and guiding students

- Governance and Leadership: Efficient and transparent administrative processes
- Empowering faculty across the cadres through delegation of administrative and academic responsibilities creating a sense of ownership
- Implementation of integrated management system (quality and environment management systems)
- Innovative Practices: Curricular innovations that enhance student participation (PBL, CBL), research competencies (MSP), peer assisted learning (SDL) along with PPD
- Clinically oriented assessment strategies including objective structured practical examination (OSPE) and objective structured clinical examination (OSCE).
- Regular feedback from Malaysian and Indian external examiners on the curriculum and examination process

Weaknesses:

- No provision for pursuing diplomas and postgraduate medical programs
- Lack of exclusive auditorium for institutional curricular and co-curricular activities
- Demanding academic schedule restrict students from giving their best in the co-curricular activities
- Difficulty in getting feedback from stakeholders as majority of the stakeholders are from Malaysia
- Difficulty in retaining faculty due to non recognition of the programme by medical council of India (MCI)

Opportunities:

- Our credible experience in delivering a curriculum that meets international standards can be utilized to initiate new international programs.
- Advanced training for faculty in the development and use of information and communication technology (ICT) for teaching, learning and evaluation
- Enhanced interaction between faculty of the two campuses for improved student learning outcomes
- Use of ICT in assessment of essay papers to make the process less time consuming
- Promoting interdisciplinary research activities

Challenges

- To refine the curriculum to meet the global standards that enables our graduates to practice medicine in global settings.

- To continue providing the modern educational facilities and maintaining the high standards
- Overcoming the cultural barriers and acclimatizing the students to the new learning environment
- Non recognition of the program by MCI hinders career progression of the faculty in India
- Providing enough representation among students from socially backward, economically-weaker, rural/ tribal backgrounds and differently-abled individuals and disadvantaged communities.
- Our graduates are not eligible to register and undertake clinical practice in India

51. Future plans of the institution.

- To strengthen the existing program in lines with the needs of the Malaysian health system and educational needs.
- To have the program accredited by qualifying agencies of other South East Asian countries

ANATOMY

1. Faculty profile - adequacy and competency of faculty

There are twenty eight faculty members who meet the requirements for teaching Phase I Stage I MBBS, Phase I Year 1 BDS and First year allied health science programs as per the requirements of the regulatory bodies

#	Name	Qualification	Designation	Teaching Experience
1	Dr. Mohandas Rao KG	M. Sc., Ph. D.	Professor & Head	19
2	Dr. Somayaji S N	M. Sc., Ph. D.	Professor	41
3	Dr. Satheesha Nayak B	M. Sc., Ph. D.	Professor	21
4	Dr. Deepthinath R	M. Sc., Ph. D.	Professor	17
5	Dr. Prakashchandra Shetty K.M	M. Sc., Ph. D.	Assoc. Prof.	14
6	Dr. Bincy M. George	M. Sc., Ph. D.	Assoc. Prof.	10
7	Dr. Prasad A. M.	M. Sc., Ph. D.	Assoc. Prof.	15
8	Dr. S. Sudarshan	M. Sc., Ph. D.	Assoc. Prof.	12
9	Dr. Vasavi Rakesh Gorantla	M. Sc., Ph. D.	Asst. Prof. (<i>On long leave</i>)	09
10	Dr. P. Vasanthakumar	M. Sc., Ph. D	Asst. Prof.	08
11	Dr. Raghu Jetti	M. Sc., Ph. D	Asst. Prof.	07
12	Mr. Venu Madhav Nelluri	M. Sc.	Senior Lecturer Grade	06
13	Ms. Snigdha Mishra	M. Sc.	Lecturer	06
14	Dr. Surekha Devadasa Shetty	M. Sc.	Lecturer	05
15	Mr. Naveen Kumar	M. Sc.	Lecturer	05
16	Mr. Srinivasa Rao S.	M. Sc.	Lecturer	05
17	Ms. Sapna	M. Sc.	Lecturer	05
18	Ms. Ashwini L.S.	M. Sc.	Lecturer	05
19	Dr. Swamy Ravindra Shantakumar	M. Sc.	Lecturer	05
20	Ms. Anitha Guru	M. Sc.	Lecturer	05
21	Ms. Abhinitha P.	M. Sc.	Lecturer	05
22	Ms. Jyothsna	M. Sc.	Lecturer	04
24	Dr. Rajesh T.	M. Sc.	Lecturer	04
25	Mrs. Gayathri Prabhu	M. Sc.	Lecturer	04
26	Ms. Melanie Rose D'Souza	M. Sc.	Lecturer	04
27	Ms. Ashwini Aithal P.	M. Sc.	Lecturer	04
28	Dr. Shyamala Hande	M. Sc., Ph. D.	Professor of Histology & Cell Biology	19

Number of faculty positions sanctioned and filled: 28/28

The department has adequate number of faculty members. Many faculty members have been rated among the top 5 teachers on several occasions at the institutional level and three faculty members have received the good teacher award based on student voting. Students find all the teachers in the department competent and helpful.

2. **Student profile –**

Entry level competency: Refer to appendix No.1

Socioeconomic status: Generally most students are from middle-income group (detailed information not available)

Language proficiency: English

3. **Changes made in the courses or programmes during the past two years and the contribution of the faculty to those changes**

The MBBS and BDS programs are conducted in compliance with the requirements of the Malaysian Qualifications Agency (MQA) which is the regulatory body governing the health sciences education in Malaysia. Anatomy is taught in Phase I Stage I for MBBS and Phase I Year 1 for BDS students.

The Anatomy Department has incorporated more clinically oriented teaching in MBBS and BDS courses. To comply with this, the faculty members of the department have prepared audio visual aids which are readily available for students. Faculty members intend to prepare more audiovisual aids on relatively difficult topics in Anatomy.

The MBBS students are being regrouped for dissection classes, based on their merit to achieve better learning by students. We have conducted a research study to reveal the advantages and disadvantages of this method and we found this change enables the MBBS students to learn better. To increase the reasoning skills and critical thinking ability, we post clinical question/questions on the dissection hall notice board, during every dissection class. The students are encouraged to solve the clinical questions and discuss with the concerned table teacher to clarify their doubts. The faculty in rotation prepares 2-3 specimens of various parts of the body which are used for students' revision and examinations. The technical staff of dissection hall is trained to dissect and prepare specimens which can be used for demonstrations and examinations.

In order to make the histology learning easier and to avoid the technical difficulties in using microscopes during the examinations, laminated photomicrographs of all histology slides have been prepared. The learning objectives have been reframed /revised with more clarity to give a better picture about the anatomy teaching. To enable the students to revise/excel in

anatomy and to make them more competitive, department conducts yearly quiz programs in association with Elsevier publishers.

4. Trends in the success and dropout rates of students during the past three years

MBBS Batch 28 : Melaka March 2011 Phase I Stage I (held in February 2012)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Anatomy	134	35	169	118	27	133	78.70

MBBS Batch 29 : Melaka September 2011 Phase I Stage I (held in August 2012)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Anatomy	198	22	220	166	15	181	82.27

MBBS Batch 30 : Melaka March 2012 Phase I Stage I (held in February 2013)

Subject	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Anatomy	128	33	161	103	25	128	79.50

MBBS Batch 31 : Melaka September 2012 Phase I Stage I (held in August 2013)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Anatomy	228	26	254	218	22	240	94.48

MBBS Batch 32 : Melaka March 2013 Phase I Stage I (held in February 2014)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Anatomy	162	13	175	142	5	147	84.0

MBBS Batch 33 : Melaka September 2013 Phase I Stage I (held in August 2014)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Anatomy	234	22	256	202	16	218	85.15

BDS Batch 3 Phase I Year 1 (held in July 2012)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Anatomy	72	1	73	71	1	72	98.6

BDS Batch 4 Phase I Year 1 (held in July 2013)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Anatomy	67		67	64		64	95.52

BDS Batch 5 Phase I Year 1 (held in July 2014)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Anatomy	79		79	70		70	88.61

Dropouts in 2012- MBBS – 12 out of 893 students (1.34%)

Dropouts in 2013- MBBS – 6 out of 1009 students (0.59%)

Dropouts in 2014- MBBS – 13 out of 851 students (1.46%)

5. Learning resources of the departments - library, computers, laboratories and other resources

The faculty members have access to an air conditioned library with about 1250 reference books in Anatomy, Physiology, Biochemistry, Pathology, Microbiology and Pharmacology specialties. Among them, 250 books belong to the Department of Anatomy. All the faculty members have been provided with laptops and free internet connection by the University. In addition, The Department also has access to 13 desktop computers connected with 2 multi-functional printers, a scanner and a photocopier.

The department has a spacious state of art Gross Anatomy Dissection Hall that accommodates 250 students at a time. We have about 1000 dissected specimens of various regions of the body and 30 dissected cadavers in our collection. There is a state of art multipurpose laboratory which is used for histology practical classes. Each student is provided with separate work space with slides, microscope and photomicrographs. The multipurpose laboratory is equipped with plasma TV monitors connected to a microscope. The department has access to a spacious state of the art museum that showcases more than 1000 specimens. This museum is one of the best Anatomy museums in Asia.

The department also has research rooms with space earmarked to carry out advanced research with instruments including histology embedding bath, CO₂ incubator, laminar

airflow culture hood, sledge microtome and rotary microtome. There are facilities for H&E staining, crystal violet staining and Golgi staining of tissues. Faculty have access to animal behavior assessment apparatuses such as radial maze, T-maze, water maze, passive avoidance apparatus and open field apparatus.

6. Modern teaching methods practiced and use of ICT in teaching – learning

To achieve the objectives in the cognitive, psychomotor and affective domains we use a cluster of teaching methods such as didactic lectures, self-directed learning (SDL), problem based learning (PBL) etc. The lectures are made interactive wherein there is ample scope for students to interact. Appropriate use of AV aids is emphasized upon. Students are encouraged to learn in small groups, through peer interactions to attain more communication skills.

PBL: Students are introduced to a conceptually and clinically significant topic, presented in the format of a case scenario. These are designed specially to illustrate the relevance of anatomy knowledge to medical practice. The students are divided into small groups. Each group has a faculty as facilitator. PBL is conducted in two sessions. In the first session (brain storming session), cases are given and the students work together to analyze the problem and clarify difficult terms, identify key issues, formulate a hypothesis, and list the learning objectives. In the second session (presentation session), which is conducted after a week, students present the specified learning objectives. PBL encourages students to participate in group discussions to enable them to develop communication skills, leadership qualities, peer interactions and respect to each other etc. This will help a medical graduate to function effectively as a professional when he/she begins his/her independent career. A combination of SDL and PBL methods is expected to make them lifelong learners.

The undergraduate medical education in our department is based on learning through dissection of cadavers, through osteology and microscopic Anatomy. Practical classes are organized in small groups so that teachers can give personal attention to each student with a view to improve his/her skill and competence in learning the subject. Adequate numbers of imported anatomy models are available in dissection hall and skills lab for learning Anatomy.

7. Participation of teachers in academic and personal counseling of students

Each one of the teachers is involved in mentoring a group of students. The responsibilities of a mentor include

- Providing academic and personal counseling to their mentees
- Helping the students to get acclimatized to the campus life in Manipal.

- Promote cultural integration.
- Support co-curricular and welfare activities of the students.
- Arrange remedial measures for students who are at the risk of failure
- Guiding the mentored student research projects.

8. Details of faculty development programmes and teachers who have been benefited during the past two years

Manipal Centre for Personal and Professional Development of Manipal University conducts Pedagogic and personal effectiveness workshops on a regular basis. All faculty members of the department have attended this workshop. In the last two years, seven faculty members of the department have benefited by this workshop.

9. Participation / contribution of teachers to the academic activities including teaching , consultancy and research

- All teachers are contributing to teaching of MBBS, BDS and allied health students
- All teachers are contributing to research. Seven faculty members have registered for PhD
- Two faculty members have completed the FAIMER fellowship, which is a two year fellowship on leadership in higher education
- One faculty member is the principal investigator in an ICMR funded research project

Chairing session/ guest lecture/awards/resource person in workshop

1. Naveen kumar - chaired the anatomical session for the 2014 Australasian Society for Human Biology conference on the 11th December 2014 held at Comfort Inn, Glenelg, Adelaide, Australia
2. Dr. Mohandas Rao KG - Chaired a session on embryology at Annual conference of Anatomical Society of India (ASI) held at Chandigarh in November 2013.
3. Dr. Mohandas Rao KG - Attended and chaired sessions at Annual conference of Karnataka chapter of Anatomical Society of India (ASI) held at Dharwad in August 2014.
4. Dr. Satheesha Nayak B - Chaired a Session on “Clinical and Surgical Insight into Cardiac Anatomy and Congenital Malformation” in the 61st National conference of Anatomical Society of India, held at Post Graduate Institute of Medical Education and Research, Chandigarh from 22-25 November, 2013.

5. Dr. Satheesha Nayak B - Chaired a session at the 16th Karnataka Chapter of Anatomists State Conference Held at SDM College of Medical Sciences Hospital Sattur Dharwad held on 23rd and 24th August 2014.
6. Dr. Bincy- Guest lecture on “Anatomy essentials in sleep apnea’ delivered in workshop on “Home respiratory care” conducted by SOAHS Manipal on 25th February 2014
7. Dr. Bincy- Dr.M.M.Cooper memorial award for best paper presentation in the faculty category during the 36th Annual conference of the Association of Anatomists, Tamil Nadu in October 2013
8. Dr. Sudarshan- Best poster award for a poster titled “Learning approaches of first year medical students and their academic performance in anatomy” presented at the 2nd Dubai international conference: sustaining success through innovation, organized by Michigan State University, Dubai campus in January, 2014.

10. Collaboration with other departments/ institutions, at the State, National and International levels, and their outcome during the past two years

- NIL
- NIL

11. Priority areas for Research and details of the ongoing projects, important and noteworthy publications of the faculty, during past two years

The department of Anatomy has two recognized PhD guides

Priority areas for research include neuroanatomy, osteology, anthropometry and histology of the skin

Ongoing projects

Category	Number
Funded research projects	0
Non-funded research projects	2
PhD research projects	7
PG research projects	0
UG research projects	1

Last 3 years (2012-2014):

	2012	2013	2014
Completed funded research projects	0	0	0
Completed non-funded research projects	0	0	0
Completed PhD research projects	0	1	1
Completed PG research projects	0	0	0
Completed UG research projects	00	18	33
Publications			
International	49	85	83

	National	0	0	0
Books		0	0	0
Chapters in books		0	0	0
Conference presentations	International	6	5	11
	National	15	18	13

❖ **On-going non-funded research projects :**

Sl. No.	Title	Faculty Involved
1	Effect of Glycyrrhiza Glabra Extract on Structure of Hippocampus, Learning and Memory in Rat Pups Treated During their Growth Spurt Period	Ms.Sapna Ms.Ashwini LS Dr. Mohandas Rao KG
2	Through the circuits of computers to the circuits of brain- Is gamification, a stressfree and enjoyable learning module?	Ms. Snigdha Mishra

❖ **Ongoing Ph.D. research projects :**

Sl. No.	Title	Name of student	Name of the guide
1.	Quantitative Fraction and Ratio Analysis of Dermal Collagen and Elastic Fibers in Sections Perpendicular to Each Other, in Different Regions of Human Body – a Histological Study on Cadavers	Naveen Kumar	Dr. Pramod Kumar
2.	Fertility and gonadal function in male mice treated with sorafenib”	Surekha D shetty	Dr. K L Bairy
3.	Effect of prenatal inflammation on developing and adult neurogenesis: A histomorphometric and behavioral study in the rats	Dr Rajesh T	Dr Ramesh Rao T
4.	Histopathological, cellular and biochemical evaluation of protective role of Cissus quadrangularis on osteoporosis and diabetes induced osteopenia	Srinivasa Rao S	Kumar MR Bhat
5.	Safety and efficacy of human bone marrow derived mesenchymal stromal cells In liver cirrhosis animal model	Ashwini Aithal P	Dr. K. L.Bairy
6.	Protective Role of Essential Nutrients and Environmental Enrichment in Attenuating Postnatal Obesity- Induced Atherosclerosis and Spatial Memory through Aging in Rats - A Behavioral, Biochemical and Histological Study	Gayathri S Prabhu	Dr. Kiranmai S Rai
7.	Histomorphometric and Immunohistochemical study of the selected major arteries of Upper and Lower extremities of the Human body	Venumadhav Nelluri	Dr. Ramesh Rao T.

❖ Completed Ph.D. research projects:

Sl. No.	Title	Name of the research scholar	Guide
1.	Three dimensional analysis of craniofacial morphology in south indian population	Dr. Vasanthakumar 2014	Dr. Pramod Kumar
2.	Structural changes in the hippocampus associated with temporal lobe epilepsy	Sudarshan.S 2013	Dr.Satheesha Nayak

❖ Completed U.G. research projects:

Sl. No.	Title	Name of the student	Guide
1.	Effects of Psychological Stress and Dietary Pattern on Acne and its Awareness in MMMC students	Haszura Anak Senghie, Fadhirah binti Che Lah, Farah Liyana binti Azmi, Hoe Suwen.	Dr.Swamy Ravindra Shantakumar 2014
2.	Observation On The Relationship Between Type And Duration Of Exercise On The Mental And Physical Health And Academic Performance Of MMMC Students.	Huzaifah Bin Sahabdeen, Fawzul Azri Bin Zainal Abidin, Gaajeen Parmal.	Dr.Swamy Ravindra Shantakumar 2014
3.	Effect Of Light Exposure During Sleep On The Curricular And Extracurricular Activities.	Farah Suziantie binti Adnan, Husna binti Rosleli, Fateen Nadhira binti Ismail, Hastanti binti Samsuddin, Fateen Najwa binti Mohd Yacob.	Dr.Swamy Ravindra Shantakumar 2014
4.	Exploring Perception on Humanitarian Issues between Indian and Malaysian Students	Nur Amni Binti Mohd Shamsuddin, Noramyliya binti Jamil, Atiqah binti Mohd Zayed	Naveen Kumar 2013
5.	The Ratio of Second to Fourth Digit Length (2D:4D) and Heart Disease	Mohammad Arsyd, Syed Mohd Farris, Muhammad Hafiz, Terry Anak Jamba,	Naveen Kumar 2014
6.	Medical undergraduate student's perception on the knowledge of autism spectrum disorder: Survey based study at different levels of curriculum	Mohamad Nur Faiz bin Mohd Nazri, Ms. Nadia Nurulain binti Abd Karim, Ms. Amirah Husna binti Norani, Ms. Nur Nazatul Amira binti Noorha Wasma Putra, Mr. Muhammad Syafiq bin Habibullah	Naveen Kumar 2014
7.	The Effect of Medical Drama on Student's Interest in Medical Profession	Vivesha a/p sekharan, Norazwa Khairina binti Amatkhri, Ungku Azlan Shah bin Ungku Zulkefli, Mohamad Taufiq bin Abdul Rahi,	Dr.Surekha D Shetty 2013

		Prishalini Gunalan.	
8.	“Effect of Hygiene Practices on the Academic Performance of MMMC Students”	Ong Han Jie, Lok Siaw Leng, Nik Aqilah Binti Adlin	Dr.Surekha D Shetty 2013
9.	Impact of Transportation on Academic Achievement of Medical Students	Yang Hong Nian, Ahmad Yamany bin Othman	Dr.Satheesha Nayak B 2014
10	Comparative Study On The Usage Of Contact Lens And Spectacles Among Melaka Manipal Medical College Students And The Reasons Why They Prefer It	Menakah Rajaindran , Marianne Ong Chaye Ping, Tham Khai Hern	Dr.Satheesha Nayak B 2013
11	Dermatoglyphic pattern of the right thumb among Malaysian Medical students	Ms. Praveena Kaur A/P Jasbir Singh, Ms. Teow Xin Min, Ms. Tan Jia Ming	Dr.Satheesha Nayak B 2013
12	Comparison of Academic Performance between Students Preferring Self-study and Group Study among MMMC Students	Ms. Siti Khadijah Binti Mazli Ms. Nabilah Syahirah Binti md nor Mr. Fong Zi Quan	Dr. Mohandas Rao 2013
13	Influence of study location on academic performance - A study done among MMMC students.	Ms. Nivadhavalle Muthiah Ms. Saradhambal Shanmuganathan Ms. Gayatri Amiappan	Dr. Mohandas Rao 2013
14	The effect of sinistrality vs dextrality on i.q.	Ashvin Naidu Nikhil Menon	Dr. Mohandas Rao 2014
15	Awareness of Side Effects of Formalin in Anatomy Dissection Classes Among First Year MBBS Students in MMMC (Manipal Campus)	Jevitha Pillay Kanagaselvam, Khaizatul Azreen Kamaruzaman, Lee Chiu Xian, Loi Lai Hing	Ashwini L S 2014
16	The effect of power nap between didactic academic schedule on the performance of MBBS students in MMMC	Ms. Lina Chua Li Li, Ms. Liew Shier Nee, Ms. Lim Chee Siew, Ms. Intan Syazlin binti Zakaria	Ashwini L S 2014
17	Perception of Students on various Teaching Methodology Adopted by MMMC lecturers: A comparative and analytical study among MMMC students	Mr. Kisor A/L Thaijala Rao, Mr. Koay Vichard, Mr. Law Ngee Ling , Ms. Lee Shu Ying	Ashwini L S 2014
18	A study on isolation of airborne microbial flora from classroom	Ms. Ramlah bt. Mohamed Ibrahim Mr. Syahiran B. Sariff Mr. Fazwan B. Mahdan	Ms. Sapna Mrs.Jessica D'souza 2013
19	Exploring student's perception regarding Indian road traffic rules	Mr. Ammirul Fahmi Bin Othman Mr. Shahzuan Amir Bin Enuan	Ms. Sapna 2013

	and legal requirement for vehicle ownership	Ms. Nurmardhati Abyan Binti MD. Shah	
20	Influence of Family Background on Medical Student's Choice of Profession	Mr. Juno Teo Yaw King, Ms. Thivya Priya Arumugam, Ms. Aarti Arichandra, Mr. Samuel Tiong Kuok Siong	Dr. Rajesh. T 2014
21	Influence of Music Background on Student's Academic Performance	Mr. Afi Amirul Asyraf bin Afi Roshisham, Ms. Filzah Syuhaida binti Abdul Wahid, Ms. Nurul Yakin binti Mohd. Fauzi, Ms. Nur Afiqah binti Adnan	Dr. Rajesh. T 2014
22	Rumor has it: a study on the effect of placebo among MMMC students	Cherlyn Liew Chin Ling, LowJia Jun, Haran Mohandas, Lee Mao Sheng	Dr. Deepthinath R 2014
23	Smartphones- effective and enjoyable mobile learning	Batch 31 students: Ms. Hasvic Thevathas Ms. Pyarri Manoj Ms. Bhavitrai Thiagarajan Ms. Dai Ru Ting	Ms. Snigdha Mishra 2014
24	A Retrospective Study on Incidence of Bone Fractures in Patients with Diabetes Mellitus at T.M.A. Pai Hospital, Udipi	Noorhafizi Bin Abdul Razak, Nor Azzam Bin Ismail, Nur Lina Binti Mohd Arsad, Nurhazirah Aqilah Binti Salim Musa	Srinivasa Rao S 2014
25	Assessment of Infection Profile of Infants with Respiratory Tract Infections (RTI) Attending Paediatrics Department of T.M.A Pai Hospital, Udipi	Norzuraida binti Ishak, Nur Izzati binti Mustafa Kamal, Norhayati binti Nasir, Noordiana binti Abd Latif, Nurul Athirah binti Zuhari	Srinivasa Rao S 2014
26	Student's perceptions regarding the effect of romantic relationships on academic performance	Mr. Ian Daniel Francis Mr. Prabakaran Karuppiah Ms. Sujarnie Sureshkumar Ms. Wong Chen Yee	Ashwini Aithal P 2014
27	Emotional Intelligence and Academic Performance of Medical Students	Ms. Prasaniya Gunasegeran Ms. Sivagamy Meenakshi Sundaram Mr. Lim Zhen Rong	Ashwini Aithal P 2014
28	Effect of sports on student learning - a student perspective	Bavithira, Narainrai Selvaraj , Amal Ayna bt. Azmi	Gayathri S Prabhu 2014
29	Profile of Cervical Cancer Cases Reported at Kasturba Hospital	Rishika P. Muraly , Jaya Ruban Rachel Poomivasagam	Gayathri S prabhu 2014
30	How does carrying sports activities affect students learning process inside and outside class	Ms. Bavithira a/p Balasubramaniam Mr. Narainraj a/l Selvaraj Ms. Amal Ayna Binti Azmi	Gayathri S prabhu 2014
31	Influence of Music on Short- term and Long- term Memory	Ms. Hanis Syafinaz Ms. Ramya Ghanta Mr. Ang Jit Shen Ms. Harveen Kaur Gill	Venumadhav Nelluri 2013
32	Influence of Environment and	Ms. Tharshini Chelvan	Venumadhav

	Reading Habits on Academic Performance of Students of Melaka Manipal Medical College	Mr. Edwin Lan Teck Pei Ms. Mayuri Sivasubramaniam	Nelluri 2014
33	Factors That Affect Student Interest in Anatomy	Sharmilla M Sivan, Parthibhan Subramaniam, Siti Aishah Abkahhar, Neesshalini Bala Raj	Abhinitha P 2014
34	Relationship between Acne and One's Self Confidence	Ravina Suloshini Gengatharana, Sarah Zulkiflee, Purveena Ganisan, Sithtarren Arumugam	Abhinitha P 2014
35	The Effect of Lecturers' Gender on Student's Interest in Learning	Ooi Chia Lin, Pavithra a/p R. Malaimany, Quah Chee Sian, Rachel Ting JingJing, Saw Sew Ying	Abhinitha P 2014
36	The Influence of Blood Group on Character Traits - A Study on the Students of Melaka Manipal Medical College	Kavinesh Kupusamy, Lam Ming Han, Raudah Rozan, Raveender Kaur Gill	Jyothsna patil 2014
37	Hair Fall Crisis among Medical Students	Marina bintiAbdMujib, Ahmad Kamilulhayat bin Khairuddin, SubramaniPaidathalii	Jyothsna patil 2013
38	Perceptions of Teachers on Students' Process of Learning	Wong Woei Jiann, Giritharen Sivapathasundaram, Rammiya Vellasamy	Jyothsna patil 2013
39	Effect of homesickness on students' academic performance	Ms. Mahfuzah binti Zulkifli Ms. Mariati binti Maitaba Ms. Nabilah Ismah binti Muhamad Rapidi Ms. Natalea binti Raymond Ms. Noor Intan Zailila binti Jamaluddin	Dr Raghu Jeti 2014
40	Printed Meterials vs Electronic Devices in Learning Process	Mr. Muhammad Yassin bin Ikbaal Ms. Michelle Ang Ying Ying Mr. Mohammad Yunus bin Mohd Kasim Mr. Mohd Munzir bin Abdul Razak Mr. Muhammad Shahzan bin Safian	Dr Raghu Jeti 2014
41	The role of creativity in learning anatomy	Ms. Fakhira Damia Binti Sharif Zaimi Ms. Nabila Bt Razali Ms. Izyan Zalikha Bt Ismail Mr. Muhamad Hasif Bin Abdul Hamid	Dr. Bicy M. George 2014
42	The effectiveness of using cadaver as an educational tool in teaching anatomy	Mr. Muhammad Aizat Bin Yahaya Ms. Muhamad Yusuff Hafiz Mr. Ahmad Asnawi Bin Ismail	Dr. Bicy M. George 2014

43	Anthroposcopic and anthropometric analysis of periorbital features in Malaysian population. An inter-racial study	Ms. Thilaga a/p Dhawaraja Mr. Neshan Perumal Ms. Nishalani Jothy a/p Kanavathi Mr. Tan Kian	Dr. P. Vasanthakumar 2013
44	Complications of kidney transplation	Ms. Kwa Hsiang Ling Ms. Ong Yee Min Ms. Shalini a/p Ganeson Ms. Sufinas binti Khairuddin Ms. Ang Shu Ting	Dr. S. Sudarshan 2013
45	Evidence based assessment of insomnia among medical students in Manipal	Mr. Pradhaneesh Kumaran a/l Uthayakumaran Mr. Saravanesan a/l Nallatamby Ms. Siti Nuraishah binti Osmin	Dr. S. Sudarshan 2013
46	Racial influence on the anthropometry of the index and ring digits in malaysian students	Ms. Monisha a/p Sashi Kumaran Mr. Shailesh Anand a/l Baskaran Mr. Benjamin Chiam Wen Loo	Mr. Raghu Jetti 2013
47	Gender difference in arithmetical ability	Mr. Tajul Ashraf bin Shamsuri Mr. Vinoth Kumar a/l Sanderan Ms. Hassvini a/p Nadaraja Ms. Ramya Ghanta	Dr. P. Vasanthakumar 2013
48	Advantages and disadvantages of living-off campus: A cross-sectional study among MMMC students	Mr. Chai Keat Chun Mr. Ng Zhi Zhuan Mr. Cheong Wai Sheng Ms. Chin Ek Wei	Ms. Anitha Guru 2014
49	A study on the involvement of students in sports and various factors affecting it	Ms. Christina Voon Vui Yee Ms. Chandramathy Neeroshiny a/p Kuppusamy Ms. Choo Li Ting Ms. Elizabeth a/p Aroolsamy	Ms. Anitha Guru 2014
50	Financial management strategies among medical students: A cross-sectional study	Mr. Mohammad Nuril Anwar bin Mohd Jamalulail Ms. Afiqah Binti Ahmad Dan Ms. Nur Azreena Izzatie Binti Paiman Ms. Nurul Hasima Binti Zainal	Dr. H. Shyamala Hande & Dr. Chadrika D. Nayak 2013
51	Comparision of short term memory between males and females	Ms. Yeong Sze Yuen Ms. Chu Yun Le Ms. Abigail Ann a/p Jegawathan Ms. Mohana Preesha a/p Partheeban	Dr. Prakash Chandra Shetty 2014

PUBLICATIONS: 2012

A. REVIEW ARTICLES:

1. 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
2. Krishnaraj Somayaji S, Rashmi Acharya S. Mohandas Rao KG, Venkataramana V. Anatomy and clinical applications of mandibular nerve. *Bratisl Lek Listy* 2012, 113(7): 431-440
3. Krishnaraj Somayaji, Mohandas Rao KG. Relevance of maxillofacial anatomy in endodontics; A review. *Acta Stomatologica Naissi* 2012, 28(65); 1128-1143

B. ORIGINAL ARTICLES:

1. Adiga S, Vinay BS, Shobha Kamath, Bhaskar Gaonkar, Amit Panda, Mohandas Rao KG, KL Bairy. Evaluation of hepatoprotective activity of combination of *Phyllanthus Niruri* and *Curcuma Longa* Extracts in Wistar rats. *Research J. Pharmac. Biol & Chem. Sci.* 2012, 3(3):1260-1268
2. Pamidi N., Satheesha Nayak B. Effect of streptozotocin induced diabetes on rat hippocampus. *Bratisl Lek Listy* 2012, 113(10): 583-588
3. Naveen Kumar, Pramod Kumar, Keerthana Prasad, B. Satheesha Nayak. Histological study on the distribution of dermal collagen and elastic fibres in different regions of the body. *A International Journal of Medicine & Medical Sciences* 2012, 4(8): 171-176.
4. Reem R Abraham, K. Ramnarayan, Bincy M George, Indira Adiga, Girija R Kumari, Niveditha Suvarna, Vasudha Devi, Shobha KL, Madeeha B Mamot, Wan Nayitah BWJ, Nai'mah BA Haripin. Effects of problem-based learning along with other active learning strategies on short term learning outcomes of students in an Indian medical school. *Int J Health & Allied Sciences* 2012, 1(2): 98-103
5. Sareesh Naduvil Narayanan, Raju Suresh Kumar, Jaijesh Paval, Vivekananda Kedage, M. Shankaranarayana Bhat, P.Gopalakrishna Bhat. **Satheesha Nayak.** Analysis of emotionality and locomotion in radio-frequency electromagnetic radiation exposed rats. *Neurological Sciences* 2012 (DOI 10.1007/s10072-012-1189-4).
6. Naveen Kumar, Satheesha Nayak, S.N.Somayaji. Role of dilute alcohol in the removal of fine wrinkles from paraffin sections, a histo-technical study. *Int. J. Morphol.* 2012, 30 (1); 45
7. Vasavi Rakesh, Satheesha Nayak, M. S. Reddy, Vollala Venkata Ramana, Raghu Jetti, Varun Reddy. Variations of the flexor digitorum superficialis and lumbrical

- muscles of the hand – A study in South Indian Cadevers. *IMTU Medical Journal* 2012, 3; 12-14.
8. Ashwini LS, Mohandas Rao KG, Sharmila Saran, Somayaji SN. Morphological and morphometric analysis of supraorbital foramen and supraorbital notch: A study of human skulls. *Oman Medical Journal* 2012, 27(2); 129-133
 9. Muddanna S. Rao, Arunachalam Kumar, Niveditha Suvarna, Jessica Sushma D'souza. Health of coconut tree climbers of rural southern India- Medical emergencies, body mass index and occupational marks: A quantitative and survey study. *Bincy M. George, Journal of Clinical and Diagnostic Research* 2012, 6(1);57-60
 10. Tamkin Khan Rabbani, Shyamala Hande, SanjayBedi, Tejinder Singh, Vinay Kumar. Learning Objectives: “Perfect is the Enemy of Good!” *International Journal of User-Driven Healthcare*. 2012, 2(3): 44-62

C. CASE REPORTS:

1. Srinivasa Rao Sirasanagandla, Satheesha Nayak B, Kumar M.R.Bhat & Swamy Ravindra S. Communication of the anterior branch of the great auricular nerve with the cervical branch of facial nerve and its variant nerve endings deep in the parotid gland. *Int. J. Morphol.* 2012, 30(3): 840-842
2. Srinivasa Rao Sirasanagandla, Kumar M.R.Bhat, Narendra Pamidi, S. N. Somayaji
Unusual third head of the sternocleidomastoid muscle from the investing layer of cervical fascia. *Int. J. Morphol.* 2012, 30(3): 783-785
3. Nayak BS, Kumar N, Shetty SD, Guru A. Looped external iliac artery- a case report.
International Journal of Morphology 2012, 30(3): 870-871
4. Nair V, Nair RV, Mookambika RV, Mohandas Rao KG, Krishnaraja Somayaji S. Additional muscle fibers of brachioradialis with anomalous high origin and entrapment of radial nerve in an osseomuscular canal. *Bratisl Lek Listy* 2012, 113 (10): 622-623
5. Naveen Kumar, Ashwini Aithal, Anitha Guru, Satheesha B. Nayak. Bilateral vascular variations at the renal hilum: A case report. *Vascular medicine* 2012, doi:10.1155/2012/968506

6. Satheesha Nayak, Sudarshan S, Venu Madhav N, Srinivasa Rao S Unusual branching pattern of common hepatic artery- a case report. *Int. J. Anatomical Variations* 2012, 5: 126-127
7. Satheesha Nayak. *Int. J. Anatomical Variations* 2012, 5: 128-129
8. Satheesha Nayak, Naveen Kumar, Anitha Guru, Surekha D Shetty. A case of bifid rib and additional intercostal space. *Int. J. Anatomical Variations* 2012, 5: 134-136
9. Bincy M George, Sathhesha Nayak, Snigdha Mishra, Sudarshan S. Presence of a single lateral extramural diverticulum at the junction of second and third parts of the duodenum-a case report. *Int. J. Anatomical Variations* 2012, 5: 132-133
10. Satheesha Nayak, Srinivasa Rao, Sapna M, Ashwini LS, Jyothsna P, Ashwini Aithal P, Swamy Ravindra S, Abhinitha P. Abnormal intraparotid termination of facial vein and its clinical importance. *Journal of Surgical Academia* 2012, 2(2): 27-29
11. Satheesha Nayak, Srinivasa Rao, Surekha DS, Naveen K, Anita G. Replaced right hepatic artery associated with uncommon triplet right renal vein: Embryological perspective and clinical importance. *Journal of Surgical Academia* 2012, 2(2): 45-48
12. Melanie RD, Anitha G, Naveen K, Satheesha BN. Sub-brachialis course of the median nerve in the arm and its possible clinical complications: A case report. *Journal of Surgical Academia* 2012, 2(2): 52-55
13. Naveen Kumar, Ashwini P. Aithal, Mohandas KG Rao, Satheesha Nayak B The venous chiasma between the basilica vein and the brachial vein: A case report. *Journal of clinical and diagnostic research* 2012, 6(9): 1539-1540
14. Naveen Kumar, Srinivas Rao Sirasanagandla, Ashwini Aithal, Satheesha Nayak B. Possible entrapment of the ulnar artery by the third head of pronator teres muscle. *Rev Arg de Anat Clin* 2012, 4(3): 102-105
15. Satheesha Nayak B, Vasanth Kumar, Naveen Kumar, Raghu Jetti. Unusual fissure on the diaphragmatic surface of the spleen- a case report. *International Journal of Anatomical Variations* 2012, 5: 96-98
16. Surekha D. Shetty, Abhinitha P, Sapna Marpalli, Satheesha Nayak B. Total replacement of inferior gluteal artery by a branch of superior gluteal artery. *International Journal of Anatomical Variations* 2012, 5: 85-86

17. Surekha D. Shetty, Satheesha Nayak B, Venu Madhav N, Srinivasa Rao Sirasanagadla, Abhinitha P. The abnormal origin, course and the distribution of the arteries of the upper limb. *Journal of clinical and diagnostic research* 2012, 6(8): 1414-1416.
18. Nayak SB, Ashwini LS, Swamy Ravindra S, Abhinitha P, Sapna Marpalli, Jyothsna Patil and Ashwini Aithal P. Surgically important accessory artery- a case report. *J.Morphol. Sci.* 2012, 29(3): 1-2.
19. Swamy Ravindra S, Somayaji SN, Satheesha Nayak b, Mohandas Rao KG.
External jugular vein passing through triangle formed by tendon of cleido-occipitalis cervicalis muscle, trapezius muscle and clavicle- a case report. *International Journal of Anatomical Variations* 2012, 5:51-53.
20. Ashwini Aithal P, Naveen Kumar, Satheesha Nayak B. Absence of superior belly of the omohyoid muscle: A case report. *Journal of Pharmaceutical and Biomedical Sciences* 2012, 23(23): 1-2.
21. Swamy Ravindra Shantakumar., K.G. Mohandas Rao. Variant branching pattern of axillary artery: A case report. *Case reports in Vascular Medicine* 2012, doi:10.1155/2012/976968
22. Ashwini S. Shetty, Shetty Santosh, Rakesh C, Narendra Pamidi, Raghu Jetti. An atypical oversized lateral circumflex femoral artery and its clinical implications. *J clinical and diagnostic research* 2012, 6(7): 1284-1285
23. Rodrigues V, Satheesha Nayak B, Mohandas Rao KG, Rao AS, Venkataramana V, Somayaji SN Anomalous muscle from the fascia around popliteal vessels. *Bratisl Lek Listy* 2012, 113 (7); 451-453
24. Satheesha Nayak B, Srinivasa Rao, Naveen Kumar, Surekha Shetty. Hepatosplenic trunk associated with tortuous course of right hepatic artery forming caterpillar hump. *North American Journal of Medical Sciences* 2012, 4(8); 376-378
25. Narendra Pamidi, Srinivasa Rao, Satheesha Nayak B, Raghu Jetti. Variant position of the gallbladder associated with abnormal peritoneal fold around it. *Rev Arg de Anat Clin* 2012, 4(2); 70-73
26. Mohandas Rao KG, Somayaji SN, Jyothsna P, Sapna M, Ashwini LS. High origin of ulnar artery with unusual superficial course and abnormal additional branches from the superficial palmar arch. *Journal of Surgical Academia* 2012, 1: 42-45

27. Naveen Kumar, Surekha D Shetty, Somayaji SN, Satheesha Nayak B. Presence of accessory coracobrachialis and its clinical importance. *International Journal of Anatomical Variations* 2012, 5; 27-28
28. Srinivasa Rao Bolla, Sashi Kumar, Saikat Roy, Narendra pamidi, Raghu Jetti. Unusual branching pattern of brachial artery with abnormal superficial palmar arch. *Journal of surgical academia* 2012, 2 (1); 53-55
29. Raju S, Raghu J, Sreenivasulu Reddy M, Sirisha B, Indira B, Sujatha M. Unilateral rectus sternalis muscle: It's clinical significance. *An Journal of surgical academia* 2012, 2(1); 21-22
30. Satish Nayak B, Srinivasa Rao Sirasanagandla, Narendra Pamidi, Raghu Jetti. Variations in branching pattern of the internal iliac artery in an adult male- A case report. *Rev Arg de Anat Clin* 2012, 4 (1); 25-28.
31. Srinivasa Rao Sirasanagandla, Satheesha Nayak B., Bhagath Kumar POTU, Kumar MR Bhat. Origin of the facial artery from lingual-facial trunk and its course through the submandibular salivary gland: A case report. *Rev Arg de Anat Clin* 2012, 4 (1); 20-24
32. Jyothsna P, Mohandas Rao KG, Somayaji SN, Ashwini LS. Multiple vascular anomalies involving testicular, suprarenal arteries and lumbar veins. *North American Journal of Medical Sciences* 2012, 4 (3); 154-156
33. Gorantla VR, Nayak BS, Potu BK Variations of the celiac trunk and its branches associated with the shift of vascular hilum (porta hepatis) of the liver. *Bratisl Lek Listy* 2012, 113 (2); 120-122
34. K. Kalyan Chakravarthi, Nelluri Venumadhav. Morphological study of Metopic suture in adult South Indian skulls. *International Journal of Medical and Health Sciences*. 2012, 1: 23-28

D. LETTER TO EDITOR:

1. Bhagath Kumar Potu, Muddanna S. Rao, Srinivasa Rao Sirasanagandla. Effect of Majja basti (therapeutic enema) and Asthi shrinkhala (*Cissus quadrangularis*) in the management of osteoporosis (*Asthi-Majjakshaya*). *AYU* 2012, 33 (2), 317.
2. Bhagath Kumar Potu, Sreenivasa Rao Sirisanagandla, Peh Suat Cheng. Abnormal communication of human median and musculocutaneous nerves in lower arm. *International Journal of Anatomy, Radiology and Surgery* 2012, 1(1): 21-22

PUBLICATIONS: 2013**A. REVIEW ARTICLES:****B. ORIGINAL ARTICLES**

1. Naveen K, Anitha G, Melanie D'souza, Jyothsna Patil, Satheesha Nayak. Incidences and clinical implications of communication between musculocutaneous nerve and median nerve in the arm- A cadaveric study. *West Indian Medical Journal* Nov 2013; vol 62(8):744-747
2. Naveen Kumar, Sareesh NN, Satheesha Nayak B, Murli Manju, Suhani S, Mamatha H, Sampath PK. Appendicitis and appendectomy: A retrospective survey in South Indian population. *Journal of Surgical Academia* 2013; 3(2):10-13
3. Naveen Kumar, Anitha Guru, Ashwini Aithal, Surekha Shetty, Satheesha Nayak, Narendra Pamidi. Evaluation of the variant anatomical disposition of the renal hilar structures in South Indian adult human cadavers and its clinical implications. *Journal of Clinical and Diagnostic Research*. 2013 Aug, Vol-7(8): 1543-1546
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C. CASE REPORTS

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D. LETTER TO EDITOR

PUBLICATIONS: 2014

A. REVIEW ARTICLES:

1. Shirur Krishnaraj Somayaji, Mohandas Rao KG. Course and termination of 2nd order neurons of general sensory from oral structures and taste pathways: Contradictory views. *OA Anatomy* 2014; 2(3):23.

B. ORIGINAL ARTICLES

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C. CASE REPORTS

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 58. Sudarshan S. Duplicated right crus of the diaphragm: a cadaveric case report. *J Can Chiropr Assoc* 2014; 58(1)
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D. LETTER TO EDITOR

1. Satheesha B. Nayak. Thoracic Inlet or Thoracic Outlet: Which One is Which in Anatomical and Clinical Literature? *Anat Sci Educ* 7:167 (2014) Published online 00 Month 2013 in Wiley Online Library (wileyonline library.com). DOI 10.1002/ASE.1416.
2. Srinivasa Rao Sirasanagandla, Satheesha B Nayak. Should Mylohyoid Muscle be Considered a True Partition Between the Sublingual and Submandibular Fossae? *Saudi Journal of Medicine & Medical Sciences* 2014, 2: 234-234.
3. Hande, H. Shyamala, Surekha R. Kamath, and Jessica D'Souza. "Students' perception

of effective teaching practices in a medical school." Education in Medicine Journal 6.3 (2014).

YEAR: 2012

The details of our conference presentations

International:

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1.	Serendipitous Finding of the Variations of the Ribs and Their Corresponding Cartilages	Anitha Guru	2 nd Joint Conference of the ANZACA(Australian and New Zealand Association of Clinical Anatomists) and AIAS (Australian Institute of Anatomical Sciences) at University of New South Wales, Sydney, 9-11 December, 2012
2.	Variant gastric and hepatic branches of left hepatic artery	Naveen Kumar	4 th Asia – Pacific Gastroesophageal Cancer Congress & 5 th Annual Scientific meeting of the Singapore Gastric Cancer Consortium held from 4 th to 6 th July 2012 at National University Health System (NUHS) Singapore
3.	Evaluation of educational outcomes of problem based learning in a hybrid curriculum	Dr Shyamala Hande	2 nd Asia Pacific Joint conference on PBL, Shanghai, Oct 24-28, 2012
4.	Renal arterial collar: A case report	Ashwini L S	2 nd International Anatomical Sciences And Cell Biology Conference, December 6 th -8 th , 2012 at Chiang Mai, Thailand
5.	Radiographic study of carrying angle and its changes in ageing		1 st WORLD CONGRESS ON HEALTHY AGEING "Evolution: Holistic Ageing in an Age of Change" 19 th -22 nd March 2012, Kuala Lumpur Convention Centre, Kuala Lumpur, Malaysia
6.	A study on the number and arrangement of the structures passing through the PortaHepatis in South Indian Population	Sapna Marpalli	2 nd International Anatomical Sciences and Cell Biology Conference and Pre-conference Workshop: Advances in Microscopy (conducted by NIKON) and the 36 th Annual Conference of Anatomy

		Association of Thailand at Chiang Mai, Thailand on 6 th to 8 th December 2012
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National:

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1.	“Abnormal branching pattern of common hepatic artery” - a case report”.	Dr. Satheesha Nayak B	14th Annual conference of Karnataka Chapter Anatomists held at Shri BM patil Medical College and Hospital and research centre, Bijapur. 8th and 9th September 2012. (National Conference)
2.	“Bilateral extrinsic origin of the inferior epigastric and deep circumflex iliac arteries – a case report”.	Dr. Satheesha Nayak	60th National conference of Anatomical Society of India, held at SCB Medical College Cuttack, Odisha. 27-29 December 2012.
3.	Unusual Formation of an Arterial Loop in the Cubital Fossa and Abnormal Origin of Radial Artery from the Arterial Loop- A Clinically Important Variation.	Dr. Mohandas Rao	Annual conference of Anatomical Society of India (ASI) held at Bhubaneswar in December 2012.
4.	Additional muscle fibers of brachioradialis with anomalous high origin and entrapment of radial nerve in an osseomuscular canal.	Dr. Mohandas Rao	Annual conference of association of Anatomists, Tamilnadu at Kanchipuram in October, 2012.
5.	Recalling the key words at the beginning of a lecture- a useful method of revision and an effective lidopener.	Dr. Mohandas Rao	At 1st International conference on research and training in health professions education-2012 at Belgaum in February, 2012.
6.	Vascular variations in the right side of the neck- A case report	Naveen Kumar	XIV conference of Karnataka Chapter of Anatomists, held at BLDE university, Bijapur from 7 th - 9 th September 2012
7.	Variation of axillary artery branching pattern in a south Indian cadaver.	Raghu Jetty	The 2 nd International anatomical sciences and cell biology conference at Chiang Mai, 6-8 December 2012.
8.	“Abnormal origin, course and distribution of arteries of upper limb – a case report	Surekha D Shetty	60 th National conference of anatomical society of India. Department of Anatomy. Bhubaneswar, Odisha. December, 27 th to 29 th , 2012.
9.	Variant Origin and Course of Ulnar Artery – A Case Report	Surekha D Shetty	XIV Annual Conference of Karnataka Chapter Anatomists–SBMPMC- ACON-2012. Department of Anatomy, Shri B

			M Patil Medical College Hospital & Reserch. September, 8 & 9 th 2012.
10.	Unusual branching pattern of axillary artery associated with the high origin of ulnar artery- A case report.	Swamy Ravindra S	14th Annual Conference Of Karnataka Chapter Of Anatomists held at bijapur, Karnataka from 7th to 9th of December 2012.
11.	Abnormal Intraparotid Termination of Facial Vein and Its Clinical Importance.	Swamy Ravindra S	60th NATCON PRECONFERENCE AND CONFERENCE bhuvaneshwar, odisha from 26 to 29th of December 2012.
12.	Entrapment of Ulnar Neurovascular Bundle by an Unusual Muscle Belly in the Anterior Part of Wrist	Ashwini L S	SANCON – 2012, 35th Annual Conference of Association of Anatomists Tamil Nadu at Saveetha Medical College, Kanchipuram, Chennai on 13th & 14th October 2012
13.	Variations in the Branching Pattern of Coeliac trunk	Venu Madhav Nelluri	NATCON – 60 of ASI, National conference of Anatomical society of India at Cuttak – Bhubaneswar, conducted between 27th to 29th December, 2012.
14.	Additional Muscle in the Anterior Compartment of the Forearm – a case report	SapnaMarpalli	35th Annual Conference of Association of Anatomists-Tamilnadu on 13th and 14th October 2012
15.	Abnormal course and branching of the left testicular artery in the posterior abdominal wall - a case report	Sapna Marpalli	NATCON of ASI and Pre-conference CME at SCB Medical College, Cuttack, Odisha on 26 th to 29 th December 2012,

The details of workshops attended

Sl. No.	Name of the workshop	Name of the faculty	Details of the workshop
1.	National Symposium and Workshop on Best Practices in Clinical Embryology	Dr. Satheesha Nayak B	in December 2012 held at Manipal
2.	Teacher as a communicator organized by MCPD, Manipal	Dr. Mohandas Rao	November 2012.
3.	Neurobiology of Cognition at NIMHANS Bangalore, India	Dr. Mohandas Rao	November 2012.
4.	Academic leadership “Teacher as a Leader” organized by MCPD, Manipal	Dr. Mohandas Rao	January 2012.
5.	National symposium and workshop	Naveen Kumar	1 st and 2 nd December, 2012.

	on best practices in clinical embryology,		Organized by Department of clinical embryology, KMC Manipal
6.	Workshop on Medical Writing	Raghu Jetti	Department of Medicine, KMC, Manipal, 16&17 June 2012.
7.	Indo-US Symposium on Disorders of the developing brain.	Surekha D Shetty	Organized by Manipal Life Sciences Centre & Kasturba Medical College, Manipal University, Manipal. October, 27 – 28 th , 2012.
8.	Tax planning & investment	Surekha D Shetty	Organized by Finance forum of MIM, January 24, 2012.
9.	Exploring the human anatomy through advanced imaging.	Swamy Ravindra S	25 th feb 2012, organised by dept of Anatomy KMC, Manipal.
10.	Indo us symposium on disorders of the developing brain.	Swamy Ravindra S	27 th to 28 th oct 2012, organised by MLSC and KMC, Manipal.
11.	‘Teacher as communicator’	Swamy Ravindra S	16 th November 2012, organised by MCPD, Manipal.
12.	Neurobiology of cognition	Ashwini L S	At Convention Center, NIMHANS, Bangalore, on November 01-02, 2012
13.	Disorders of The Developing Brain	Venu Madhav Nelluri	27 th to 28 th of October, 2012.
14.	Recent Developments in Invitro Fertilization	Venu Madhav Nelluri	28 th of July, 2012
15.	Exploring the Human Anatomy Through Advanced Imaging	Venumadhav Nelluri	26 th December, 2012
16.	One day symposium on Nanoscience and technology	Snigdha Mishra	9 th March 2012 at Center for atomic and molecular physics, Manipal
17.	Systematic reviews of public health interventions	Ashwini Aithal P	At manipal university on 8th November 2012

YEAR: 2013

❖ The details of our conference presentations

International:

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1.	Evaluation of variant anatomical disposition of renal hilar structures in human cadavers and its clinical implications	Naveen Kumar	International conference in Medicine and Public Health (ICMPH) 2013, 24 th to 28 th June 2013 at the Siriraja hospital, Mahidol University, Bangkok, Thailand

2.	Merit based re-distribution of students in anatomy dissection classes: method re-visited“	Dr.Bincy M George	South African Association of Health Educationists, (SAAHE) 2013 conference held in Durban, South Africa from 27th to 29th June 2013.
3.	Prenatal Inflammation induced cognitive impairments: attenuated by postnatal physical exercise in Rats	Rajesh T	International symposium on Neurosciences and Annual conference of Indian academy of Neurosciences at University of Allahabad, UP on 25-27 Oct, 2013
4.	Analysis of Extensor Digitorum Brevis Muscle: an Anatomic Guide for Muscle Flap and Tendon Transfer Surgical Dissection	Srinivasa Rao S	International Conference in Medicine and Public Health, held at Mahidol University, Bangkok, 28th to 28th June, 2013
5.	Clinical Implications of Communications between Musculocutaneous Nerve and Median Nerve in the Arm of South Indian Cadavers”	Melanie Rose D'Souza	International Conference in Medicine and Public Health, June 2013, Siriraj, Thailand

National:

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1.	Abnormal formation of sciatic nerve – A case report.	Swamy Ravindra Shantakumara	61st NATCON preconference and conference held at Chandigarh, Punjab from 22nd to 25th November, 2013.
2.	Multiple venous variations of the head and neck – A case report”	Naveen Kumar	61 st NATCON – ASI, Organized by Department of Anatomy, Postgraduate Institute of Medical Education & research Chandigarh, India held on 22 nd to 25 th November 2013
3.	Substantia nigral neuroprotective effect of Ocimum sanctum (Linn) fresh leaf extract in rats subjected to foot shock stress.	Mohandas Rao	International symposium on Neurosciences and XXXI Annual Conference of Indian Academy of Neurosciences held at Allahabad, in October 2013.
4.	“Incomplete Circle of Willis due to Bilateral Abnormal Origin of Posterior Cerebral Arteries and Bilateral Absence of Posterior Communicating	Mohandas Rao	Annual conference of Anatomical Society of India (ASI) held at Chandigarh in November 2013.

	Arteries”		
5.	Unusual veins in the neck – a case report	Surekha D shetty	61 th National conference of Anatomical Society of India held at Chandigarh in Novmber, 2013.
6.	Sessile terminal ileum, sub-hepatic caecum and abnormal peritoneal fold attached to the gall bladder – a case report	Satheesha nayak	61st National conference of Anatomical Society of India, held at Post Graduate Institute of Medical Education and Research, Chandigarh from 22-25 November, 2013.
7.	Incidence of absence of palmaris longus in a multiracial population	Dr.Bincy M George	36th annual conference of association of anatomists, Tamilnadu,Conducted on 5th&6th October 2013
8.	Unusual Accessory Muscle Belly of Brachioradialis in the Extensor compartment of forearm	Ashwini L S	15 th Karnataka Chapter of Anatomists Conference at Sapthagiri Institute of Medical College and Research Center Bengaluru held on 13 -15 th September 2013
9.	Neuroprotective Effect of Tinospora cordifolia (Willd) Miers Extract on Hippocampal CA3 Neurons of Neonates Exposed to Prenatal Vibratory Stress	Ashwini L S	International Symposium on Neuroscience and XXXI Annual Conference of Indian Academy of Neuroscience, 25-27 th October 2013
10.	‘A rare case of axillary arch bridging across the axilla over the axillary vessels and brachial plexus’	Sapna Marpalli	15th Karnataka Chapter of Anatomists Conference at Sapthagiri Institute of Medical College and Research Center Bengaluru held on 13 -15th September 2013
11.	‘Memory Enhancing Effect of Glycyrrhiza Glabra Extract in Rat Pups Treated During their Growth Spurt Period- 6 week old wistar rats’	Sapna Marpalli	International Symposium on Neuroscience and XXXI Annual Conference of Indian Academy of Neuroscience and Local chapter of IAN, held on 25-27th October 2013
12.	“Lets play Anatomy”	Snigdha Mishra	Presented this poster at the innovation day organized by the MIT manipal on 21 st Dec 2013
13.	A case report of bilateral duplication of renal vessels	Dr Raghu Jetti	XII Regional society of anatomists meet- 20&21 July, 2013
14.	Absence of superior belly of the omohyoid muscle: A case	Ashwini Aithal P	XIV Annual conference of Karnataka chapter anatomists,

	report		Bijapur on September 8th and 9th , 2012
15.	Reactions Among First Year Medical Students On Their First Exposure To Cadaveric Dissection.	Gayathri S Prabhu	61st National Conference of Anatomical Society of India (NATCON 61) November 2013 held in Chandigarh
16.	Accessory Parotid Gland and Unusual Termination of Facial Artery	Abhinitha P	61st National Conference of Anatomical Society of India (NATCON 61) November 2013 held in Chandigarh
17.	Unilateral arterial variation in axillary region with a high origin of brachial artery - a case report.	Melanie Rose D'Souza	NATCON 61, Chandigarh, November 2013.
18.	Variant origin of common trunk of accessory hepatic artery and cystic artery from the superior mesenteric artery".	Prakash Shetty	NATCON-61 held from 23rd to 25th November, 2013 in Chandigarh

Details of workshops attended

Sl. No.	Name of the workshop	Name of the faculty	Details of the workshop
1.	Clinical and surgical Insight into Cardiac Anatomy and Congenital Malformations.	Swamy Ravindra Shantakumar	November 22nd, 2013. Organized by Department of Anatomy, Postgraduate Institute of Medical Education & Research, Chandigarh.
2.	CME cum workshop on 'Clinical and surgical insight into Cardiac anatomy and congenital malformations'	Naveen Kumar	22nd to 25th November 2013, at Department of Anatomy, Postgraduate Institute of Medical Education & research Chandigarh, India
3.	CME on "Experience the advances in teaching and research in embryology"	Naveen Kumar	Kasturba Medical College, mangalore on 5th October 2013
4.	CME on "Experience the advances in teaching and research in embryology"	Swamy Ravindra shantakumar	Kasturba Medical College, mangalore on 5th October 2013
5.	Survey Research & Statistical Analysis	Surekha D shetty	August 12-14 th , 2013. Organized by Department of Statistics, Manipal University, Manipal.

6.	Clinical and surgical Insight into Cardiac Anatomy and Congenital Malformations.	Surekha D shetty	November 22 nd , 2013. Organized by Department of Anatomy, Postgraduate Institute of Medical Education & Research, Chandigarh.
7.	“Effective Electronic Communication”	Mohandas Rao	Organized by MCPD, Manipal in December 2013.
8.	“Critical thinking” organized by	Mohandas Rao	MCPD, Manipal in December 2013.
9.	“Experience the Advances in Teaching & Research in Embryology”	Mohandas Rao	Organized by Department of Anatomy, KMC Mangalore in October 2013.
10.	Ethical issues in Biomedical Research jointly	Mohandas Rao	Organized by MCPD, Manipal and Department of hospital administration, KMC, Manipal in May 2013.
11.	Counseling skills for teachers	Mohandas Rao	Organized by Department of student affairs, Manipal in March 2013.
12.	National workshop on “assessment in higher education”	Dr.Bincy M George	conducted on 10th to 12th january 2013, organized by manipal center for professional and personal development, manipal university
13.	Workshop on “ curriculum design”	Dr.Bincy M George	conducted on 9th july 2013,organized by manipal center for professional and personal development, manipal university
14.	Scientific Communication and Grant Writing	Ashwini L S	Received travel grants to attend the workshop sponsored by Department of Biotechnology, Ministry of Science and Technology, New Delhi at National Academy of Sciences (India) Allahabad on 24thOctober 2013
15.	Scientific communication and Grant Writing Workshop	Sapna Marpalli	Organized by Indian Academy of Neuroscience Allahabad and workshop is sponsored by Department of Biotechnology and New Delhi on 24th October 2013 at Allahabad
16.	Hands on workshop in Neurochemistry and Electron Microscopy,	Rajesh T	25—20 th July 2013, at National Institute of Mental health and Neurosciences, Bangalore, India.
17.	How to write and publish scientific paper-	Rajesh T	14 th Apr 2013, Kasturba Medical College, Mangalore, Manipal University, Manipal.
18.	Learning Museum Techniques with Joy-	Rajesh T	27 th March 2013. Kasturba Medical College, Mangalore, Manipal University.

19.	Experience the Advances in Teaching & Research in Embryology	Dr Deepthinath	5th october 2013 at KMC Mangalore
20.	Assessment in Higher Education	Dr Raghu Jetti	Assessment in Higher Education May 17&18, Manipal Centre for Professional and Personal Development, Manipal.
21.	Counseling Skills for Teachers	Dr Raghu Jetti	Counseling Skills for Teachers, August 30&31, Department of Student Affairs, Manipal University, Manipal
22.	Effective Electronic Communication	Dr Raghu Jetti	Effective Electronic Communication, December 28, Manipal Centre for Professional and Personal Development, Manipal.
23.	1-Week hands-on Workshop on Human/Cancer Cell Culture Techniques and MTT Assay	Srinivasa Rao S	Organized by International Centre for Stem Cells, Cancer and Biotechnology (ICSCCB), Pune, India, 10th-16th November 2013
24.	Ethical Issues in Biomedical Research	Ashwini Aithal P	29th and 30th May, 2013 at MCPD, Manipal
25.	Statistics For Research – April 16-20 th	Gayathri S Prabhu	T.A.PAI Instituiute of amangement
26.	Continuing Professional Development Programme 6 th july	Gayathri S Prabhu	MCODS Manipal
27.	7 CME on Histotechnology & 7 th Workshop on Immunohistochemistry	Venumadhav Nelluri	26 & 27 December 2013
28.	Clinical and surgical insight into cardiac anatomy and congenital malformation	Melanie Rose D'Souza	NATCON 61, Chandigarh, November 2013
29.	Clinical and surgical insight into cardiac anatomy and congenital malformation.	Prakash Shetty	NATCON 61, 23 rd to 25 th November, Chandigarh, 2013.

YEAR: 2014

The details of our conference presentations

International:

Sl.	Title of the presentation	Name of the	Details of Conference
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No.		faculty	
1.	Morphometric Parameters of the Indian Human Adult Kidney: An Anatomical Study.	Swamy Ravindra Shantakumara	International Conference on Global Public Health 2014, held at Negombo, Srilanka, from 3rd to 4th of July 2014.
2.	Histomorphometric analysis of dermal collagen and elastic fibers from the skin samples obtained in horizontal and vertical orientations on the trunk region of human cadavers'	Naveen Kumar	28th annual conference for the Australasian Society for Human Biology held at Hotel Comfort Inn, Glenelg, Adelaide, Australia from 10th-13th December 2014
3.	Quantitative fraction of dermal collagen and elastic fibres in sections taken perpendicular to each other from head and neck region – a histological study'	Naveen Kumar	International conference on Global Public health 2014 held on 3-4 th July 2014 at Goldi Sands Hotel, Negombo, Sri Lanka
4.	“Effect of Sorafenib on Histopathological Changes in Testes of Swiss Albino Mice”	Surekha D shetty	Pharmacology & Physiology International Scientific Congress 2014, held at Kuala Lumpur on August 2014.
5.	Morphological variations of the lungs seen in the cadavers of south indian region”.	Dr.Bincy M George	At 18th congress of the international federation of associations of anatomists (ifaa) held on August 8-10, 2014 in Beijing international convention center, Beijing, China.
6.	“A Rare Combination of Multiple Venous Convergences to the Left Renal Vein and Renal Venous Collar around the Abdominal Aorta”	Sapna Marpalli	18th Congress of the International Federation of Associations of Anatomists (IFAA) During August 8-10 at Beijing, China
7.	The thymus: a rarely observed structure in the dissecting room	Dr.Prasad.AM	Asian Joint Congress of Clinical Anatomy held from November 8 to 9, 2014 in Tokyo, Japan.
8.	Annulus of pancreatic tissue around the common hepatic artery- a rare case	Dr Deepthinath	2nd congress of Asian Association of clinical Anatomy ,November 8&9 2014 held at Tokyo medical and Dental university, Tokyo, Japan
9.	Effect of <i>Ginkgo biloba</i> on neuroanatomical changes associated with fluoride intoxication	Dr Raghu Jetti	18 th congress of International Federation of Association of Anatomists, August 8-10, Beijing, China
10	Effect of human bone marrow	Ashwini	Pharmacology and Physiology

	derived mesenchymal stromal cells in treating liver cirrhosis	Aithal P	International Scientific Congress, Malaysia in August, 2014.
11	Learning approaches of first year medical students and their academic performance in anatomy	Dr. Sudarshan.S	2nd Dubai international conference: sustaining success through innovation, organized by Michigan State University, Dubai campus in January, 2014

National:

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1.	Unilateral Vagocervical Nerve Trunk Replacing the Ansa Cervicalis.	Swamy Ravindra Shantakumara	62nd NATCON-ASI - organized by Regional Institute of Medical Sciences, Imphal, Manipur from 18th to 20th November 2014.
2.	Presence of an accessory spleen in the gastrosplenic ligament: Its histological and clinical significance”	Naveen Kumar	62nd NATCON-ASI - organized by Regional Institute of Medical Sciences, Imphal, Manipur from 18th to 20th November 2014
3.	Unusual Formation and Distribution of the Superficial Palmar Arch – A case report	Surekha D shetty	62 th National Conference of Anatomical Society of India held at Imphal on Novmber 2014.
4.	“Cuncurrent variations in the branching pattern of the coeliac trunk and superior mesenteric artery – A case report”.	Satheesha Nayak	at the 16th Karnataka Chapter of Anatomists State Conference Held at SDM College of Medical Sciences Hospital Sattur Dharwad held on 23rd ad 24th August 2014
5.	“Multiple prehilar branches of the right renal artery – A case report”	Satheesha Nayak	at the First State conference of Maharastra chapter of Anatomists Held at NKP Salve Institute of Medical Sciences and research, Nagpur, held on 19th and 20th September 2014.
6.	Neuroprotective Effect Of Tinospora cordifolia Extract On Hippocampal CA3 Neurons Of Neonates Exposed To Prenatal Vibratory Stress And Postnatal Maternal Separation	Ashwini L S	18 th Annual Convention of Society of Pharmacognosy, On February 21-22, 2014, Maharshi Dayanand University, Rohtak, Haryana state, India
7.	‘Memory Enhancing Effect of Glycyrrhiza Glabra Extract in Rat Pups Treated During their Growth Spurt Period-3 week old wistar rats’	Sapna Marpalli	18th Annual Convention of Society of Pharmacognosy held on 21-22nd February 2014 at Maharshi Dayanand University, Rohtak Hariyana
8.	Tendinous Pronator Teres - A rare	Dr	MAHACON 1, 2014. NKPS I

	case	Deepthinath	MS& RC, NAGPUR
9.	A rare unusual morphology of the anterior arch of atlas	Srinivasa Rao S	XIII Regional Society of Anatomist's Meet-2014, held at MMC, Khammam, TS, 4th & 5th of July-2014
10	Efficacy of Lemon Extract in Attenuating Prenatal Stress-Induced Changes on Hippocampal Neurons in Rats- A Qualitative Study	Abhinitha P	47th Annual Conference of the Indian Pharmacological Society IPSCON-Guwahati December 2014
11	Anomalous subclavicular course and unusual communication of external jugular vein. A case report	Melanie Rose D'Souza	NATCON 62. R.I.M.S, Imphal, November 2014
12	Accessory abductor digiti minimi muscle: a potential cause of ulnar neuropathy at wrist	Jyothisna patil	16th Karnataka Chapter of Anatomists State Conference Held at SDM College of Medical Sciences Hospital Sattur Dharwad held on 23rd and 24th August 2014
13	A Rare Case Of Tendinous Clavicular Insertion Of Trapezius Muscle - Could It Be A Cause For Supraclavicular Nerve entrapment Syndrome?	Jyothisna patil	62nd NATCON-ASI - organized by Regional Institute of Medical Sciences, Imphal, Manipur from 18th to 20th November 2014.

The details of workshops attended

Sl. No.	Name of the workshop	Name of the faculty	Details of the workshop
1.	Recent advances in genetics – A national CME	Swamy Ravindra Shantakumara	Held on 25th January 2014 by Dept of Anatomy, Srinivasa institute of medical sciences and research centre, Mukka, Mangalore
2.	“Medical Education and Ethics”	Swamy Ravindra Shantakumara	17th November, 2014. Organized by Regional Institute of Medical Sciences, Imphal.
3.	National CME on ‘Medical education and Ethics’	Naveen Kumar	At Regional Institute of Medical Sciences, Imphal, Manipura on 17th November 2014
4.	A national CME on Recent Advances In Genetics	Naveen Kumar	25 th Jan 2014 at Srinivasa Institute of Medical Sciences and Research Centre, Mukka Mangalore
5.	“Medical Education and Ethics”	Surekha D shetty	17 th November, 2014. Organized by Regional Institute of Medical Sciences, Imphal.
6.	“Mindfulness-Based Cognitive Behavioural Interventions:	Mohandas Rao	Organized by NIMHANS organized by Department of

	Applications in Clinical and Nonclinical Settings”		Clinical Psychology, NIMHANS, in November 2014.
7.	Attended workshop on “Nurturing an Effective Workplace”	Mohandas Rao	Organized by TA Pai Management Institute, Manipal in November 2014.
8.	Attended workshop on “Intellectual Property Rights”	Mohandas Rao	Organized by MCPD and Innovation Centre, MIT Manipal in August 2014.
9.	Recent Advances in Genetics	Dr Deepthinath	25th January 2014 at SIMS & RC, Mangalore
10.	“Digitised Lab-based Teaching in Human Physiology”	Ms. Snigdha Mishra	One day workshop conducted by the dept. of Physiology MMMC, Manipal
11.	Design creating effective MCQs	Dr Raghu Jetti	Design creating effective MCQs, February 17&18, Manipal centre for Professional and Personal Development, Manipal.
12.	Evolution of Teaching and Learning in Higher Education	Dr Raghu Jetti	Evolution of Teaching and Learning in Higher Education, May 15 th , Manipal Centre for Professional and Personal Development, Manipal
13.	Basic Techniques of Molecular Biology,	Dr Raghu Jetti	Basic Techniques of Molecular Biology, October 11 th , Departments of KMC and MMMC, Manipal
14.	Cross Sectional Anatomy of Brain and its Applied aspects	Srinivasa Rao S	Organized by Department of Anatomy, MVJ Medical college & Research Hospital, Bangalore, 23rd Sept 2014
15.	Effective electronic communication	Ashwini Aithal P	4th January, 2014 at MCPD, Manipal
16.	Teacher effectiveness	Ashwini Aithal P	25th January, 2014 at MCPD, Manipal.
17.	Basic Techniques of Molecular Biology	Ashwini Aithal P	11th October 2014, held at dept of pharmacology, KMC, Manipal
18.	Basics of Flow Cytometry and Genetic Toxicology	Ashwini Aithal P	School of Life Sciences, Manipal University, Manipal from 11-16 December, 2014
19.	“cognition: cell to system” a two day symposium	Jyothsna patil	21 and 22 Feb 2014
20.	Hands on workshop on basic techniques of molecular biology 11th October 2014	Gayathri S Prabhu	Department of pharmacology, kmc manipal
21.	Awareness programme for faculty	Gayathri S	Workshop conducted by

	and researchers on august 14, 2014	Prabhu	directorate of research
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12. Placement record of the past students and the contribution of the department to aid student placements

After successful completion of Stage I or year 1, students proceed to stage IIA or year 2.

13. Plan of action of the department for the next five years

We are planning to fine tune the teaching program. We are planning to incorporate more of student centered learning approaches.

PHYSIOLOGY

1. Faculty profile - adequacy and competency of faculty

There are nineteen faculty members who meet the requirements for teaching Phase I Stage I MBBS, Phase I Year 1 BDS and First year allied health science programs as per the requirements of the regulatory bodies.

Sl	Name	Qualification	Designation	Teachin Experience (Yrs)
1	Dr. Sharmila Torke	M. Sc, Ph. D	Assoc. Prof. & Head	22
2	Dr. Kiranmai S. Rai	M. Sc, Ph. D	Professor	28
3	Dr. Surekha R Kamath	M. Sc, Ph. D	Professor	18
4	Dr. Barathi S. Subramaniam	MBBS,MD	Professor	13
5	Dr. Reem Rachel Abraham	M. Sc, Ph. D	Professor.	13
6	Dr. Archana P.R.	M. Sc, Ph. D	Selection Grade Lectuer	20
7	Mrs. Liegelin Kavitha	M. Sc	Selection Grade Lectuer	14
8	Mr. James Gonsalves	M. Sc	Selection Grade Lecturer	14
9	Mr. Ganesh Kamath M.	M. Sc	Senior Grade Lecturer	10
10	Dr. Sareesh N.N.	M. Sc	Asst. Prof.	07
11	Dr. Prathap M Baby	M. Sc	Asst. Prof.	09
12	Mr. Shreevatsa Bhat M.	M. Sc	Senior Grade Lecturer	09
13	Mr. Ramesh Babu	M. Sc	Lecturer	09
14	Mr. Jay Prakash	M. Sc	Senior Grade Lecturer	07
15	Ms. Preethi Lavina Concessao	M. Sc	Lecturer	06
16	Ms. Aparna Tripathy	M. Sc	Lecturer	05
17	Dr. Prathibha Maria D'Almeida	M. Sc	Lecturer	05
18	Dr. Asha V.	M. Sc	Lecturer	04
19	Ms. Sujatha Prabhu P.	M. Sc	Lecturer	03

Number of faculty positions sanctioned and filled: 19/19

The department has adequate number of faculty members. Many faculty members have

been rated among the top 5 teachers on several occasions at the institutional level. Students find all the teachers in the department competent and helpful.

2. Student profile –

Entry level competency: Refer to appendix No.1

Socioeconomic status: Generally most students are from middle-income group (detailed information not available)

Language proficiency: English

3. Changes made in the courses or programmes during the past two years and the contribution of the faculty to those changes

The MBBS and BDS programs are conducted in compliance with the requirements of the Malaysian Qualifications Agency (MQA) which is the regulatory body governing the health sciences education in Malaysia. Physiology is taught in Phase I Stage I for MBBS and Phase I Year 1 for BDS students.

MBBS program: The department has designed a course book of specific learning objectives in physiology for medical students. The course book has been updated every six months in the past three years. All faculty members were involved in updating the course book. The laboratory manual has been updated every six months in the past three years. Additionally, clinical updates on relevant topics are being conducted for students in every block.

BDS program: Specific learning objective book has been designed for the BDS course. It is updated every year. Additional laboratory exercises have been added in the practical syllabus in the past two years.

4. Trends in the success and drop out rates of students during the past two years

Batch 28 : Melaka March 2011 Phase I Stage I (held in February 2012)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Physiology	134	23	157	127	19	146	92.99

Batch 29 : Melaka September 2011 Phase I Stage I (held in August 2012)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Physiology	198	11	209	176	8	184	88.04

Batch 30 : Melaka March 2012 Phase I Stage I (held in February 2013)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Physiology	128	23	151	114	17	131	86.75

Batch 31 : Melaka September 2012 Phase I Stage I (held in August 2013)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Physiology	228	14	242	211	9	220	90.90

Batch 32 : Melaka March 2013 Phase I Stage I (held in February 2014)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Physiology	162	21	183	148	16	164	89.61

Batch 33 : Melaka September 2013 Phase I Stage I (held in August 2014)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Physiology	234	15	249	211	13	224	89.95

BDS Batch 3 : Phase I Year 1 (held in July 2012)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Physiology	72	1	73	71	1	72	98.6

BDS Batch 4 : Phase I Year 1 (held in July 2013)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Physiology	66		66	64		64	96.97

BDS Batch 5 : Phase I Year 1 (held in July 2014)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Physiology	78		78	77		77	98.72

5. Learning resources of the departments - library, computers, laboratories and other resources

Faculty members and students have access to the air conditioned Health Sciences Library of the University which has large numbers of latest editions of textbooks, journals, e-journals, internet facility, photocopying and e-books. The institution has common air conditioned library where adequate standard physiology text books are available for the faculty members. Faculty members have access to the library 24 hours. All faculty members are provided with individual laptops with free 24 hour internet access. Also, the faculty members have access to more than 10 computers in the college office with scanner and printer facility and a photo copying machine. There are two air conditioned fully equipped laboratories for the students. Each student is provided with separate work space with microscope. AV aids and charts are also used during laboratory teaching. There is an air conditioned research laboratory for faculty members. The faculty members from the department have developed three audio-visual aids which supplement the teaching. Students can access these AV aids from the central library.

6. Modern teaching methods practiced and use of ICT in teaching – learning

Active learning is emphasized in the curriculum. Self-Directed Learning (SDL), Problem Based Learning (PBL), Case Based Learning (CBL) and audio-visual aids are part of teaching learning methods.

Problem based learning (PBL) sessions: Students are introduced to a conceptually and clinically significant topic, presented in the format of a case scenario. These are designed specially to illustrate the relevance of physiological concepts to medical practice. The students are divided into small groups. Each group has a faculty as facilitator. PBL is conducted in two sessions. In the first session (brain storming session), cases are given and the students work together to analyze the problem and clarify difficult terms, identify key issues, formulate a hypothesis, and list the learning objectives. In the second session (presentation session), which is conducted after a week, students present the specified learning objectives.

Self-Directed learning (SDL) sessions: These are scheduled on specific topics which will not be covered in the lectures. The topics are notified at the commencement of each block/module. Students are required to study the given topic themselves either

independently or collaboratively. During SDL sessions, students are divided into smaller groups each lead by a faculty facilitator. These groups are again subdivided into four or five subgroups. Students present and discuss different topics following 10-15 min of group discussion.

Case Based Learning (CBL): Case based learning uses cases to stimulate interest in a particular area of the curriculum.

Audio-visual aids:

Videos are used to supplement the classroom learning. The mode of teaching has been changed from traditional black board teaching to power point presentations with good use of quality images and animations rich with useful interactive sessions. Quality control of all teaching activities is maintained through student and faculty feedback which helps achieve high standards in our teaching learning activities. Students being the stakeholders have the freedom to give their feedback before and after the implementation of any changes related to teaching learning activities. The department is in the preparatory phase to incorporate ICT in teaching learning activities.

7. Participation of teachers in academic and personal counseling of students

Each faculty member is involved in mentoring a group of students. The responsibilities of a mentor include

- Providing academic and personal counseling to their mentees
- Helping the students to get acclimatized to campus life in Manipal.
- Promote cultural integration.
- Support co-curricular and welfare activities of the students.
- Arrange remedial measures for students who are at the risk of failure
- Guiding the mentored student research projects.

Also remedial activity is conducted for the slow learners where students get a chance for one to one interaction with the faculty to understand complex concepts, clarify doubts and to take tips on learning strategies.

In 2012 and 2013, a group of students participated in the Inter-Medical School Physiology Quiz (IMSPQ) which was held at University of Malaya, Kuala Lumpur, Malaysia.

8. Details of faculty development programmes and teachers who have been benefited during

the past three years

Manipal Centre for Personal and Professional Development (MCPD) of Manipal University conducts Pedagogic and personal effectiveness workshops on a regular basis. All faculty members of the department have attended this workshop. Some faculty members act as resource persons in these workshops. In the last three years, four faculty members of the department have benefited by this workshop. Apart from that, faculty members actively take part in other faculty development programmes conducted by MCPD on a regular basis.

9. Participation / contribution of teachers to the academic activities including teaching , consultancy and research

All faculty members are involved in didactic lectures, small group activities such as SDL, PBL and practical sessions. Two of the faculty members have successfully completed FAIMER fellowship from various regional institutes in India in the last three years. Presently some faculty members serve as the adjunct faculty of MCPD. Many are resource persons for the teaching learning workshops conducted by MCPD. All faculty members are actively involved in research activities. Three faculty members have registered for PhD in the last three years and two have completed Ph.D.

Guest lectures/chairing sessions/awards/resource person in workshop

1. Dr.Reem Rachel Abraham was the recipient of the **‘TEACHING CAREER ENHANCEMENT AWARD’** by the **American Physiological Society** in the year 2014.
2. Dr.Reem Rachel Abraham completed the ‘Archive Fellows Program’ (certificate course) by American Physiological Society in May 2014.
3. Dr.Reem Rachel Abraham completed the ‘Archive Scholars Program’(certificate course) by American Physiological Society in December 2013.
4. Dr.Reem Rachel Abraham received a travel grant from International Union of Physiological Sciences (IUPS) as well as American Physiological Society (APS) to attend the 37th Congress of IUPS at Birmingham, UK in July 2013.
5. Dr.Reem Rachel Abraham was shortlisted for the ‘best oral presentation category’ in the 10th Asia Pacific Medical Education Conference (APMEC) held at Singapore in 2013.
6. Dr.Reem Rachel Abraham was the recipient of *Certificate of Excellence in Teaching* conferred by Melaka Manipal Medical College, Manipal Campus, Manipal University, India in December 2014
7. Dr.Reem Rachel Abraham received first prize for the audiovisual teaching material titled “Hypothyroidism: The Silent Intruder” , in the audiovisual teaching material competition conducted by Melaka Manipal Medical College, Manipal Campus, Manipal University, India, in 2014.
8. Dr.Reem Rachel Abraham won first prize in the poster competition held in conjunction with the National workshop on ‘Assessment in Higher Education’ conducted by Manipal Centre for Professional Development, Manipal University, India in January 2013

9. Dr.Reem Rachel Abraham delivered a guest lecture on “Learning Environment” at Manipal College of Nursing (MCON), Manipal University, India in October 2014.
10. Dr.Reem Rachel Abraham was an invited speaker at the National conference of Indian Speech and Hearing Association held at Manipal in December 2014.
11. Mr. Ganesh Kamath M. was the Resource person at the Faculty development program on “Problem based Learning” held at Manipal college of Nursing, Manipal between 25th -26th July 2013.
12. Mr. Ganesh Kamath M. was the judge at the event“Pharma Quora 2013” organized by the Academic Committee, Student council of the Manipal College of Pharmaceutical Sciences, Manipal held between 23rd -24th November 2013.
13. Mr. Ganesh Kamath M. was a facilitator for the poster presentation session at the National Conference on Health Professions Education (NCHPE 2014) at Mahatma Gandhi Institute of Medical Sciences, Sevagram, Wardha, Maharashtra held between 24-27 September 2014.
14. Mr. Ganesh Kamath M., delivered a lecture on ‘Seven jump approach’ at the pre-conference workshop on Introduction to problem based learning, during the Annual Convention of Indian Speech and Hearing Association (47th ISHACON) conference conducted by the Indian speech and hearing association held at Manipal, from 30-31 December, 2014.
15. Dr. Barathi S Subramaniam presented a paper and chaired a Scientific Session in the International Conference for Academic Disciplines, American University of Rome,Italy.28 to 31 October 2014
16. Dr. Barathi S Subramaniam was the resource person for session on Facilitation and Feedback in PBL during the faculty development programme.25th and 26th July, 2013 ,Manipal College of Nursing, Manipal University
17. Dr. Barathi S Subramaniam was the resource faculty in the “Pedagogic and Personal Effectiveness” workshop for the faculty of MES Dental College, Perinthalmanna, Kerala, 10th, 12th April, 2013
18. Dr. Barathi S Subramaniam was the resource faculty in the “Pedagogic and Personal Effectiveness” workshop for the faculty of Pediodontics, MCOBS, Mangalore 21-22 March, 2013.
19. Dr. Barathi S Subramaniam was the resource faculty in the National workshop on “Assessment in Higher Education” 10-12 January, 2013, MCPD, MU, Manipal.
20. Dr. Barathi S Subramaniam was the resource faculty in the “Pedagogic and Personal Effectiveness” workshop for the faculty of MSAP.4-7 January 2013.
21. Dr. Barathi S Subramaniam was the resource faculty in the “Pedagogic and Personal Effectiveness workshop” 21st and 22nd Dec 2012, KLE University
22. Dr. Prathibha M D Almeida won best poster award on ‘Ethics in laboratory medicine’ organized by SOAHS, Manipal University, April 2013

23. Dr. Sareesh N. N. Received certificate of appreciation from Manipal University for excellence in teaching in the year 2014
24. Dr. Sareesh N. N. functioned as a resource person and delivered a talk on “Physiological aspects of sleep apnea” during a workshop on “Home Respiratory Care” organized by department of Respiratory Therapy, School of Allied Health Sciences, Manipal University, Manipal on 25th Feb, 2014
25. Dr. Sareesh N. N. was invited to deliver a special lecture on Sleep Physiology for Post Graduate students of Respiratory Therapy, at School of Allied Health Sciences (SOAHS), Manipal University, Manipal in the year 2013
26. Dr. Sareesh N. N. was the recipient of T.M.A. Pai Gold Medal for Outstanding Medical Research from Manipal University in the year 2013
27. Dr. Sareesh N. N. was invited as a scientific judge for Indian Science & Engineering Fair (INSEF) (Regional Fair at Mangalore) organized by The Yenepoya School, Mangalore in association with Science Society of India (SSI) in the year 2013
28. Dr. Sareesh N. N. was the recipient of T.M.A. Pai Gold Medal for Outstanding Medical Research from Manipal University in the year 2012
29. Dr. Sareesh N. N. was invited to deliver a special lecture on Sleep Physiology for Post Graduate students of Respiratory Therapy, at School of Allied Health Sciences (SOAHS), Manipal University, Manipal in the year 2012
30. Dr. Sareesh N. N. was invited as a scientific Judge for Indian Science & Engineering Fair (INSEF) Micro Fair at Puttur (Organised by the Science Society of India) in the year 2012
31. Dr. Asha V received best paper award for the oral paper presentation in International conference ‘2013 IEEE international conference on MOOC, Innovation and Technology in Education (IEEE MITE 2013) during Dec 20 – 22, 2013 at Jaipur.
32. Dr. Asha V. won third prize in the oral presentations at South East Asian Regional Association for Medical Education (SEARAME 2014) conference held in Colombo, Sri Lanka from 12th to 15th November, 2014.
33. Dr. Asha V received Foundation for Advancement of International Medical Education and Research (FAIMER) Fellowship from PSG Coimbatore, India in April 2014
34. M.G.Ramesh Babu was invited as a chaiperson for a scientific session in **“International conference on reseach methodology and scientific writing”** which was held at Mahatma Gandhi University, Kottayam, Kerala, on 20-22 Dec-2013.
35. Kiranmai S Rai-Delivered guest lecture on- “A brief review on factors up-regulating dentate neurogenesis and its role in Cognition” at a two day symposium on “Cognition: Cell to System” held at Shirdi Sai Baba Conference Hall, Manipal University, Manipal, Udupi, Karnataka, INDIA, during 21-22 Feb 2014.
36. Kiranmai S Rai- Delivered guest lecture on- “An insight into recent scientific findings that helps improve learning and memory” at Milagres College, Kalianpur, Udupi, Karnataka, INDIA, on 20th March 2014.

37. Kiranmai S Rai- Resource person at Student's symposium on "Cannabis: Revisited" held at MCOPS, Manipal University, Manipal, Udupi, Karnataka, INDIA, on 21st April 2014.
38. Kiranmai S Rai- Chair- person at Manipal Research Colloquium-2014 held at Manipal University, Manipal, Udupi, Karnataka, INDIA, on 11th & 12th April 2014.
39. Kiranmai S Rai-Invited as panel member for discussion on ' Opportunities and Challenges for Women Scientists in India' at 2012 Women in Word Neuroscience Symposium [WWN 2012] sponsored by International Brain Research Organization & Indian Academy of Neurosciences, Bangalore Chapter at NIMHANS Bangalore on Nov 3rd 2012.

Events organized for students

1. Department of Physiology organised a story writing contest on the topic 'Tales of endocrine disorders' in the month of April 2012 for first year medical students
2. A guest lecture on 'Normal and abnormal sinus rhythm' by Dr. Anurag Saincher, Department of emergency medicine, University of British Columbia, Canada was organized for students as well as faculty in January, 2014
3. A guest lecture on 'The EKG in Ischemic heart disease' by Dr. Anurag Saincher, Department of emergency medicine, University of British Columbia, Canada was organized for students as well as faculty in December, 2014

10. Collaboration with other departments/ institutions, at the State, National and International levels, and their outcome during the past two years

1. Dr. Barathi S. Subramaniam collaborated with Optometry department, Manipal College of Allied Health Sciences and guided a mentored student project on "Prevalence of general injuries and ocular defects among chefs in Manipal"
2. Dr. Barathi S. Subramaniam collaborated with Psychiatry department, Kasturba Medical College, Manipal and guided a mentored student project titled " A comparative study on prevalence of internet addiction among undergraduate students and faculty of medicine"
3. Dr. Barathi S. Subramaniam collaborated with Psychiatry department, Kasturba Medical College, Manipal and conducted a workshop on stress management for first year medical students.
4. Dr. Sareesh N. N. collaborated with Department of Electronics and Communication Engineering, MIT for a project entitled "Analysis of emotional reactivity, locomotion and brain biochemical indexes in radio-frequency electromagnetic radiation exposed rats"
5. Dr. Sareesh N. N. collaborated with Department of Biochemistry, KMC Manipal, for a project entitled "Evaluation of serum cortisol levels and place preference behavior in

- rats exposed to 0.9 GHz radiations”
6. Ms. Preethi Concessao Collaborated with the Department of Pharmacology, KMC Manipal, for a project titled “Effect of aqueous extract of *Mucuna pruriens* on arsenic induced toxicity in mice”.
 7. Mr. Jay Prakash Collaborated with the Department of Pharmacology, KMC Manipal, for a project titled “Effect of combination of hydroalcoholic extract of *Aegle marmelos* leaves and *Tamarindus indica* seeds on blood glucose level in streptozocin nicotinamide induced diabetic model”.
 8. M.G.Ramesh Babu collaborated with the Department of Radiology, KMC, Manipal, for a project titled; *Variations in Default Mode Network of Brain among Rajayoga Meditators, Non-Meditators and Patients with Migraine Disorder – An In-depth Voxel Based Morphometric Analytical Study of sMRI and fMRI.*
 9. Kiranmai S Rai-Collaborative Grant with Dr. D. Anandh, School of Regenerative Medicine, Manipal University, Bangalore-560065, Karnataka

11. Priority areas for Research and details of the ongoing projects, important and noteworthy publications of the faculty, during past three years

Priority areas for research in the department: Medical education, neurophysiology, gastroenterology and reproductive physiology.

Ongoing:

Category	Number
Funded research projects	2
Non-funded research projects	2
PhD research projects	7
PG research projects	Nil
UG research projects	0

Last 3 years (2012-2014):

	2012	2013	2014
Completed funded research projects	1	1	Nil
Completed non-funded research projects	6	7	17
Completed PhD research projects	Nil	1	1
Completed PG research projects	Nil	Nil	Nil
Completed UG research projects	5	6	15
Publications	International	4	10
	National	2	8
Books (edited)	1	Nil	Nil
Chapters in books	Nil	Nil	Nil

Conference presentations	International	5	6	6
	National	1	5	8

The detailed outline of projects is given below:

Ongoing funded research projects are:

Sl#	Title	Principal Investigator	Funding agency	Total amount received
1.	Therapeutic Effect of <i>Thymol/Zingerone</i> , Dietary Polyphenols on Radiation Induced Damage in Swiss Albino Mice- A Pilot Study	Dr. Archana.P.R	BRNS	Rs.5,21,500/-
2.	Analysis of neurobehavioral performances, brain morphology and biochemical indexes in radio-frequency electromagnetic radiation exposed rats	Dr. Sareesh N. N.	Indian Council of Medical Research (ICMR)	3,36000.00

Ongoing non-funded research projects are:

Sl	Title	Faculty involved
1.	Haematological profile of patients with chronic kidney disease in predialysis and postdialysis stages and its correlation with biochemical and clinical parameters” – A cross sectional study	Sujatha Prabhu
2.	Unhealthy food habits and psychological symptoms in health science students – a predictor for quality of sleep and academic performance -A prospective study	M.G.Ramesh Babu

Ongoing PhD projects in the department:

Title	Name of the student	Guide
1. Staging Chronic Pancreatitis by M-ANNHEIM classification: Role of Clinical Parameters & Biomarkers	Mr. Ganesh Kamath M.	Dr. C. Ganesh Pai (Guide) Dr. Ullas Kamath (Co-guide)

2. A strategic framework for continuous curriculum development in Physiology through curriculum mapping and implementation of an integrated curriculum.	Dr. Asha V	Dr. Vasudha Devi (Guide) Dr. Raghavendra Rao (Co-guide)
3. The attenuating efficacy of <i>clitoria ternatea</i> aqueous root extract and combined choline with DHA supplementation on deficits in behaviour and neural plasticity: A study on maternal separated rats through aging	Dr. Prathibha M	Dr. Kiranmai S Rai (Guide) Dr. Shobha U Kamath (Co-guide)
4. Effect of prenatal stress and Acetyl cysteine on expression of brain neurotransmitters.	Liegelin Kavitha Bernhardt	Dr. Sampath Madhyastha (Guide) Dr.K.L Bairy (Co-Guide)
5. Evaluation of Goal directed intraoperative fluid therapy in general surgical patients undergoing open major bowel surgery	Ms. Sujatha Prabhu	Dr. Anitha Shenoy (Guide) Dr. Krishna HM (Co-Guide)
6. Variations in Default Mode Network of Brain among Rajayoga Meditators, Non-Meditators and Patients with Migraine Disorder – An In-depth Voxel Based Morphometric Analytical Study of sMRI and fMRI	M.G.Ramesh Babu	Dr. Kiranmai S Rai (Guide) Dr.Rajagopal KV (Co-Guide)
7. Factors predicting achievement in an outcome based educational approach in physiology	James	Dr.K.Ramnarayan (Guide) Dr.K.L Bairy (Co-Guide)

Completed funded research projects:

Year 2012:

SI #	Title	Faculty involved	Funding agency	Total amount
1.	Analysis of the Biological effects of Mobile Phone Radiations: Cytogenetic, Biochemical, and Histological Investigations in Blood and Adrenal Tissues of Rats	Dr. Sareesh N. N.	Manipal University	25000.00

Year 2013:

SI #	Title	Faculty involved	Funding agency	Total amount
1.	Staging Chronic Pancreatitis: Role of Clinical Parameters & Biomarkers	Mr. Ganesh Kamath M.	Indian Council of Medical Research (ICMR)	5,02800.00

Year 2014: Nil

Completed PhD research projects:

Year 2012: Nil

Year 2013

Title	Name of the Students	Guide
1. Radiofrequency electromagnetic radiation exposure induced behavioral changes and their cellular basis in Wistar rats	Dr. Sareesh N. N.	Dr. Satheesha Nayak B.

Year 2014

Title	Name of the Students	Guide
1. Blood volume analysis: A new technique using trivalent chromium – an experimental study	Prathap M Baby	Dr. Pramod Kumar

Completed non-funded research projects:

Year 2012:

Sl No.	Title	Investigator
1.	Predictors of students' academic performance in the preclinical MBBS programme at Melaka Manipal Medical College (Manipal Campus)	Dr. Sareesh N. N.
2.	Prevalence and correlates of susceptibility to motion sickness	Dr. Sareesh N. N.
3.	Perioperative fluid therapy and clinical outcomes in patients undergoing major abdominal surgery – Retrospective study.	Ms. Sujatha Prabhu
4.	Student Awareness towards Quantum Pendant	Ms. Sujatha Prabhu
5.	Sleeping habits among MMMC students (Manipal Campus)	Dr. Asha V.
6.	Impact of teaching how to reflect, on students' reflection - in-learning and study approaches	Dr. Asha V.

Year 2013:

Sl No.	Title	Investigator
1.	Student's preference towards didactic lectures in physiology	Mr. Shreevatsa Bhat M
2.	Does your blood group affect your Intelligence Quotient?	Mr. Shreevatsa Bhat M
3.	Depressive behaviour in early life stressed rats	Dr. Prathibha
4.	Awareness of Chickenpox among the MMMC students	Dr. Prathibha

5.	Health benefits of music	Dr. Prathibha
6.	Food intake and its sleep induced effects on medical students of Melaka Manipal Medical College	Dr. Prathibha
7	A study of the proportion of patients with diabetes mellitus developing heart disease	Dr Sharmila Torke

Year 2014:

Sl No.	Title	Investigator
1.	Use of Humor in Classroom Teaching: Students' Perspectives.	Dr.Reem Rachel Abraham
2.	Assessment of speed of handwriting and certain factors influencing it in undergraduate medical students	Dr. Sareesh N. N.
3.	The effect of mood on colour preferences in young adults	Dr. Sareesh N. N.
4.	Effect of aqueous extract of <i>Mucuna pruriens</i> on arsenic induced toxicity in mice.	Ms. Preethi Concessao
5.	“Effect of combination of hydroalcoholic extract of <i>Aegle marmelos</i> leaves and <i>Tamarindus indica</i> seeds on blood glucose level in streptozocin nicotinamide induced diabetic model”.	Mr. Jay Prakash
6.	A comparative study on textbook learning versus internet learning	Ms. Sujatha Prabhu
7.	Effect of online shopping on the study time	Ms. Sujatha Prabhu
8.	Relationship between physical activity intensity of students and academic performance	Mr. Shreevatsa Bhat M
9.	Level of Physical Activity of Medical Students	Mr. Shreevatsa Bhat M
10.	Factors Affecting Menstrual Cycle	Mr. Shreevatsa Bhat M
11.	Digit ratio as an index of personality and behavioral traits	Liegelin Kavitha
12.	A comparative analysis of skin verses respiratory allergy in medical students	Liegelin Kavitha
13.	Study of the relationship between the VARK learning styles of MMMC medical students, their academic performance and career- associated goals	Dr. Archana PR
14.	Personality type and medical specialty	Dr. Archana PR
15.	Gender differences in effortful thinking	Dr. Asha V

16.	Lifestyle and dysmenorrhea	Dr. Asha V.
17.	A study of the relationship between library usage and academic performance of first year medical students of MMMC, Manipal.	Dr Sharmila Torke

Completed UG projects:

Year 2012:

Sl No.	Title	Investigator
1.	Predictors of students' academic performance in the preclinical MBBS programme at Melaka Manipal Medical College (Manipal Campus)	Dr. Sareesh N. N.
2.	Prevalence and correlates of susceptibility to motion sickness	Dr. Sareesh N. N.
3.	Student Awareness towards Quantum Pendant	Ms. Sujatha Prabhu
4.	Sleeping habits among MMMC students (Manipal Campus)	Dr. Asha V.
5.	Impact of teaching how to reflect, on students' reflection - in-learning and study approaches	Dr. Asha V.

Year 2013:

Sl No.	Title	Investigator
1.	Student's preference towards didactic lectures in physiology	Mr. Shreevatsa Bhat M
2.	Does your blood group affect your Intelligence Quotient?	Mr. Shreevatsa Bhat M
3.	Awareness of Chickenpox among the MMMC students	Dr. Prathibha
4.	Health benefits of music	Dr. Prathibha
5.	Food intake and its sleep induced effects on medical students of Melaka Manipal Medical College	Dr. Prathibha
6	A study of the proportion of patients with diabetes mellitus developing heart disease	Dr Sharmila Torke

Year 2014:

Sl No.	Title	Investigator
1.	Use of Humor in Classroom Teaching: Students' Perspectives.	Dr.Reem Rachel Abraham
2.	Assessment of speed of handwriting and certain factors influencing it in undergraduate medical students	Dr. Sareesh N. N.

3.	The effect of mood on colour preferences in young adults	Dr. Sareesh N. N.
4.	A comparative study on textbook learning versus internet learning	Ms. Sujatha Prabhu
5.	Effect of online shopping on the study time	Ms. Sujatha Prabhu
6.	Relationship between physical activity intensity of students and academic performance	Mr. Shreevatsa Bhat M
7.	Level of Physical Activity of Medical Students	Mr. Shreevatsa Bhat M
8.	Factors Affecting Menstrual Cycle	Mr. Shreevatsa Bhat M
9.	Digit ratio as an index of personality and behavioral traits	Liegelin Kavitha
10.	A comparative analysis of skin verses respiratory allergy in medical students	Liegelin Kavitha
11.	Study of the relationship between the VARK learning styles of MMMC medical students, their academic performance and career- associated goals	Dr. Archana PR
12.	Personality type and medical speciality	Dr. Archana PR
13.	Gender differences in effortful thinking	Dr. Asha V
14.	Lifestyle and dysmenorrhea	Dr. Asha V.
15.	A study of the relationship between library usage and academic performance of first year medical students of MMMC, Manipal.	Dr Sharmila Torke

Publications: 2012

International:

- 1) **Reem Rachel Abraham**, Rashmi Vyas, Rita Sood, Saira Banu, Amol R. Dongre, Chamanhalli Appaji Ashwini, Animesh Jain, Thomas V. Chacko.
Adult learning principles in an online learning faculty development program.
Thrita Journal of Medical Sciences 2012, 1(3): 77-81
- 2) **Sareesh Naduvil Narayanan, Raju Suresh Kumar**, Jaijesh Paval, Vivekananda Kedage, M. Shankaranarayana Bhat, P.Gopalakrishna Bhat. Satheesha Nayak.
Analysis of emotionality and locomotion in radio-frequency electromagnetic radiation exposed rats.
Neurological Sciences 2012(DOI 10.1007/s10072-012-1189-4).
- 3) **Reem Rachel Abraham, Sharmila Torke.**

Learning through story writing.

South-East Asian J Medical Education 2012, 5(2): 66-67

- 4) **Asha Vashe**, Reem Rachel Abraham, Sharmila Torke, Vinod Pallath, Asha Kamath. Student and faculty perspectives on Laboratory Based Learning (LBL) sessions in Physiology, South East Asian Journal of Medical Education 2012;6(2):1-7.

National:

- 1) **Surekha R. Kamath**, Jessica S.D.

Prevalence of myopia among students of Melaka Manipal Medical College at Manipal in India. Indian J Bioinformatics & Biotechnology 2012, 1(1): 19-22.

- 2) **Reem R Abraham**, K. Ramnarayan, Bincy M George, Indira Adiga, Girija R Kumari, Niveditha Suvarna, Vasudha Devi, Shobha KL, Madeeha B Mamot, Wan Nayitah BWJ, Nai'mah BA Haripin. Effects of problem-based learning along with other active learning strategies on short term learning outcomes of students in an Indian medical school. Int J Health & Allied Sciences 2012, 1(2): 98-103

Books edited:

Year 2012:

SI No.	Title	Faculty
1.	Basics of Physiology for Allied Health Science	Dr Reem Rachel Abraham

Publications 2013:

International

1. Sirasanagandla SR, Rooben RK, Rajkumar, **Narayanan SN**, Jetti R. Ascorbic acid ameliorates prenatal nicotine exposure induced impaired spatial memory performances in rats. W Indian Med J DOI:10.7727/wimj.2013.089
2. **Narayanan SN**, Kumar RS, Paval J, Kedage V, Bhat MS, Nayak S, Bhat PG. Analysis of emotionality and locomotion in radio-frequency electromagnetic radiation exposed rats. *Neurol Sci* 2013;34(7):1117-24.
3. Adhikari S, Mukunda N, Satish Kumar M C, Nandi S, **Narayanan SN**, Kagpal V, Avinash H, Chandrashekar B R, Rao RK, Nayak SB. Evaluation of antiepileptic property of Marsilea quadrifolia Linn. in maximal electroshock and pentylenetetrazole induced rat models of epilepsy. *Brain Inj* 2013;27(13-14):1707-14

4. Kumar N, **Narayanan SN**, Nayak SB, B.V. Murlimanju, Suhani S, Mamatha H, Kumar SP. Appendicitis and appendectomy: a retrospective survey in south Indian population. J Surg Acad 2013;3(2):10-13.
5. Ciraj AM, **Reem Rachel Abraham**, Vinod Pallath, K.Ramnarayan, Asha Kamath, Ramachandra Kamath. Exploring attributes of effective teachers - Student perspectives from an Indian medical school. South East Asian Journal of Medical Education 2013; 7(1) : 8-13.
6. **Reem Rachel Abraham, Sharmila Torke, Surekha Kamath**, Mini-test blueprint for OSPE in Physiology. Education in Medicine Journal 2013; 5 (4): e90-e91.
7. **Sharmila Torke, Reem Rachel Abraham**, Ramnarayan K. Faculty perspectives on the multi-component assessment system in Physiology. International Journal of Arts and Education 2013; 3 (1). pp. 1-3.
8. **Subramaniam, Barathi S, Amuthan Arul , Almeida Prathibha MD**. Efficacy of gamat extract in wound healing in albino wistar rats. International Journal of Pharmaceutical Sciences Review and Research, 2013.20 (1): 142-145.
9. Shankara Narayana Bhat M., **Asha V.**, **Vinod V.** Thomas. “A Comprehensive Faculty Development Program.” in 2013 IEEE International Conference in MOOC, Innovation and Technology in Education (MITE), IEEE conference Publications, 2013, Page(s): 280-284.DOI: [10.1109/MITE.2013.6756350](https://doi.org/10.1109/MITE.2013.6756350) .
10. **Asha Vashe**, Vasudha Devi, Raghavendra Rao, **Reem Rachel Abraham**, Vinod Pallath. Link between self-directed learning readiness and academic performance of medical students.2013 IEEE International Conference in MOOC, Innovation and Technology in Education (MITE).

National

- 1) **Subramaniam BS**, Ramaswamy C. Role of gender and waist-hip ratio (WHR) on heart rate variability (HRV) in adolescent age. National Journal of Physiology, Pharmacy & Pharmacology 2013, 3(1): 4-8
- 2) Amuthan A, **Subramaniam BS**. 18 Siddhars and Siddha Medicine: The forgotten Indian Saints and their Medical Knowledge. University News 2013;51:41-44 & 53.
- 3) **Subramaniam BS**, Hande S, Komattil R.Attendance and achievement in medicine: Investigating the impact of attendance policies on academic performance of medical students.AnnMed Health Sci Res 2013; 3:202-5. DOI: 10.4103/2141-9248.113662
- 4) **Subramaniam BS**, Amuthan A Almeida PMD, Arunkumar HD. Efficacy of Gamat Extract in Wound Healing in Albino Wistar Rats.Int. J. Pharm. Sci. Rev. Res., 2013;20(1):142-145
- 5) Baby PM, Kumar P, Kumar R, Jacob SS. Techniques for Estimation of Blood Volume and Their Limitations in Clinical Settings. JSWCR 2013; 6(1):3-13.
- 6) **Ramesh M.G.**, Kiranmai s. Rai. **Region-wise gray matter volume alterations in brain of adolescents with attention deficit hyperactive disorder: a voxel based morphometric analysis.** Indian J Physiol Pharmacol 2013; 57(3): 270–279.
- 7) **Ramesh M.G.**, Sathian B., Sinu E., Kiranmai S. Rai. **Efficacy of rajayoga meditation on positive thinking: an index for self-satisfaction and happiness in life.** Journal of Clinical and Diagnostic Research [serial online] 2013 October [cited: 2013 Oct 31]; 7:2265-2267. Available from http://www.jcdr.net/back_issues.asp?issn=0973-709x&year=2013&month=October&volume=7&issue=10&page=2265-2267&id=3488

- 8) **Surekha Kamath**, Jessica D'Souza. Prevalence of obesity among the medical students: a cross sectional study in a South Indian medical college. *Al Ameen J Med Sci* 2013, 6(1): 93-5

Publications 2014:

International:

- 1) **Prathibha M Dalmeida**, Dilip Moorthy, Shobha U Kamath, **Kiranmai Rai**,
:Comparative
efficacy of Clitoria Ternatea and Choline in maternal separation stress induced alterations
in
hippocampus. *RJPBCS*. 2014
- 2) **Reem Rachel Abraham**, Varsha Hande, Maria Elena Jude – Sharma, Sonia Kaur Wohlrath, Chee Chen Keet, Siyamala Ravi. Use of Humor in Classroom Teaching: Students' Perspectives. *Thrita Journal of Medical Sciences* 2014; 3 (2): e10517.
- 3) **Liegelin Kavitha**. Neuroprotective role of N Acetylcysteine against prenatal stress induced behavioral toxicity. *RJPBCS*. 2014
- 4) Narayanan SN, Jetti R, Gorantla VR, Kumar RS, Nayak S, Bhat PG. Appraisal of the Effect of Brain Impregnation Duration on Neuronal Staining and Morphology in a Modified Golgi-Cox Method. *J Neurosci Methods*. 2014 Jul 23;235C:193-207. doi: 10.1016/j.jneumeth.2014.07.007.
- 5) Narayanan SN, Kumar RS, Kedage V, Nalini. K, Nayak S, Bhat PG. Evaluation of oxidant stress and antioxidant defence in discrete brain regions of rats exposed to 900 MHz radiations. *Bratisl Lek Listy* 2014;115(5):260-266.

National

- 1) James Gonsalves, **Reem Rachel Abraham**, Shyamala Hande, Sharada Rai, K Bairy, K Ramnarayan. Cumulative grade point average as a tangible predictor of academic achievement: A retrospective cross-sectional study. *JETHS* 2014; 1 (2): 7 – 12.
- 2) **Ganesh Kamath M**, Jay Prakash, Dash S, Chowdhury S, Ahmed ZB, Yusof MZ. "Is there an Association between Self-Reported Sleep Duration, Body Mass Index and Waist-Hip Ratio in Young Adults? A Cross-Sectional Pilot Study". *J Clin Diagn Res*. 2014; 8(9):BC05-7.
- 3) Baby PM, Kumar P, Kumar R, Jacob SS, Rawat D, Binu VS, Karun KM. A novel method for blood volume estimation using trivalent chromium in rabbit models. *Indian J Plast Surg*. 2014;47(2):242-8.
- 4) Ganesh Kamath M, **Jay Prakash**, Dash S, Chowdhury S, Ahmed ZB, Yusof MZ. "Is there an Association between Self-Reported Sleep Duration, Body Mass Index and Waist-Hip Ratio in Young Adults? A Cross-Sectional Pilot Study". *J Clin Diagn Res*. 2014; 8(9):BC05-7.
- 5) Prima Jenevive Jyothi D'Souza, Jyothi Chakrabarty, Sulochana B, **James Gonsalves**. Quality of life of head and neck cancer patients receiving cancer specific treatments. *Journal of Krishna Institute of Med Science University* 2013, 2(1): 51-57

- 6) Deb Debasree, Khandelwal Smita, Kansal Nitin, **Gonsalves James**. Depression and Anxiety in Heart Failure Patients in a South Indian Population: A Pilot Study in Asian Journal of Biomedical and Pharmaceutical Sciences, Volume 3, Issue 17, March 2013.
- 7) Khandelwal Smita, Deb Debashree, **Gonsalves James**. Practice of Self-Medication among Medical Students in Manipal; International Research Journal of Pharmaceutical and Applied Sciences; 2013; 3(5):175-179.
- 8) Chatterjee, Pratik Kumar, P. Prasanna Mithra, Rahul Pal, Poulomi Chatterjee, B. Unnikrishnan, N. A. Vinodini, **Aparna Tripathi**, V. B. Suman, Anish Singhal, and Sheila R. Pai. "Epidemiological correlates among women with Polycystic ovary syndrome in South India." IJCRAR 2, no. 9 (2014): 181-186
- 9) Presented a poster titled "Summative Assessment as a Predictor of Academic Achievement in Physiology for First Year Undergraduate Medical Students at Melaka Manipal Medical College, India" at the National Workshop on Assessment in Higher Education organized by the Manipal Centre for Professional and Personal Development from 10th – 12th January, 2013.
- 10) Brijesh Sathian, M G Ramesh Babu, Pradeep Aggarwal, Jayadevan Sreedharan, Elayedath Rajesh, S B Dixit. Influence of food habit on Body Mass Index of Indian and Nepalese male adolescents: a comparative study. Indian Journal of Community Health / Vol 26 / Supp 02 / Dec 2014
- 11) **Surekha R Kamath**. Students' Perception of Effective Teaching Practices in a Medical School. Education in Medicine journal. Vol 6 Issue 3 2014.

The details of conference presentations

2012

International

Sl. #.	Title of the presentation	Name of the faculty	Details of Conference
1.	Effect of lamotrigine on the histological parameters of testis in Wistar rats	Preethi Concessao	Dubai international technologies and pharmaceutical conference in March 2012
2.	Antidiarrheal activity of Curcuma angustifolia powder in rats	Prathibha Maria D'Almeida	Dubai international technologies and pharmaceutical conference between 12-14 March 2012
3.	Evaluation of serum cortisol levels and place preference behavior in rats exposed to 0.9 GHz radiations	Sareesh N.N	South Asian Association of Physiologists – 3 rd Conference in Colombo, Srilanka from 7 th to 10 th November, 2012
4.	Students' perception of good teaching in a medical school	Surekha R Kamath	APJC –PBL – 2012, Shanghai-Conference in Shanghai, China on 26 th & 27 th October, 2012
5.	Item analysis of Multiple True or	Asha V	SEARAME-NCHPE 2012 in

False (MTF) questions in an undergraduate medical program	Coimbatore from 6 th -8 th September, 2012
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National

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1.	Positive Thinking And Socioeconomic Status: A prerequisite For Happiness	M.G.Ramesh Babu	Satellite symposium on “Neurobiology of Cognition”, organized by IAS & NIMHANS, at Bangalore, 1 st & 2 nd November-2012

2013**International**

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1.	“Effects of PBL along with other active learning strategies on short-term learning outcomes of students in an Indian medical school”	Dr. Reem Rachel Abraham	10 th Asia Pacific Medical Education Conference (APMEC) held in Singapore from 16 th to 20 th January, 2013
2.	“Exploring undergraduate medical students’ self-directed learning readiness”	Dr. Reem Rachel Abraham	37 th Congress of IUPS at Birmingham, UK from 21 to 26 th July 2013.
3.	Assessment for Learning: Facing the Change, Changing the Face.	Dr.Barathi S.Subramaniam	6th international SAAHE 2013 Conference, “From Information to Transformation”, held at Durban, South Africa held from 27-29 June 2013.
4.	Behavioral alterations on elevated plus maze following Tab. Mentat	Dr. Prathibha M D Almeida	pharma-Nutrition, April 2013 at Singapore Expo
5.	<u>Link between self-directed learning readiness and academic performance of medical students</u>	Dr. Asha V.	2013 IEEE International Conference in MOOC, Innovation and Technology in Education (MITE) at Jaipur (Dec 2013).
6.	Impact of remedial activity among low achievers	Dr. Surekha R Kamath	6 th international SAAHE Conference held at Durban, South Africa held from 27-29 June 2013.

National

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1.	A novel method for blood volume	Dr.Prathap	The 59 th annual national

	estimation using ⁵¹ Cr (III) in rabbit models		conference of Association of Physiologists and Pharmacologists of India held on November 27 th – 30 th , 2013 NIMHANS Bangalore
2.	Evaluation of Laboratory Based Learning sessions in physiology of first year undergraduate medical program	Dr. Asha V.	APPICON 2013, at NIMHANS, Bangalore during Nov 2013
3.	Faculty perspectives on the multi-component assessment system in physiology	Dr Sharmila Torke	APPICON conference held at NIMHANS, Bangalore between 28 to 30 November, 2013
4.	Efficacy of meditation on positive thinking: an index for self-satisfaction and happiness in life	M.G.Ramesh Babu	XXXI Annual National Conference of Indian Society of Professional Social Work, on 5 th Jan-2013, organized by Department of Psychiatry, Kasturba Medical College, Manipal University, Manipal
5.	“N-acetylcysteine-neuroprotective role against prenatal stress induced changes in learning and memory.	Liegelin Kavitha	59th Annual National Conference of APPI (APPICON 2013) at NIMHANS, Bangalore, held on 28th to 30th November 2013.

2014

International

Sl.	Title of the presentation	Name of the faculty	Details of Conference
1.	“Maternal separation stress induced alterations in rat hippocampus	Dr. Prathibha	Pharmacology and Physiology International Scientific Congress Kuala Lumpur, Malaysia between 22-24 August 2014
2.	“Use of humor in classroom teaching: Students’ perspectives”	Dr. Reem Rachel Abraham	Association of Medical Education in Europe (AMEE) conference held from 30 th August to 3 rd September 2014 at Milan, Italy.

3.	A Description Of Stress Management Programme For First Year Medical Students At Melaka Manipal Medical College-Manipal Campus	Dr.Barathi S.Subramaniam	Attended the International Conference for Academic Disciplines, American University of Rome,Italy.28 to 31 October 2014
4.	Relationship between self-directed learning readiness and academic performance of undergraduate medical students	Dr. Asha V	South East Asian Regional Association for Medical Education (SEARAME 2014) conference held in Colombo, Sri Lanka from 12 th to 15 th November, 2014
5.	Perioperative fluid therapy and clinical outcomes in patients undergoing major abdominal surgery	Ms. Sujatha Prabhu	Pharmacology and Physiology International Scientific Congress Kuala Lumpur, Malaysia between 22-24 August 2014
6.	Pulmonary function studies among cashew factory workers in South India	Dr. Surekha R Kamath	International Conference on occupational Medicine held at Kuala Lumpur, Malaysia in May 2014.

National

Sl. #	Title of the presentation	Name of the faculty	Details of Conference
1.	Progression of pancreatitis: A follow up study using the M-ANNHEIM classification	Mr. Ganesh Kamath M.	5th International Conference of Asia Oceanic Pancreas Association (AOPA) held at New Delhi, India from April 18th to 20th 2014.
2.	Smoking alters the rate pressure product in young adults	Mr. Ganesh Kamath M.	60th Annual Conference of Association of Physiologists and Pharmacologists of India (APPICON -2014) held at Puri, Odisha, India between 19th to 22nd November 2014
3.	Utility of 51Cr (III) for repetitive blood volume estimation in rabbits	Dr.Prathap	60th Annual Conference of Physiologist and Pharmacologist of India held on 19 - 22 November, 2014 Puri, Odisha
4.	“Chronic and repeated radiofrequency electromagnetic	Sareesh N.N	Association of Physiologists

	radiation exposure affects basolateral amygdala morphology and induces impulsiveness in rats”		and Pharmacologists of India conference organized by Department of Physiology, SCB Medical College and Hospital, Cuttack, Odisha on 20-22nd Nov, 2014
5.	Insight into dietary supplementation among Malaysian medical students	Preethi Concessao	Association of Physiologists and Pharmacologists of India conference organized by Department of Physiology, SCB Medical College and Hospital, Cuttack, Odisha on 20-22nd Nov, 2014
6.	Premenstrual syndrome- A cross sectional study	Aparna Tripathy	Association of Physiologists and Pharmacologists of India conference organized by Department of Physiology, SCB Medical College and Hospital, Cuttack, Odisha on 20-22nd Nov, 2014
7.	“Effect of Combination of Crude Extract of <i>Aegle marmelos</i> Leaves and <i>Tamarindus indica</i> Seeds on Sugar level in Streptozocin Induced Diabetic Rats”	Jay Prakash	Association of Physiologists and Pharmacologists of India conference organized by Department of Physiology, SCB Medical College and Hospital, Cuttack, Odisha on 20-22nd Nov, 2014
8.	N-Acetylcysteine for gestational stress-induced behavioral toxicity.	Liegelin Kavitha	Indian Academy of Neuroscience at NIMHANS, Bangalore, held on 28th to 30th November 2013

12. Placement record of the past students and the contribution of the department to aid student placements

After successful completion of Stage I or year 1, students proceed to stage IIA or year 2

13. Plan of action of the department for the next five years

1. The department was successful in bringing out a course book titled ‘Educational objectives for Physiology’ which has inspired external examiners from other institutions to recommend the same in their institutions. The department’s next plan of action is to bring out similar course book for allied health course.
2. Faculty members in the department feel the need of a text book in Physiology aligned with the educational objectives. The department is working towards bringing out a text book of physiology.
3. The department is heading towards establishing a neurophysiology research lab funded by the research grants and the university.
4. In view of helping the academically poor performers, the department is conducting remedial classes on Saturday afternoons, where students get a chance for one to one interaction with the faculty to understand complex concepts, clarify doubts and to take tips on learning strategies.
5. Three faculty members in the department are eligible for PhD guideship. This will enable many students to pursue PhD under their guidance.
6. The department is planning to develop videos of all laboratory experiments.
7. The department organized a workshop on ‘Digitized lab-based teaching in Human Physiology’ for faculty from constituent colleges of Manipal University as well as medical colleges in and around Mangalore in October 2014. Henceforth we plan to conduct similar workshops every year.

BIOCHEMISTRY

1. Faculty profile - adequacy and competency of faculty

There are fifteen teaching faculty members who meet the requirements for teaching Phase I Stage I MBBS, Phase I Year 1 BDS and First year allied health science programs as per the requirements of the regulatory bodies

Sl No.	Name	Qualification	Designation	Teaching experience (Yrs)
1	Dr. Chandrika D. Nayak	M. Sc, Ph. D	Professor & Head	17
2	Dr. Ullas Kamath	MBBS, MD	Professor & Dean	24
3	Dr. Madhukar Mallya	M. Sc, Ph. D	Professor	23
4	Dr. Maya Roche	M. Sc, Ph. D	Professor	18
5	Dr. Guruprasad Rao (on leave)	M. Sc, Ph. D	Professor	19
6	Dr. Somashekar Shetty B	M. Sc, Ph. D	Professor	19
7	Dr. Indira Adiga K	M. Sc, Ph. D	Professor	8
8	Dr. Rajashekar Rao Barkur	M. Sc, Ph. D	Associate Professor	14
9	Mr. B. Vivekananda Shenoy	M. Sc	Selection Grade Lecturer	12
10	Ms. Takkella Nagamma	M. Sc	Senior Grade Lecturer	11
11	Mr. Babi Dutta	M. Sc	Lecturer	6
12	Mr. Sambit Dash	M. Sc	Lecturer	6
13	Mr. Bijay Kumar Barik	M. Sc	Lecturer	5
14	Ms. Akshatha C. Pai	M. Sc	Lecturer	3
15	Mr. Abhishek Chaturvedi	M. Sc	Lecturer	2

Number of faculty positions sanctioned and filled: 15/15

The department has adequate number of faculty members. Four faculty members have received the good teacher award, four faculty have received audiovisual awards and many faculty members have been rated among the top 5 teachers on several occasions at the institutional level. Students find all the teachers in the department competent and helpful.

2. Student profile –

Entry level competency: Refer to appendix No.1

Socioeconomic status: Generally most students are from middle-income group (detailed information not available)

Language proficiency: English

3. Changes made in the courses or programmes during the past two years and the contribution of the faculty to those changes

The MBBS and BDS programs are conducted in compliance with the requirements of the Malaysian Qualifications Agency (MQA) which is the regulatory body governing the health sciences education in Malaysia. Biochemistry is taught in Phase I Stage I for MBBS and Phase I Year 1 for BDS students.

- A temporal integration approach has been designed for delivering a system wise teaching of Anatomy, Physiology and Biochemistry subjects: Department has appointed block and integration committee coordinators for the smooth conduct of this.
- An integrated PBL is now a part of the MBBS curriculum: Department has PBL coordinators to carry out the work with cooperation of block teachers and block coordinators
- Visits to hospital clinical labs has been inculcated into the practical component for MBBS students: Faculty taken turns to escort and orient students during these sessions
- Clinical updates and wrap up sessions by clinicians are organized on a regular basis: Block teachers and coordinators with consultation from HOD carry out these functions
- Case based learning sessions are more streamlined and done on a regular basis for every block: Teachers are made to discuss cases relevant to their topics especially those mentioned and described in the syllabus copy
- Handouts given during SDL sessions are revised on a timely basis.
- The syllabus (theory & practicals) has been updated in keeping with current trends in clinical Biochemistry
- Some of the learning objectives were redistributed across the four blocks to ensure a more equitable spread
- Learning objectives for BDS are framed in an outcome-based format
- New case scenarios were designed for the problem-based learning (PBL) activities
- New practical specimens, photographs, case scenarios and exercises were introduced in keeping with the needs of the present day medical students
- The Biochemistry practical journal was redesigned by including new photographs to encompass a wider range of clinical disorders
- The objective-structured practical examination (OSPE) was restructured by making it more focused on assessing the practical learning objectives
- Integrated PBL sessions were introduced for BDS

- Teaching resources for faculty reference are made accessible to maintain uniformity and consistency in content delivery
- Special mentorship program is in place to give extra guidance to academically weak students of both regular and refresher batches of MBBS: Each faculty is assigned one to four candidates and is asked to monitor closely on a regular basis about their performance

4. Trends in the success and drop out rates of students during the past two years

Batch 30: Melaka March 2012 Phase I Stage I (held in February 2013)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Biochemistry	128	28	156	96	19	115	74%

Batch 31: Melaka September 2012 Phase I Stage I (held in August 2013)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Biochemistry	228	34	262	213	30	243	93%

Batch 32: Melaka March 2013 Phase I Stage I (held in February 2014)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Biochemistry	162	18	180	133	12	145	81%

Batch 33: Melaka September 2013 Phase I Stage I (held in August 2014)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Biochemistry	234	32	266	199	27	226	85%

BDS Batch 3 : Phase I Year 1 (held in July 2012)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Biochemistry	72	1	73	71		71	97.26

BDS Batch 4 : Phase I Year 1 (held in July 2013)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Biochemistry	67			65			97

BDS Batch 5 : Phase I Year 1 (held in July 2014)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Biochemistry	79			78			98.7

Number of dropouts in the last two years: MBBS – 19 students

BDS – 2 students

5. Learning resources of the departments - library, computers, laboratories and other resources

- Faculty members and students have access to the air conditioned Health Sciences Library of the University which has large numbers of latest editions of textbooks, journals, internet facility, photocopying and e-books. Faculty can access the MMMC staff library which has sufficient copies of latest editions of textbooks in Biochemistry
- The faculty members have access to the academic section of MMMC which has common computer terminals with internet connection, printers, scanner and photocopying machine
- There are two air conditioned fully equipped laboratories for the students. Students perform important experiments individually with sufficient supply of reagents and instruments.
- Faculty members make use of research facilities such as incubator, cooling centrifuge, pH meter, spectrophotometer, electronic balance, ELISA reader, fluorimeter and PCR machine in the multipurpose laboratory
- Faculty are given individual laptops with free internet access in their workstations
- Faculty members are innovative and contribute audiovisual teaching aids regularly to the archives

6. Modern teaching methods practiced and use of ICT in teaching – learning

Active learning is emphasized in the curriculum. Self-Directed Learning (SDL), Problem Based Learning (PBL), Case Based Learning (CBL) and audio-visual aids are part of teaching learning methods.

PBL: Students are introduced to a conceptually and clinically significant topic, presented in the format of a case scenario. These are designed specially to illustrate the relevance of biochemical concepts to medical practice. The students are divided into small groups. Each group has a faculty as facilitator. PBL is conducted in two sessions. In the first session (brain storming session), cases are given and the students work together to analyze the problem and clarify difficult terms, identify key issues, formulate a hypothesis, and list the learning objectives. In the second session (presentation session), which is conducted after a week, students present the specified learning objectives.

The mode of teaching makes use of both traditional blackboard teaching and modern techniques such as power point presentations with good use of quality images, animations and videos rich with useful interactive sessions. Quality control of all teaching activities is maintained through student and faculty feedback which helps achieve high standards in our teaching learning activities. Students being the stakeholders have the freedom to give their feedback before and after the implementation of any changes related to teaching learning activities. Students can access audiovisual learning materials prepared by faculty members in the health sciences library of the university.

The practical sessions focus on aspects of Biochemistry applicable to clinical and to day to day life situations. Students are exposed to the use of glucometer for quick estimation of blood glucose and dipstick tests for urine analysis. Photographs of nutrient deficiency disorders, hormonal imbalances and genetic disorders are displayed along with relevant notes to reinforce the theory knowledge in practical sessions.

7. Participation of teachers in academic and personal counseling of students

Teachers are involved in mentoring a group of students. The responsibilities of a mentor include

- Providing academic and personal counseling to their mentees
- Helping the students to get acclimatized to campus life in Manipal.
- Promote cultural integration.
- Support co-curricular and welfare activities of the students.
- Arrange remedial measures for students who are at the risk of failure

- Guiding the mentored student research projects.

8. Details of faculty development programmes and teachers who have been benefited during the past two years

- Manipal Centre for Personal and Professional Development (MCPD) of Manipal University conducts Pedagogic and personal effectiveness workshops on a regular basis. All faculty members of the department have attended this workshop. In the last two years, four faculty members of the department have benefited by this workshop. One faculty member serves as a resource person in sessions conducted by MCPD
- Faculty members have also attended workshops on PBL facilitation skills, student counselling skills and mentoring skills
- Faculty have attended certificate course on Epidemiology, Biostatistics and Research Methodology organized by Department of Statistics, Manipal University
- Faculty have attended CMEs conducted in association with department of Biochemistry, KMC, Manipal in the past two years
- One of our faculty have completed a three month graduate certificate course in Public Policy with distinction from The Takshashila Institution, Bangalore
- One of our faculty completed a certificate course on nanoscience & technology

9. Participation / contribution of teachers to the academic activities including teaching , consultancy and research

- All teachers are contributing to teaching of MBBS, BDS and allied health students. Teaching activities include lectures, problem based learning, practicals and self- directed learning.
- Consultancy: Eight faculty members are providing diagnostic consultancy services in the Clinical Biochemistry laboratory of KMC, Manipal
- Research:
 - Faculty members are involved in conducting research, presenting their findings in conferences and publishing in journals, and guiding students in their undergraduate and PhD projects.
 - They also moderate post graduate students of KMC, Manipal for their journal club presentations and seminars.
 - Six faculty members are recognized as PhD guides by Manipal University.
 - Four of our faculty are amidst their pilot studies and planning to register for PhD within a span of two years.

Chairing sessions/guest faculty/awards

1. Dr. Ullas Kamath chaired a session in the workshop of the Society of Biological Chemists in Manipal in April 2012.
2. Dr. Ullas Kamath chaired a session at the South Regional Conference of the Association of Clinical Biochemists of India at Mangalore, India, in 2014
3. Dr Ullas Kamath received the Distinguished Alumni Award as the first PG student in Department of Biochemistry, KMC, Mangalore, 2014
4. Dr. Maya Roche chaired a session at the South Regional Conference of the Association of Clinical Biochemists of India at Mangalore, India, in 2014
5. Dr. Guruprasad Rao delivered an invited talk on ‘Emerging biomarkers in diabetic complications’ in ‘Explore 2014’, Clinical Laboratory Science, an update, organized by Manipal College of Allied health Sciences, Manipal onn April 16, 2014
6. Dr Somshekhar Shetty: Member of Judges panel- For the oral presentation competition of research work of Ayurveda students in VPSV Ayurveda College, Kottakkal, Kerala on 27th & 28th April 2012
7. Dr Somshekhar Shetty: Invited as judge for the poster session in ACBICON 2014 organized at AIIMS, Jodhpur, 10th to 13th December 2014

Editorial Board/ National Committee/ International Committee members:

1. Dr Chandrika D Nayak: Member, national Advisory Board of the Editorial Committee of International Journal of Neurology and Neurosurgery.

CME/symposia/seminars organized

1. CME on Biochemistry of molecular markers in cancer – Manipal Biochemistry Update, March 30th, 2012
2. International Indo-Malaysian CME on Laboratory Medicine, February 20th, 2013
3. ICMR sponsored national CME and Workshop on “Inherited Metabolic Disorders”, 30th September and 1st October, 2013
4. Awareness Program on Clinical Chemistry Trainee Council, February 1st, 2013
5. South regional ACBI Conference, at KMC Mangalore, May 2014
6. Cheminova, 4th Manipal Biochemistry Update, December 2014 at Interact Ga, Manipal

10. Collaboration with other departments/ institutions, at the State, National and International levels, and their outcome during the past two years

1. Madhukar Mallya. Absorption Spectroscopy for the estimation of glycated Haemoglobin (HbA_{1c}) for the Diagnosis and Management of Diabetes Mellitus-A pilot study
2. Madhukar Mallya. Development of direct Spectroscopic methods for the estimation of serum beta HCG & Progesterone for the diagnostic purposes
3. Dr Maya Roche and Akshatha Pai : Correlation of beta hCG, PAPP-A and proteinase inhibitory activities at 11-14 weeks with second trimester fetal growth parameters in collaboration with Dept of OBG, Kasturba Hospital, Manipal
4. Sambit Dash: Project on Guillain Barre Syndrome in collaboration with Department of Biochemistry and Department of Neurology, KMC, Manipal
5. Bijay Kumar Barik. Molecular modeling using Turbomole software and optimization of the geometry, vibrational spectroscopic studies of anthraquinone derivatives- A preliminary study in collaboration with Dept. of Atomic and Molecular physics, Manipal University
6. Abhishek Chaturvedi. Serum MDA and protein thiols in patients with bipolar disorder in collaboration with A.V. Baliga Hospital, Udupi
7. Abhishek Chaturvedi. Oxidative stress in Schizophrenia patients with and without diabetes mellitus in collaboration with A.V. Baliga Hospital, Udupi
8. Babi Dutta. Estimation of nitric oxide, beta carotene and total oxidant status in inflammatory gum disease in collaboration with MCOCS, Manipal and KMC, Manipal
9. Vivek Shenoy. Synthesis of chalcones, its properties and its characterization using IR and NMR techniques.

10. Priority areas for Research and details of the ongoing projects, important and noteworthy publications of the faculty, during past two years

The department of Biochemistry has six recognized PhD guides

Priority Areas of Research:

- Plasma proteinase inhibitors
- Active learning strategies for the class room

- Guillain Barre Syndrome
- Molecular Modeling and spectroscopic studies of anthraquinone derivatives
- Matrix metalloproteinases: stimulators and inhibitors
- Antioxidants and oxidative stress in type 2 diabetes mellitus patients
- Herbal therapy for hepatoprotection in alcoholism

Ongoing research projects:

Category	Number
Funded research projects	1
Non-funded research projects	5
PhD research projects	1
PG research projects	2
UG research projects	

Projects in last 3 years (2012-2014):

		2012	2013	2014
Completed funded research projects		-	-	-
Completed non-funded research projects		1	2	3
Completed PhD research projects		1	-	-
Completed PG research projects		2	2	-
Completed UG research projects		8	6	12
Publications	International	5	8	5
	National	3	2	4
Books		1	2	1
Chapters in books		-	-	-
Conference presentations	International	3	8	2
	National	1	4	2

Ongoing PhD projects in the department:

No.	Title	Name of the student	Guide
1	Anti ganglioside antibodies and serum inflammatory markers in patients with Guillain Barre Syndrome	Mr. Sambit Dash	Dr. Ullas Kamath (Co-guide)

Completed PhD projects in the department:

No.	Title	Name of the student	Guide
1	Effect of lead induced oxidative stress on prenatal and postnatal rat brain	Dr.Rajashekar Rao Barkur	Dr.KL Bairy Professor of

development-a biochemical, morphological and behavioural study		Pharmacology, KMC,manipal
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Publications in the last three years

2012

1. Chandrika D. Nayak, Madhava Kamath, Dinesh M. Nayak, Nagesha KM. "Status of pituitary-thyroid axis of newborns and its relationship with anthropometry and maternal factors at birth". International Journal of Pharmaceutical and Bio Sciences; Oct 2012; 3(4):B 51-57.
2. Dinesh M. Nayak, Chandrika D. Nayak, Bharat Raj. "Implementing office pediatrics in undergraduate medical curriculum: An ideal opportunity for learning pediatric practices in a realistic picture". International journal of A J Institute of Medical Sciences, Nov 2012; Vol 1, No 2, pp 152-155.
3. Abraham, Reem R and Ramnarayan, K and George, Bincy M and Adiga, Indira and Kumari, Girija R and Suvarna, Niveditha and Devi, Vasudha and Lakshminarayana, Shobha Karabylyu and Mamot, Madeeha B and Jamil, Wan Nasyitah BW and Haripin, Nai'mah BA Effects of problem-based learning along with other active learning strategies on short-term learning outcomes of students in an Indian medical school. (2012) International Journal of Health & Allied Sciences , 1 (2). pp. 98-103
4. Barkur RR, Rao MS and Bairy LK. Impairment in Spatial Memory in adult Rats following developmental Low Lead Exposure. International Journal of Pharma Sciences and Research (IJPSR). Vol 3 No 11 Nov 2012, 512-522.
5. Karim S, Pratibha PK, Kamath S, Bhat GS, Kamath U, Dutta Babi, *et al.* Superoxide dismutase enzyme and thiol antioxidants in gingival crevicular fluid and saliva. Dental Research Journal, May 2012, Vol 9 Issue 3: 266-272
6. Mrinmoy Chakrabarty, Priyanka Bhat, Sweta Kumari, Avin D'Souza, K. L. Bairy, Abhishek Chaturvedi, Archana Natarajan, Mohandas Rao K. G., Shobha Kamath. Cortico-hippocampal salvage in chronic aluminium induced neurodegeneration by *Celastrus paniculatus* seed oil: Neurobehavioural, biochemical, histological study. J Pharmacol Pharmacother 2012;3:161-71.
7. Vijayalakshmi, Adiga S, Bhat P, Chaturvedi A, Bairy KL, Kamath S. Evaluation of the effect of *Ferula asafoetida* Linn. gum extract on learning and memory in Wistar rats. Indian J Pharmacol. 2012 Jan;44(1):82-7
8. Nagamma T, Bhutia R D, Pokharel D R, Yadav S, Baxi J. Influence of alcohol consumption on oxidative stress and antioxidant status in cancer patients- case control study from western Nepal. Asian Pacific J cancer Pre, 2012, 13, 3513-3517.

2013

1. Chandrika D. Nayak, Vaibhav Agarwal, Dinesh M Nayak. Correlation of cord blood heterogeneity in neonates with their anthropometry at birth. Indian Journal of Clinical Biochemistry; April 2013, Volume 28, [Issue 2](#), pp 152-157.

2. Indira Adiga K, Chandrika Dinesh Nayak, Surekha Bhat, Asha Kamath. Is academic performance of medical students dictated by their gender and ethnicity? South East Asian Journal of Medical Education June 2013; Vol 7 (1):95.
3. Madhukar Mallya, Revathi Shenoy, Gopalakrishna K, Monalisa, Jeesha, Sudha D Kamath. Absorption Spectroscopy for the estimation of glycated Haemoglobin (HbA_{1c}) for the Diagnosis and Management of Diabetes Mellitus-A pilot study, , Photomedicine and Laser Surgery, Volume 31, Number 5, 2013. Pp. 219-224.
4. Maya Roche. “Immunoreactive α 2-macroglobulin tubal pregnancy: A possible tool for early diagnosis” Published in International Journal of the AJ Institute of Medical Sciences 2 (2013)13-16
5. Barkur RR, Govindan S, Kamath A. Correlation between academic achievement goal orientation and the performance of malaysian students in an indian medical school. Educ health 2013;26:98-102.
6. Alok kumar, E Archana, Akshatha pai, Gayathri Nayak, Revathi P Shenoy, Anjali Rao. Serum mineral status and climacteric symptoms in perimenopausal women before and after yoga therapy, an ongoing study. Journal of Mid-Life Health 2013;4(4):225-229
7. Devaramane Virupaksha, Vanishree Bambrana, Nagalakshmi Yaparthy, Natarajan Archana, Vivek Sharma, Abhishek Chaturvedi, Jeevan K Shetty, Panambur V Bhandary, Mungli Prakash, Veena Nayak. Oxidative stress in Schizophrenia patients with and without diabetes mellitus. Asian Journal of Biomedical and Pharmaceutical Sciences, 2013, 3: (18), 29-32.
8. B Somashekar Shetty and Sudhakar Pemmineti. ‘Evaluation of *Centella Asiatica* Leaf Extract for Wound Healing in Sterptozotocin Induced Diabetic Rats’ in Research Journal of Pharmaceutical, Biological and Chemical Sciences, 2013 4(2) April – June 2013, 1082- 1090.
9. B Somashekar Shetty. Wound Healing and Indigenous Drugs: Role as Antioxidants’: A Review, in Research and Reviews: Journal of Medical and Health Sciences, 2(2), April-June 2013.
10. Guruprasad Rao. Faculty perception of PBL curriculum in Melaka Manipal Medical College, Manipal, India. International Journal of Applied Biology and Pharmaceutical Technology 2013, 4(2): 105 – 111
11. Guruprasad Rao, Surekha Bhat, S. Gurumadhva Rao, P. Gopalakrishna Bhat. Effect of Treatment with ‘Nishamalaki’ Powder on Glycemic Control and Markers of erythrocyte Oxidative Stress in Diabetic Rats Compared to Troglitazone. Int. J. Pharm. Sci. Rev. Res., Mar – Apr 2013, 19(2): 127-134
12. Guruprasad Rao, Surekha Bhat, S. Gurumadhva Rao, P. Gopalakrishna Bhat. Antidiabetic and Antioxidant Efficacy of a Powdered Mixture of Curcuma Longa and Emblica Officinalis in Diabetic Rats In Comparison With Glyburide. WebmedCentral Diabetes 2013;4(2):WMC004065

2014

1. Chandrika D Nayak, Surekha Bhat, Indira Adiga. Analyzing the prospectives of innovative multiple true false questions in assessment of biochemistry for

- medical undergraduates. *Int J Appl Bio Pharm Tech*; Oct-Dec 2014; Vol 5 (4):211-214
2. Maya R, Reem RR, Akshatha GN. "An Odyssey through Medical Students' Life- An International Experience". Published in *National Journal of Laboratory Medicine*, 2014, Jun, Vol 3(2):6
 3. Barkur RR, Bairy LK. Histological study on hippocampus, amygdala and cerebellum following low lead exposure during prenatal and postnatal brain development in rats. (2014) *Toxicol Ind Health*. doi:10.1177/0748233714545624
 4. M Ganesh Kamath, Jay Prakash, Sambit Dash, Sudipta Chowdhury, Zuhilmi bin Ahmed, Muhammad Zaim Zharif bin Mohd Yusof. "Is there an Association Between Self-Reported Sleep Duration, Body Mass Index and Waist-Hip Ratio in Young Adults? A Cross-Sectional Pilot Study". *Journal of Clinical and Diagnostic Research*, September 2014 / 8 (9) BC 05 – BC 07
 5. 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.
 6. Nagamma T, Ahmed S, Pai A, Mohan S, Chaturvedi A, Singh PP. Evaluation of oxidative stress and antioxidant activity in pre and post hemodialysis in chronic renal failure patients from Western region of Nepal. *Bangladesh Journal of Medical Science* 2014; 13(1):40-44
 7. Nagamma T, Baxi J, Singh PP. Status of oxidative stress and antioxidant levels in smokers with breast cancer from Western Nepal. *Asian Pacific J cancer Pre*, 2014, 15 (21), 9467-9470
 8. B. Somashekar Shetty and Sudhakar Pemmineti. Evaluation of Antidepressant activity of Gallic acid in mice' in *Research Journal of Pharmaceutical, Biological and Chemical Sciences*, 2014 5(2) March –April 2014
 9. Akshata SJ, Shobha KL, Vivekananda Shenoy. Effect of 1-(4-bromophenyl)-3-(4-hydroxyphenyl) prop-2-en-1-one on clinical isolates of MDR bacteria. *Research journal of Pharmaceutical, Biological and Chemical Sciences*. 2014-15; 466-470.

Books published

Sl No.	Title	Faculty	Publisher
1	'MCQs in Biochemistry with explanatory answers' First Edition (2012)	Mrs. Nagamma	Jaypee Publishers, New Delhi
2	Biochemistry -1 (BLT-301A) (2013)	Dr Madhukar Mallya H	SMU-Directorate of Distance Education
3	Basics of Biochemistry (BLT 201) (2013)	Dr Madhukar Mallya H	SMU-Directorate of Distance Education
4	Biochemistry and Biophysics (MBT	Dr Madhukar	SMU-Directorate of

102) (2014)	Mallya H	Distance Education
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The details of our international conference presentations have been listed below:

2012

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1	Effect Of Low Lead Exposure During Foetal And Early Postnatal Life On Pre-Weaning Behavioral Tests And Post-Weaning Behavioral Test With A Follow Up In Rats	Dr.Rajashekar Rao Barkur	The 8th Congress of Toxicology in Developing Countries” in Bangkok, Thailand from Sept 10-13, 2012
2	Urinary peptides as early marker of renal dysfunction	Sambit Dash	1 st World Congress on Healthy Ageing 2012, Kuala Lumpur, Malaysia
3	Urinary protein thiols in different grades of Proteinuria	Mr. Bijay Kumar Barik	1 st world congress on healthy ageing, Kuala Lumpur, Malaysia, 19 th - 22 nd March, 2012

2013

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1	Exploring the potential of innovative multiple true false questions in assessment of Biochemistry for medical undergraduates	Dr Chandrika D Nayak	International conference on Medical Education 2013, Balaclava, Mauritius, October 4-6 th 2013.
2	“Students and faculty’s perspectives on OSPE in biochemistry”-	Dr.Maya Roche	10th Asia Pacific Medical Education Conference (APMEC) from 16th to 20th January 2013 at the National University of Singapore, Singapore.
3	Distraction factors that affect the academic performance of students of MMMC, at Manipal, India”-	Dr.Maya Roche	ICME . October 4-6, 2013, Balaclava, Mauritius
4	Making Molecular Biology Simple With Multiple Audiovisual Aids	Dr Indira Adiga K	‘International Conference on Medical Education 2013’ held in Mauritius between 4 th to 6 th october, 2013
5	Histological Study On Hippocampus Following Low Lead Exposure	Dr.Rajashekar Rao Barkur	The joint ISEE, ISES and ISIAQ

	During Prenatal And Postnatal Brain Development In Rats.		Environmental Health Conference 2013 in Basel,Switzerland (19-23 August 2013)
6	Oral presentation - Evaluation of oxidative stress and antioxidant activity in pre and post hemodialysis in chronic renal failure patients from Western region of Nepal	Mr. Abhishek Chaturvedi	International conference in Medicine and Public Health (ICMPH 2013), Bangkok,Thailand) (June 24-28)
7	Academic and non-academic challenges faced by MBBS students of Melaka Manipal Medical College (Manipal Campus) in the 5th semester clinical training	Dr Guruprasad Rao	International Conference on Medical Education (ICME 2013) held at Intercontinental Mauritius Resort, Mauritius from 4th to 6th October, 2013.
8	Students' perception of change in the viva voce pattern in Melaka Manipal Medical College (MMMC), Manipal Campus, India	Dr Guruprasad Rao	8 th International Medical Education Conference at International Medical University, Kuala Lumpur, Malaysia held from 13 th -15 th March 2013

2014

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1	Poster presentation - Association of oxidative stress and altered biochemical parameters in perimenopausal women receiving yoga therapy in the coastal region of Karnataka, India	Mr. Abhishek Chaturvedi	IFCC WORLD LAB 2014, Istanbul, Turkey) (June 24-28)
2	Status of oxidative stress and antioxidant levels in smokers with breast cancer	T. Nagamma	International conference on food, biological and medical sciences (FBMS-2014), Bangkok, Thailand

11. Placement record of the past students and the contribution of the department to aid student placements

After successful completion of Stage I or year 1, students proceed to stage IIA or year

2

12. Plan of action of the department for the next five years

- To motivate the new faculty to register for Ph.D
- To make an effort towards obtaining grants from external funding agencies
- To encourage faculty to strive for external fellowships
- To elevate the standards of teaching by counseling faculty
- We are planning to incorporate more audio-visual aids such as animations, videos and audios for more interactive sessions in the classrooms
- Planning to implement MCQ instead of MTF as a part of assessment for MBBS and BDS
- To formulate the learning objectives of MBBS curriculum in an outcome based format
- To implement Student Lecture Series: an opportunity for senior students to teach their juniors
- Conduct more of the student competitions to prepare audiovisual materials on given topics
- To revise the content of theory and practicals and add recent molecular biology technique demonstration sessions
- To digitize the practical sessions and also the OSPE

PATHOLOGY

1. Faculty profile - adequacy and competency of faculty

There are ten faculty members who meet the requirements for teaching Phase I Stage IIA MBBS, Phase I Year 2 BDS and Second year allied health science programs as per the requirements of the regulatory bodies

Sl No.	Name	Qualification	Designation	Teaching experience (YRS)
1	Dr. Shaila T. Bhat	DCP, DNB		11
2	Dr. K Ramnarayan	MD	Professor	38
3	Dr. Annamma Kurien	DCP, MD	Professor & Assoc Dean	20
4	Dr. Brij Mohan Kumar Singh	MD	Asst. Prof.	02
5	Dr. Sindhura Lakshmi K.L.	MD	Asst. Prof.	02
6	Dr. Brahmaiah Chari K.R.	MD	Asst. Prof.	01
7	Dr. Seemitr Verma	MBBS, DCP	Speciality Medical Officer	01
8.	Dr. Archana .S	MD	Asst. Prof.	01
9.	Dr. Chethana Babu	MD	Asst. Prof.	01
	Dr. Roumina Hassan	MD	Asst . Prof	<01
10.	Dr. Sushmitha M.G	MD	Asst. Prof.	<01
11	Dr. Panna Shetty	MD	Asst. Prof.	<01
12	Dr. Tanvi Shetty	MD	Asst. Prof.	<01

Number of faculty positions sanctioned and filled: 13/10

All the faculty members have had their post graduate training (MD / Diploma) in Pathology and attended teaching- learning- evaluation workshops. All are involved in teaching and diagnostic services. The department has adequate number of faculty members. Two faculty members have received the good teacher award and many faculty members have been rated among the top 5 teachers on several occasions at the institutional level. Students find all the teachers in the department competent and helpful.

2. Student profile –

Entry level competency: Refer to appendix No.1

Socioeconomic status: Generally most students are from middle-income group (detailed information not available)

Language proficiency: English

3. Changes made in the courses or programmes during the past two years and the contribution of the faculty to those changes

The MBBS and BDS programs are conducted in compliance with the requirements of the Malaysian Qualifications Agency (MQA) which is the regulatory body governing the health sciences education in Malaysia. Pathology is taught in Phase I Stage IIA for MBBS and Phase I Year 2 for BDS students.

- In the year 2010, a new OSPE station was introduced in the practical exam and theory syllabus was updated.
- In 2012, OSCE station was converted to 2 OSPE stations. Cancer screening, interpretation of data and focused mini viva was introduced.
- In 2013, a minor revision of the syllabus was carried. Course guide to be distributed as CDs instead of book.
- Active learning strategies to promote SDL were initiated.
- More topics of moderate complexity were included into the realm of self-directed learning
- The course guide was made outcome based
- Introduction of innovations in student learning with dramatization of Pathological concepts in 2013 called Path Theatre

4. Trends in the success and dropout rates of students during the past two years

Batch 24 : Melaka March 2009 Phase I Stage II (held in February 2011)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Pathology	106	6	112	100	6	106	94.64

Batch 25 : Melaka September 2009 Phase I Stage II (held in August 2011)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Pathology	153	6	159	148	6	154	96.86

Batch 26 : Melaka March 2010 Phase I Stage II (held in February 2012)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Pathology	119	6	125	119	5	124	99.20

Batch 27 : Melaka September 2010 Phase I Stage II (held in August 2012)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Pathology	138	0	138	130	0	130	94.20

Batch 28 : Melaka March 2011 Phase I Stage II (held in February 2013)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Pathology	147	7	154	119	5	124	

Batch 29 : Melaka September 2011 Phase I Stage II (held in August 2013)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Pathology	179	30	209	172	30	202	

Batch 30 : Melaka March 2012 Phase I Stage II (held in February 2014)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Pathology	120	6	126	109	6	115	

Batch 31 : Melaka September 2012 Phase I Stage II (held in August 2014)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Pathology	254	11	265	228	9	237	

BDS Batch 1 : Phase I Year 2 (held in July 2011)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Pathology	21	-	21	21	-	21	100

BDS Batch 2 : Phase I Year 2 (held in July 2012)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
		-			-		

BDS Batch 3 : Phase I Year 2 (held in July 2013)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Pathology	70	-	70	70	-	48	97.96

BDS Batch 4 : Phase I Year 2 (held in July 2014)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Pathology	68	-		67	-	48	97.96

Number of dropouts in the last 4 years

2011: MBBS - 3 out of 516 students

2012: MBBS - 4 out of 893 students

2013: MBBS - 3 out of 1009 students

2014: MBBS - 1 out of 851 students

2014 : BDS –1 out of 68 students

5. Learning resources of the departments - library, computers, laboratories and other resources

- Faculty members and students have access to the air conditioned Health Sciences Library of the University which has large numbers of latest editions of textbooks, journals, e-journals, internet facility, photocopying and e-books. Faculty can access the MMMC staff library which has sufficient copies of latest editions of textbooks in Pathology.
- The faculty members have access to the academic section of MMMC which has common computer terminals with internet connection, printers, scanner and photocopying machine
- There are two air conditioned fully equipped laboratories for the students.

- Faculty are given individual laptops with free internet access
- Learning resources specific for the department
 - ✓ Gross specimens-60
 - ✓ Digital images
 - ✓ Interpretative charts, clinical case and lab data based problems -22
 - ✓ Audio visual teaching material-2
 - ✓ Museum specimen repository from integrated Museum of Anatomy and Pathology (MAP). Manipal

6. Modern teaching methods practiced and use of ICT in teaching – learning

Active learning is emphasized in the curriculum. Self-Directed Learning (SDL), Problem Based Learning (PBL), Case Based Learning (CBL), audio-visual aids, practical sessions, lab and museum assignments are part of teaching learning methods. Peer assisted learning is encouraged and the use of theatre for teaching and learning of Pathology was introduced recently.

PBL: Students are introduced to a conceptually and clinically significant topic, presented in the format of a case scenario. These are designed specially to illustrate the relevance of pathological concepts to medical practice. The students are divided into small groups. Each group has a faculty as facilitator. PBL is conducted in two sessions. In the first session (brain storming session), cases are given and the students work together to analyze the problem and clarify difficult terms, identify key issues, formulate a hypothesis, and list the learning objectives. In the second session (presentation session), which is conducted after a week, students present the specified learning objectives.

The mode of teaching makes use of both traditional blackboard teaching and modern techniques such as power point presentations with good use of quality images and videos. Students can access audiovisual learning materials prepared by faculty members in the health sciences library of the university. Lab and museum assignments encourage peer-assisted and self-learning among students and the state of the art Museum of Anatomy and Pathology with its large collection of specimens provides an opportunity to students to enhance their knowledge of Pathology.

7. Participation of teachers in academic and personal counseling of students

Each one of the teachers is involved in mentoring a group of students. The responsibilities of a mentor include

- Providing academic and personal counseling to their mentees
- Helping the students to get acclimatized to campus life in Manipal.
- Promote cultural integration.
- Support co-curricular and welfare activities of the students.
- Arrange remedial measures for students who are at the risk of failure
- Guiding the mentored student research projects.

8. Details of faculty development programmes and teachers who have been benefited during the past two years

- Manipal Centre for Personal and Professional Development (MCPD) of Manipal University conducts Pedagogic and personal effectiveness workshops on a regular basis. Two faculty members of the department have attended this workshop in the past two years.
- Slide seminar by Dr. Pathmanathan, Head, Department of Pathology, School of Medicine and Health Sciences, Monash University, Sunway campus, Malaysia, August 2010.
- “Leadership and Management for Pathologists”- by Dr. Shashidhar Venkatesh Murthy, Adjunct Professor of Pathology, MMMC (Manipal campus), Head of Pathology, School of Medicine & Dentistry, James Cook University, Queensland, Australia on June 21, 2011

9. Participation / contribution of teachers to the academic activities including teaching , consultancy and research

- a. All the faculty members are involved in teaching MBBS, BDS, Allied health sciences and Pathology postgraduate teaching programme, Faculty actively take part in departmental planning, revision and improvisation of the course curriculum.
- b. Senior faculty are involved in guiding post graduate thesis
- c. All the faculty members are posted in various laboratory services- clinical lab & hematology, histopathology & cytology and forensic pathology.
- d. Dr. Annamma Kurien is the Lab Director , Clinical testing lab, Manipal Acunova (A clinical research organization handling BA/BE studies and clinical trials)

- e. Research: Faculty members are involved in conducting research, presenting their findings in conferences and publishing in journals, and guiding students in their projects. Two faculty members are recognized as PhD guides by Manipal University.
- f. Dr. Annamma Kurien is the principal or co-investigator in several externally funded research projects
- g. Dr. K. Ramnarayan is a founding faculty member of Medical Education department in Manipal University and is a pioneer of innovative practices in Medical Education and training of health professions educators

Chairing sessions/guest faculty/awards/resource person in workshop

1. Mary Mathew. Informed Consent, Workshop on Medical Ethics. KMC, Manipal. 30th Jan 2012.
2. Dr Annamma Kurien was honoured with the ‘Civic Leader’ Award by the Hemophilia Federation of India for the Hemophilia Community in July 2011
3. Dr. Annamma Kurien was an invited guest faculty at
 - ✓ CME on Comprehensive care in bleeding disorders, Feb 2010
 - ✓ CME in National Hemostasis Update at Bangalore in March 2010.
 - ✓ PG teaching programmes and lectures in Pathology Club meeting in Medical College Kottayam in Sept 2010.

Dr. C.V. Raghuvver gave the Dr P N Wahi Academy Oration at the Annual Conference in Nov 2010. Dr. Annamma Kurien won .Project of the year award for IDEEA project by Novo Nordisk hemophilia foundation , Switzerland in 2014

2. Dr. Annamma Kurien. was a speaker at the 12th Novo Nordisk Symposium on hemostasis and Thrombosis management in Vienna, Austria from June 4th to 6th June 2014.

3. Dr. Annamma Kurien is a Qualified NABL assessor of the National accreditation board of Laboratories, New Delhi., India 2010 till date

4. Dr. Annamma Kurien won the _second prize for the best audio visual material titled “The power packed neutrophils” in December 2013

4. Dr. Annamma Kurien First prize for best audio visual material titled “Life and achievements of Rudolf Virchow in 2014
5. Dr. Shaila T. Bhat won the best teacher award in November 2014

10. Collaboration with other departments/ institutions, at the State, National and International levels, and their outcome during the past two years

- Dr. Annamma Kurien is the co Investigator in an International multicentric Clinical trial ie SIPPET STUDY on Factor VIII inhibitors in plasma product exposed toddlers. 2010-2013
- Manipal hemophilia society presided by Dr. Annamma Kurien has twinning programme with University New Mexico
- Some faculty are members of the Hemophilia Society, Manipal. Every summer, the society conducts a camp called ‘Asha Kiran’ for hemophilia patients in Manipal.

Collaboration with other departments/ institutions, at the State, National and International levels, and their outcome during the past two years

1. Dr. Annamma Kurien won .Project of the year award for IDEEA project by Novo Nordisk hemophilia foundation , Switzerland in 2014
2. Dr. Annamma Kurien. was a speaker at the 12th Novo Nordisk Symposium on hemostasis and Thrombosis management in Vienna, Austria from June 4th to 6th June 2014.
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11. Priority areas for Research and details of the ongoing projects, important and noteworthy publications of the faculty, during past two years

Department of Pathology has two recognized PhD guides

Ongoing:

Category	Number
Funded research projects	2
Non-funded research projects	1
PhD research projects	3 (guide)
PG research projects	2
UG research projects	2

Last 3 years (2012-2014):

		2012	2013	2014
Completed funded research projects		1	0	0
Completed non-funded research projects		0	0	0
Completed PhD research projects		1 (Guide)	0	0
Completed PG research projects		0	2	0
Completed UG research projects		76	78	100
Publications	International	6	6	7
	National	1	2	0
Books		0	0	0
Chapters in books		0	0	0
Conference presentations	International	3	0	4
	National	1	4	2

Ongoing funded research projects are:

Sl#	Title	Principal/Co-Investigator	Funding agency	Funding amount
1.	'IDEEA: Identification, Diagnosis, Education & Empowerment for Action of people with bleeding disorders in South India	Dr Annamma Kurien	Nova Nordisk Hemophilia Foundation, Switzerland	Rs. 1 Crore
2.	SIPPET (Survey of Inhibitors in Plasma-Product exposed Toddlers) study (Clinical trial)	Dr Annamma Kurien	Sintesi Research, Italy and Max Neeman	
3.	Open Labeled Phase III multicentric study on Pharmacokinetics efficacy and safety evaluation of Kedrion Factor VIII concentrate EMOCLOT in 50 previously treated Hemophilia A children (Clinical trial)	Dr Annamma Kurien	Sintesi Research, Italy & Max Neeman	
4.	'Variability of response and resistance to clopidogrel as measured by platelet aggregometry'	Dr.Niveditha Suvarna, Dr.Annamma Kurien	Manipal University (Seed Money Grant)	Rs.25,000

2013 2014

GENA STUDY,clinical trial on recombinant Factor VIII.-2015 onwards	. Dr. Annamma Kurien Co investigator	Multi centric international clinical trial	
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Ongoing non-funded research projects are:

SI No.	Title	Faculty involved
1.	Use of active learning strategies to enhance self directed learning in undergraduate pathology (FAIMER project)	Dr Shaila Bhat

Ongoing PhD research projects

No	Title	Name of the student	Guide
1	Factors predicting achievement in an outcome based educational approach in physiology	Mr. James Gonsalves	Dr. K. Ramnarayan (Guide)
2	Identification of new cases and empowerment of patients with bleeding disorders to improve their quality of life	Mrs. Sulochana	Dr. Annamma Kurien (Co-Guide)
3	Effectiveness of comprehensive hemophilia education programme on quality of life and clinical outcomes among children and young people with hemophilia in selected hemophilia clinics of Karnataka	Ms. Anjalin D'Souza	Dr. Annamma Kurien (Co-Guide)

Completed PhD research projects

No	Title	Name of the student	Guide
1	Perceptions of teaching learning environment with special reference to Microbiology. A study on undergraduate medical students of Melaka Manipal Medical College, Manipal University	Dr. Vinod Pallath	Dr. K. Ramnarayan (Guide)

2013 -2014**Ongoing non-funded research projects are:**

SI No.	Title	Faculty involved
1.	Hematological profile in Chronic Kidney Disease in a tertiary care center in Sothern India: Principal Investigator	Sindhura Lakshmi K.L.
2.	Knowledge Attitude Practice Survey on Phlebotomy Best Practices among health care workers in a tertiary care hospital: Principal Investigator	Sindhura Lakshmi K.L.
3.	Study on “prevalence of bleeding disorders in South	Dr. Annamma Kurien

	west regions of South India” approved by ethical committee where BAT validation and reliability is to be tested in the region.	
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Ongoing PhD research projects 2013-2014

No	Title	Name of the student	Guide
1	Co-relation of bleeding score, coagulation test and thromboelastography in inherited bleeding disorders.	Javeed Aahmed	Dr. Annamma Kurien
2	Identification of bleeding disorders through health care workers in 4 districts.	Mrs. Sulochana	Guide :Dr. Dinesh Nayak Co guide : Dr Annamma Kurien
3	Effectiveness of comprehensive hemophilia education program on health related QOL and clinical outcome in Pwh.	Mrs. Anjalin	Guide :Dr. Dinesh Nayak Co guide : Dr Annamma Kurien

Completed PG research projects

No	Title	Name of the student	Guide
1	Spectrum of hemoglobin abnormalities and relevance of HbA ₂ levels by capillary electrophoresis in a tertiary care hospital	Dr. Rachana Dhakal	Dr. Annamma Kurien
2.	Comparative study of dysplasia with regenerative atypia and their association with other conditions in gastric biopsies	Dr. Swaminathan	Dr. Srilatha P.S

Publications 2010

1. Devi V, Abraham RR, Adiga A, Ramnarayan K, Kamath A

Fostering research skills in undergraduate medical students through mentored student projects: Example from an Indian medical school

Kathmandu University Medical Journal 2010, 8(31);294-8

2. Ganesan S., Shenoy U.V., Raghuveer C.V., Kamath A., Unnikrishanan

- Validation of pediatric evaluation of disability inventory in India
Physiotherapy- The Journal of Indian Association of Physiotherapists 2010, 25-27.
3. Sujatha D'Costa, C. V. Raghuveer, Adhikari Prabha and Sampath Madhyasta
Argyrophil cells in normal human uterine cervix
The Open Anatomy Journal 2010; 2: 25-28
 4. Ganesan S, Shenoy UV, Raghuveer CV, Asha Kamath and Unnikrishnan
Use of pediatric evaluation of disability inventory for functional assessment in prematurely born Indian children – A community based study
International Journal of Innovation, Management and Tecnology 2010; 1(1): 35-38
 5. Prasad A. M., Ramnarayan K., Bairy K. L
Effect of imatinib on the reproductive function
Pharmacology online 2010; 1: 469-478
 6. Sharmila Torke, Reem Rachel Abraham, K. Ramnarayan and K. Asha
The impact of viva-voce examination on students' performance in theory component of the final summative examination in physiology
Journal of Physiology and Pathophysiology 2010; 1(1): 10-12
 7. Shyamala Hande H. and K. Ramnarayan
Assessment of student performance in problem based learning sessions using rubrics
Indian Journal of Multidisciplinary Research 2010; 6(1): 23-28
 8. Vaishali, Sailakshmi Ganeshan, C. V. Raghuveer
Attitude of physiotherapy students towards communication skills and effects of an interactive lecture – A randomized controlled trial
Indian Journal of Physiotherapy and Occupational Therapy 2010; 4(2): 82-84
 9. Saju Binu Cherian, BairyKL, Muddanna S Rao, Somayaji SN, Ramnarayan K
Effects of chronic prenatal restraint stress on anxiety in post weaned male and female wistar rats
Pharmacology online 2010; 2: 99-122
 10. Prasad AM, Ramnarayan K, Bairy KL
Effect of imatinib on histological parameters in male swiss albinomice
International Journal of Pharmaceutical Sciences Review and Research 2010; 4(2): 117

11. Bincy M. George, Niveditha Suvarna, Jessica Sushma D'Souza
Twelve tips for medical students to improve identification of "Learning Issues" in Problem Based Learning
South-East Asian Journal of Medical Education 2010; 4(1): 61
12. Reem Rachel Abraham, Surekha Kamath, K. Ramnarayan
Impact of note-taking on cognition during lectures
South –East Asian journal of medical education 2010, 4(2); 44-45
13. Vasudha Devi, Reem R. Abraham, Sachidananda Adiga and Ramnarayan Komattil
Mentored student project for inculcating research skills.
Medical Education 2010; doi: 10.1111/j.1365-2923.2010.03648.x
14. K.M.Girisha, H.K.Ganesh, Lakshmi Rao, P. S. Srilatha
Massive cranial osteolysis, skin changes, growth retardation and developmental delay, Gorham syndrome with systemic manifestations
American Journal of Medical Genetics 2010, 152A (3): 759-763

Publications 2011

1. Manjunatha Goud B. K., Ayaz K. Mallick, Sarsina Devi O, Raghuveer C. V., Bhavna Nayal, Marya Ahsan, Devaki R. N. and Avinash S. S.
Diabetes mellitus and microalbuminuria: Factors affecting collection of urine samples for microalbuminuria.
International Journal of Pharma and Bio Sciences 2011, 2(1): 131-137
2. Bhavna Nayal, Raghuveer CV, Manjunatha Goud BK, Sarsina Devi O, Devaki RN, Deepa K.
Significance of microalbuminuria in cardiovascular disease and nephropathy in diabetic patients.
Research Journal of Pharmaceutical, Biological and Chemical Sciences 2011; 2(1): 358-363.
3. Majunatha Goud, Sarsina Devi, Bhavna Nayal, Niveditha Suvarna, Ayaz K. Mallick, Sweta Shivashankar.
Basic procedure of venepuncture in pediatric and adult patients.
International Journal of Applied Biology and Pharmaceutical Technology. 2011, 2(1):

385-391

4. Manjunatha Goud, Sarsina Devi, Bhavna Nayal, Raghuveer C.V., Niveditha Suvarna, Devika R.N.

Vagaries of alcoholism and its clinical significance.

International journal of pharmaceutical sciences review and research 2011, 8(1);66-69

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General procedure of phlebotomy : A review.

International journal of applied biology and pharmaceutical technology 2011, 2(1);334-341

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An overview of diabetes mellitus with emphasis on biochemical and clinical management.

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7. Vinodini N. A., Tripathi Y., C.V. Raghuveer, Asha Kamath, C. Ramaswam

A study on the protective effect of single dose of N-2-Mercaptopropionyl Glycine Administration Prior to Renal Reperfusion on Wistar Rats

Australian Journal of Basic and Applied Sciences 2011, 5(4): 149-153

8. Manjunatha Goud B.K., Nandini M., Asha Kamath, Sudhir and Bhavna Nayal

Oxidative stress and calcium levels in senile and type 2 diabetic cataract patients.

International Journal of Pharma and Bio Sciences 2011; 2(1): 109-116

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Calculated glycated hemoglobin – myth or reality.

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Anthropometric measurements of nutritional status in chronic pancreatitis in India: comparison of tropical and alcoholic pancreatitis.

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A study of c-reactive protein and its relationship with CHD and metabolism.
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Effect of serum copper concentration and ceruloplasmin on lipid parameters leading to increased propensity to cardiovascular risk.
Research journal of pharmaceutical, biological and chemical sciences 2011, 2(2); 558-563
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Serum albumin and its relationship with glutathione level in patients with brain tumor.
Research journal of pharmaceutical, Biological and chemical sciences 2011, 2(1); 780-784
14. Devika R.N., Virupakash H.S., Rangaswamy M., Deepa K., Manjunatha Gouda B.K., and Bhavna Nayal.
Correlation of serum lipids and glucose tolerance test in cholelithiasis.
International journal of pharma and bio sciences 2011, 2(1); B-224-228
15. Sathisha T.G., Pavithra V., Kasturi K., Sambasiva Rao, KRS, Manjunatha Goud B.K., Bhavna Nayal I
A case study on drug induced hepatomegaly associated with dengue infection.
International Journal of pharma and bio sciences 2011, 2(2), B-268-270
16. Manjunatha goud B.K., Bhavna Nayal, Sarsina Devi, Sathisha T.G., Sweta Shivashenker, Devika R.N.
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- International journal of pharmaceutical sciences review and research 2011, 7(2); 203-205
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Details of conference presentations

2011

International

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1	Aspirin resistance as measured by platelet aggregometry in patients on aspirin	Dr Annamma Kurien	The Malacca Strait Hematology Oncology Symposia, Medan, Indonesia. 8 th and 9 th Oct 2011
2	Primary pure gastric yolk sac tumor: Case report with immunohistochemical analysis and review of literature	Dr.Mary Mathew	ASCP Annual Meeting/WASPaLM XXVI World Congress, Las Vegas, USA. 19-22 Oct 2011
3	Widely infiltrating malignant epithelioid schwannoma of skull base.	Dr.P.S. Srilatha	NUHS-Anderson Pathology update 2011, Singapore. 27th to 29th October 2011

National

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1	Rosette formation in the marrow in plasma cell myeloma and	Dr Annamma Kurien	National Conference of the Indian Society of Hematology

Waldenstrom's macroglobulinemia	and Blood Transfusion, Chandigarh. 10th -12th November 2011
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2012

International

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1	Bone marrow embolism to the lung – An incidental finding on autopsy	Dr.Rashtri Ghosh	XXIX IAP, South Africa, Cape Town, 2012 in Cape Town, South Africa from September 29 th to October 5 th , 2012
2	Grading of ovarian serous carcinomas using a 2-tier grading system'	Dr.Jessica Minal	11th annual scientific meeting of College of Pathologists, Academy of Medicine, Malaysia from 7/06/2012- 10/06/2012

2013

National

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1	Primary bone marrow lymphoma: A diagnostic dilemma	Dr Deepak Nayak M	HAEMATOCON 2012(53 rd Annual National Conference of ISHBT), Puri, Odisha from 7 th to 11 th November, 2012

2013

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1	FNAC of lung lesions and co-relation with biopsy	Dr Archana S	International CME in Pathology, Histopathology & cytopathology, Goa, India Feb 2014
2	Histopathological features of the kidney in Sjogren's syndrome	Dr.Archana S	7th International CME in Renal Pathology & Annual Conference of Indian Society of Renal and Transplantation Pathology, Mysore, Karnataka, 2014
3	Odontogenic myxoma of the maxilla-case report of a rare entity	Dr. Archana S	41st annual state KCIAPM conference-2014
4	Amyloidosis with Crescents – Unusual combination in a case of Rheumatoid Arthritis.	Sindhura Lakshmi K.L.	Presented at ISRTP CON, September 2013, New Delhi

2014

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1	“Usefulness of ISTH bleeding assessment tool in patients with suspected bleeding disorders in a tertiary care hospital in South India	Dr. Annamma Kurien	World Congress of hemophilia at Melbourne , Australia in May 2014
2	Cyto-histological comparison of palpable breast lesions – study at a tertiary care centre	Dr.Chethana babu K.Udupa; Dr.Karthik S.Udupa; Dr.S.S.Hiremath; Prof.Sangam	3 rd ASIA PACIFIC BREAST CANCER SUMMIT Singapore; Feb 2014.
3	Comparison of FNAC and histopathology in determining the grading of carcinoma breast – experience from a tertiary care centre in South India	Dr.Chethana babu K.Udupa; Dr.Karthik S.Udupa; Dr.S.S.Hiremath; Prof.Sangam	UAE CANCER CONGRESS ; DUBAI; October 2014
4	Glomerulonephritis with crescents in adults- clinicopathological characteristics and determinants of outcome	Sindhura Lakshmi K.L.	Annual conference of ERA EDTA, June 2014, Amsterdam, the Netherlands

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1	Hemophagocytic lymphohistiocytosis- an unusual presentation of tuberculosis in patients with chronic kidney disease on hemodialysis.	Sindhura Lakshmi K.L.	Presented in Haematocon 2014, Hyderabad
2	Oxalate nephropathy associated with superimposed DPGN	Roumina Hasan	7 th International CME in renal pathology and Annual conference of ISRTP, JSS Medical college, Mysore

12. Placement record of the past students and the contribution of the department to aid

student placements

After successful completion of Stage IIA or year 2, students proceed to stage IIB or year 3

13. Plan of action of the department for the next five years

- To introduce digital lab concept for undergraduate practical teaching
- To introduce more clinical/ patient details and interpretations in learning
- Introduce innovations in student learning like introducing dramatics to pathology
- To organize faculty development programmes and encourage faculty to apply for grants

PHARMACOLOGY

1. Faculty profile - adequacy and competency of faculty

There are eleven full time faculty members in the department with masters degree in Medical Pharmacology. The faculty members have been appointed as per the regulatory requirements. The department ensures the competency of the faculty members by meeting the regulatory requirements for appointments and by asking faculty members to attend CMEs/workshops/Conferences regularly.

Sl No.	Name	Qualification	Designation	Teaching experience
1	Dr. Vasudha Devi	MBBS MD	Professor & Head	11
2	Dr. Yeswanth Rao	MBBS MD	Professor	12
3	Dr. Durga Prasad	MBBS MD	Professor	12
4	Dr. Vishal Bhat	MBBS MD	Asst. Prof.	05
5	Dr Anoosha Bhandarkar	MBBS MD	Asst. Prof.	01
6	Mr. Ganesh Shenoy	M.Sc	Senior Lecturer Grade	11
7	Ms. Smita Khandelwal	M. Sc.	Lecturer	05
8	Ms. Debasree Deb	M. Sc.	Lecturer	05
9	Ms. Tatiyana Mandal	M. Sc.	Lecturer	05
10	Ms. Devasrita Dash	M. Sc.	Lecturer	04
11	Dr. Arul Amuthan L.	M. Sc.	Lecturer	04
12	Mr. Shakt Mani Satyam	M.Sc	Lecturer	01
13	Mr. Manjunath Shetty	M.Sc	Lecturer	01
14	Mr. Ujjal Bose	M.Sc	Lecturer	

Number of faculty positions sanctioned and filled: 14/14

2. Student profile –

Entry level competency: Refer to appendix No.1

Socioeconomic status: Generally most students are from middle-income group (detailed information not available)

Language proficiency: English

3. Changes made in the courses or programmes during the past two years and the contribution of the faculty to those changes

The MBBS and BDS programs are conducted in compliance with the requirements of the Malaysian Qualifications Agency (MQA) which is the regulatory body governing the

health sciences education in Malaysia. Pharmacology is taught in the 2nd year of the MBBS and BDS programs.

The department has introduced certain practical exercises to medical students which have clinical relevance.

1. Exercise on retrieving information from drug information resources to MBBS students

As the information on drugs being expanding and new drugs being added to the already existing list, retention of all information related to drugs is challenging. During clinical practice one may have to quickly use the reference materials to plan a treatment for a patient. In this exercise students are made aware of various sources of drug information and taught to retrieve certain drug information from certain tertiary sources.

2. Exercise on drug dose calculation:

A medical practitioner is required to compute the dosage for his/her patient based on the age, body weight or any other parameters relevant to the clinical case. This exercise creates awareness of these concepts among students and teaches them to compute drug dosage in certain situations.

3. Exercise on doctor patient communication skills: In this exercise students are taught to communicate drug related information, which have influence on the outcome of the disease, to patient in lay man terms.
4. Exercise on evaluation of the fixed dose combinations (FDC) of drugs: Irrational FDCs pose threat to patients' life by exposing them to unnecessary adverse effects of drugs. These adverse drug reactions and expensive drug treatment due to FDCs will increase health care cost. To inculcate the knowledge and attitude of rational prescribing, the department has incorporated this exercise to MBBS students. In this practical students will learn to evaluate FDCs using certain criteria.
5. Exercise on evaluation of drug promotional literature: World Health Organization (WHO) has developed criteria for ethical drug promotion for the pharmaceutical companies to follow while designing promotional brochures. This will prevent low quality promotional literature which are inaccurate and of low educational value. Despite of strict regulation, pharmaceutical companies influence prescribers behavior by providing unsubstantiated claims regarding safety and efficacy of drugs and hiding contraindications, adverse drug reactions etc. Hence the department incorporated this exercise to make student aware of unethical drug promotion and to teach the skills of drug promotional evaluation.

6. Development of objective structured practical examination stations to assess students' skills on doctor-patient communication, computing drug dosage, retrieving drug information from resources, evaluation of rationality of fixed drug combinations and drug promotional literature: These stations were developed aligning learning outcomes of these exercises to the assessment.
7. Categorizing Intended Learning Outcomes based on must know, nice to know and desirable know areas: This was done for MBBS course.
8. Preparation of specification table for MBBS course: This was done based on the relevance of objectives at primary health care settings. In addition, this specification table describes the contribution of various topics in assessment with questions related to higher and lower cognitive domains.
9. Curriculum was restructured integrating pharmacology with microbiology and pathology. In addition, to achieve vertical integration, clinical updates, case discussions and problem based learning were incorporated.
10. Restructuring of problem Based learning exercise for students: This was done at the institutional level by designing common clinical cases encountered in clinical practice. These cases were further validated by other faculty members and clinicians. The cases covered all the related objectives from pharmacology, microbiology and pathology.
11. **Revision of Allied health syllabus:** Allied health subject coordinator Ms. Tatiyana under the supervision of the Head of the department revised the syllabus and designed objectives which are more specific and relevant.

These innovations and their implementation in the curriculum were done by the faculty members of the department under the guidance of Head of the department.

4. Trends in the success and dropout rates of students during the past two years

Batch 26 : Melaka March 2010 Phase I Stage II (held in February 2012)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Pharmacology	119	20	139	118	18	136	97.84

Batch 27 : Melaka September 2010 Phase I Stage II (held in August 2012)

Subjects	Total appeared	Passed
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	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Pharmacology	138	2	140	114	2	116	82.86

Batch 28 : Melaka March 2011 Phase I Stage II (held in February 2013)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Pharmacology	147	22	169	123	21	144	85.21

Batch 29 : Melaka September 2011 Phase I Stage II (held in August 2013)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Pharmacology	179	25	204	169	21	190	93.14

Batch 30 : Melaka March 2012 Phase I Stage II (held in February 2014)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Pharmacology	120	13	133	106	13	119	89.47

Batch 31 : Melaka September 2012 Phase I Stage II (held in August 2014)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Pharmacology	254	14	268	213	10	223	83.21

BDS Batch 2 : Phase I Year 2 (held in July 2012)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Pharmacology	49	-	49	49	-	49	100

BDS Batch 3: Phase I Year 2 (held in July 2013)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Pharmacology	70	-	70	70	-	70	100

BDS Batch 4: Phase I Year 2 (held in July 2014)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Pharmacology	68	-	68	68	-	67	98.53

Number of dropouts in the last three years: MBBS - 8 out of 928 students (0.8%)

BDS – 1 out of 187 (0.5%)

5. Learning resources of the departments - library, computers, laboratories and other resources

- Faculty members and students have access to the air conditioned Health Sciences Library of the University which has large numbers of latest editions of textbooks, journals, e-journals, internet facility, photocopying and e-books.
- Our department library has a total of 59 Pharmacology books and all faculty members have access to the same. We have sufficient number of copies of recommended textbooks and reference books in Pharmacology. In addition, we have some special books including “Clinical Pharmacology in Dentistry” by Cawson, “A Clinical Core Text for Integrated Curricula and Self-Assessment” by Tom and Peter, Dr. Rao’s “Handbook of Practical Pharmacology” and “Clinical Pharmacology” by Lawrence and Bennett, and all faculty members can make use of them when required.
- Faculty members are given individual laptops with free internet access. The College has an academic section with sufficient number of computers and all faculty members have access to the same. These computers have a pharmacology department folder and all data related to the department such as question papers, syllabus brochure and necessary documents are kept in that respective folders with restricted access.
- Computer software: This software replaces the use of animals in teaching, but enables students to understand the molecular nature of the drug acting on autonomic nervous system. All faculty members have the access to these software and the department uses it regularly in its practical classes.
- Kaplan pharmacology videos: These videos provide better illustration of mechanism of drug action and also discussion of drugs in clinical context and application. Faculty use these videos while preparing their teaching learning materials.
- Video on drug preparation skills: This video was prepared by Dr. Vasudha Devi and Mrs. Prachitee Upadhaye. Video demonstrates aspirating drug from an ampoule, aspirating drug from a vial, aspirating drug from the vial containing a drug in powdered form and setting up an IV infusion.
- Handouts: Department has validated handouts explaining various procedures of drug

preparation for parenteral administration, drug formulations and doctor patient communication aspects related to drugs. These handouts given to students during practical classes.

6. **Modern teaching methods practiced and use of ICT in teaching – learning**

Active learning is emphasized in the curriculum. Self-Directed Learning (SDL), Problem Based Learning (PBL), Case Based Learning (CBL) and audio-visual aids are part of teaching learning methods.

PBL: Students are introduced to a conceptually and clinically significant topic, presented in the format of a case scenario. These are designed specially to illustrate the relevance of concepts of pharmacological, microbiology and pathology to medical practice. The students are divided into small groups. Each group has faculty members from pharmacological, microbiology and pathology departments as facilitators. PBL is conducted in two sessions. In the first session (brain storming session), cases are given and the students work together to analyze the problem and clarify difficult terms, identify key issues, formulate a hypothesis, and list the learning objectives. In the second session (presentation session), which is conducted after a week, students present the specified learning objectives.

AV aids:

Lecture classes are conducted in the form of Power point presentation and using blackboard. Animations are also used to illustrate the mechanism of drugs, making the abstracts lively and easy to understand. This is extended to the practical (experiment) classes as well which acts as reinforcement of concepts learnt in lecture classes.

Video clips on the clinical features of various pathological conditions, the movement of drugs across the body and the molecular basis of drug action are projected during lecture classes as a supplement to the blackboard and PowerPoint presentations. This provides more clarity on the concepts.

Simulation exercises in practicals using computer software:

Computer software to enable the student to practice the response produced by drugs were introduced into the experimental/practical curriculum. This software replaces the use of animals in teaching, thus reducing the ethical burden we pharmacologists often bear when we use biological models in teaching and research. The software is loaded on to the laptops and the student can then work out the responses produced by drugs on simulated biological models. The software also helps the student understand the molecular nature of drug action, especially the drugs which act on the autonomic systems of the body, demonstrating the blood pressure, muscle twitching and contraction and pupillary

reactions.

7. Participation of teachers in academic and personal counseling of students

Each faculty member is involved in mentoring a group of students. The responsibilities of a mentor include

- Providing academic and personal counseling to their mentees
- Helping the students to get acclimatized to campus life in Manipal.
- Promote cultural integration.
- Support co-curricular and welfare activities of the students.
- Arrange remedial measures for students who are at the risk of failure
- Guiding the mentored student research projects.

8. Details of faculty development programmes and teachers who have been benefited during the past two years

Name	(Month, year)	Name of the workshop, place
Dr. Vasudha Devi	1. 2012, January	1. Workshop on E-learning, organized by MCPD of Manipal University, Manipal
	2. 2012, February	2. CME on 'Antibiotic resistance: current challenges' conducted by the department of Microbiology, MMMC, Manipal
	3. 2012, June	3. Workshop on 'Medical writing' conducted by Department of General Medicine, KMC, Manipal
	4. 2012, August	4. Workshop on 'Pharmacokinetic and Pharmacodynamic modeling, concepts and application, conducted by Department of Pharmacy Practice, MCOPS, Manipal
	5. 2012, August	5. Lecture on 'Pharmacoeconomics' organized by the department of

		pharmacology, MMMC, Manipal
	6. 2012, September	6. CME on Clinical Trails and Statistics' organized by Department of Pharmacology, KMC, Manipal
	7. 2013, January	7. 'Assessment in higher education' workshop organized by Manipal Center for Professional and Personal Development, Manipal (MCPD)
	8. 2013, November	8. Curriculum convention organized by Manipal University, Manipal
	9. 2013, December	9. Annual conference of Indian Pharmacological Society, NIMHANS Convention center, Bangalore, India.
	10. 2013, December	10. Workshop on Animal Cell culture Techniques organized by Karnataka College of Pharmacy, Bangalore
	11. 2013, December	11. Workshop on Advances in preclinical research organized by Vydehi Institute of Medical Sciences, Bangalore, India
	12. 2014, February	12. 'Design' A national workshop on creating effective MCQs. MCPD, Manipal University, Manipal.
	13. 2014, October	13. Hands on workshop on Basic techniques of Molecular Biology conducted by pharmacology departments of KMC and MMMC, Manipal University, Manipal, India
	14. 2014, October	14. Training program on 'Nurturing an effective workplace' for the HODs of Manipal University Institutions by TAPMI, Manipal.
	15. 2014, September	15. Investigators training program workshop organized by Pfizer India at KMC, Manipal
	16. 2014, March	16. Pharmacoeconomics workshop conducted by the department of Pharmacology, KMC, Manipal
	17. 2014, November	17. 3rd conference of the South East Asian Regional Association for

		Medical Education (SEARAME), Colombo, Sri Lanka
Dr Yeshwanth Rao K	<p>1. April, 2012</p> <p>2. April, 2013</p> <p>3. October, 2013</p> <p>4. November, 2014</p> <p>5. May, 2014</p> <p>6. May 2014</p> <p>7. Dec 2014</p>	<p>1. 2nd Saudi International Medical Education Conference (SIMEC2012) – Riyadh, Saudi Arabia</p> <p>2. AAHRPP (Association for the Accreditation of Human Research Protection Programme) Conference, Miami, US</p> <p>3. International Conference on Medical Education (ICME 2013), Mauritius</p> <p>4. South East Asian Regional Conference on Medical Education (SEARAME 2014), Colombo, Sri Lanka</p> <p>5. Mini-workshop on “Evolution of Teaching and Learning in Higher Education”, Manipal</p> <p>6. Mini-workshop on “virtual patients in health professions education”, Manipal</p> <p>7. Workshop on ‘How to Publish’, Manipal</p>
K Ganesh Shenoy	<p>1. January, 2012</p> <p>2. August September, 2012</p> <p>3. February, 2014</p> <p>4. March, 2014</p>	<p>1. “Teacher as Leader” conducted by Manipal Centre for Professional and Personal Development, Manipal</p> <p>2. Workshop on Qualitative Research conducted by Department of Optometry, Manipal College of Allied Health Sciences, Manipal</p> <p>3. Faculty Development Programme (FDP) Introduction to Qualitative Research conducted by TAPMI, Manipal</p> <p>4. Workshop on Pharmacoeconomics conducted by Department of Pharmacology, KMC, Manipal</p>

Dr. Vishal B	1. January, 2012	1. Workshop on Academic leadership at KMC, Manipal.
	2. June, 2012	2. Workshop on Medical Writing, at Manipal
	3. August, 2012	3. Workshop on Pharmacokinetics & Pharmacodynamics Modeling: Concepts and Applications, at Manipal
	4. November, 2012	4. Workshop on “Teacher as Communicator”, at MCPD, Manipal
	5. March, 2013	5. Trends, challenges and opportunities in multidisciplinary healthcare, Kuala Lumpur
	6. February, 2014	6. AEEDC Dubai 2014
	7. March, 2014	7. Workshop on ‘Pharmacoeconomics’, at KMC, Manipal
	8. March, 2014	8. Faculty development programme on ‘Innovation and Entrepreneurship’ at Manipal University Technology Business Incubator, India

Smita Khandelwal	<ol style="list-style-type: none"> 1. January, 2012 2. February, 2012 3. August, 2012 4. September, 2012 5. September, 2014 6. October, 2014 	<ol style="list-style-type: none"> 1. Workshop on “Tax Planning and Investment” organized by Finance Forum of Manipal Institute of Management, Manipal. 2. CME on “Antibiotics Resistance: Current Challenges” conducted by Department of Microbiology, MMMC, Manipal. 3. Pharmacokinetics and Pharmacodynamics Modeling: Concepts & Applications” organized by Department of Pharmacy Practice, Manipal College of Pharmaceutical Sciences, Manipal. 4. CME on “Clinical Trials and Statistics” conducted by Department of Pharmacology, Kasturba Medical College, Manipal. 5. Investigator Training Program in Clinical Trials organized by Department of Pharmacology, KMC, Manipal. 6. Digitized Lab-Based Teaching in Physiology, organized by the Department of Physiology, MMMC, Manipal.
Debasree Deb	<ol style="list-style-type: none"> 1. February, 2012 2. August, 2012 3. September, 2012 4. September, 2014 	<ol style="list-style-type: none"> 1. CME on “Antibiotics Resistance: Current Challenges” conducted by Department of Microbiology, MMMC, Manipal. 2. Pharmacokinetics and Pharmacodynamics Modeling: Concepts & Applications” organized by Department of Pharmacy Practice, Manipal College of Pharmaceutical Sciences, Manipal. 3. CME on “Clinical Trials and Statistics” conducted by Department of Pharmacology, Kasturba Medical College, Manipal. 4. Investigator Training Program in Clinical Trials organized by Department of Pharmacology, KMC,

	5. October 2014	<p>Manipal.</p> <p>5. Digitized Lab-Based Teaching in Physiology, organized by the Department of Physiology, MMMC, Manipal.</p>
Tatiyana Mandal	<p>1. January, 2012</p> <p>2. January, 2012</p> <p>3. January, 2012</p> <p>4. February, 2012</p> <p>5. June, 2012</p> <p>6. August, 2012</p> <p>7. September, 2012</p> <p>8. January, 2013</p>	<p>1. “E-learning” workshop by Dr. Sanjay Bedi, Manipal</p> <p>2. “Teacher as Leader” by MCPD, Manipal University</p> <p>3. “Teacher as Leader Workshop on Academic Leadership” by Manipal Centre for Professional and Personal Development (MCPD) , Manipal University, Manipal</p> <p>4. CME program on “Antibiotic Resistance: Current Challenges” by Dept. of Microbiology, Melaka Manipal Medical College (Manipal Campus), Manipal</p> <p>5. Workshop on “Frame It – Designing Instructional Objectives” by Manipal Centre for Professional and Personal Development (MCPD), Manipal University, Manipal</p> <p>6. “SEARCH” – the information literacy skills workshop by Manipal Centre for Professional and Personal Development (MCPD) , Manipal University, Manipal</p> <p>7. CME on “Clinical trials and statistics” by Dept. of Pharmacology, Kasturba medical College, Manipal</p> <p>8. National Workshop on “Assessment in Higher Education” by Manipal Centre for Professional and Personal Development (MCPD) , Manipal</p>

	<p>9. January, 2013</p> <p>10. January, 2014</p> <p>11. September, 2014</p> <p>12. October, 2014</p>	<p>University, Manipal</p> <p>9. Workshop on “Theatre, Performance and Medical Education” by Paul Macneil at 10th APMEC, NUS, Singapore</p> <p>10. Workshop on “Pharmacoeconomics” by Department of Pharmacology, KMC, Manipal University, Manipal</p> <p>11. Investigator’s training program in clinical trials conducted by Pfizer in Department of Pharmacology, KMC, Manipal</p> <p>12. Workshop on “Digitized Lab-based Teaching in Human Physiology” conducted by Department of Physiology, MMMC, Manipal</p>
Devasrita Dash	<p>1. February, 2012</p> <p>2. August, 2012</p> <p>3. September, 2012</p> <p>4. July, 2014</p> <p>5. September, 2014</p>	<p>1. CME on “Antibiotics Resistance: Current Challenges” conducted by Department of Microbiology, MMMC, Manipal.</p> <p>2. Pharmacokinetics and Pharmacodynamics Modeling: Concepts & Applications” organized by Department of Pharmacy Practice, Manipal College of Pharmaceutical Sciences, Manipal.</p> <p>3. CME on “Clinical Trials and Statistics” conducted by Department of Pharmacology, Kasturba Medical College, Manipal.</p> <p>4. 3rd annual hands-on workshop in neurochemistry and electron microscopy, NIMHANS, Bangalore.</p> <p>5. Investigator Training Program in Clinical Trials organized by Department of Pharmacology, KMC, Manipal.</p> <p>6. Digitized Lab-Based Teaching in</p>

	6. October, 2014	Physiology, organized by the Department of Physiology, MMMC, Manipal.
Dr.Arul Amuthan	<ol style="list-style-type: none"> 1. January, 2012 2. February, 2012 3. April, 2012 4. June, 2012 5. July, 2012 6. August, 2012 7. August, 2012 8. September, 2012 9. October, 2012 10. November, 2012 11. November 17, 2012 12. January, 2013 13. March, 2013 	<ol style="list-style-type: none"> 1. Workshop on Academic leadership at KMC, Manipal. 2. CME on Antibiotic resistance: Current Challenges, at MMMC, Manipal 3. Conference on “World Siddha Doctors Meet”, at Chennai 4. Workshop on Medical Writing, at Manipal 5. Training on Siddha Memory Empowerment Program, at Chennai 6. Workshop on Pharmacokinetics & Pharmacodynamics Modeling: Concepts and Applications, at Manipal 7. Workshop on SEARCH – the information literacy skills at Manipal 8. CME on Clinical Trials and Statistics, at Manipal 9. Workshop on “Body-Mind Balancing”, at MCPD, Manipal 10. Workshop & symposium on Evidence based public health at Manipal 11. Workshop on “Teacher as Communicator”, at MCPD, Manipal 12. 5th International conference on Medicinal plants and Herbal products, at Manipal 13. National Seminar on Anthropology of Traditional Indian Food, at Mysore

14. March, 2013	14. Hong Kong Pharmacy Conference 2013, at Hong Kong
15. April, 2013	15. Conference on World Siddha Doctors Meet 2013, at Nagercoil, India
16. April, 2013	16. Author workshop on Indexing and abstracting databases in health sciences, at Manipal University
17. May, 2013	17. National workshop on assessment in higher education, at Manipal University
18. September, 2013	18. VIII International Conference on Traditional Asian Medicines, at Sancheong, South Korea
19. October, 2013	19. Symposium on Food as Medicine, jointly organized with Indo-Queensland Research Initiative Project Fund and Department of Pharmacy Practice, at MCOPS, Manipal University
20. November, 2013	20. International Humboldt Kolleg on Bench to Bedside Translational Research : Potential Benefits of Interdisciplinary Collaboration, at KMC, Manipal
21. January, 2014	21. Seminar cum workshop on ‘Crusade against neoplasia and challenges in targeting tumor-specific nuclear machinery’, at Manipal College of Pharmaceutical Sciences, Manipal
22. March, 2014	22. Workshop on ‘Pharmacoeconomics’, at KMC, Manipal
23. March, 2014	23. Faculty development programme on ‘Innovation and Entrepreneurship’ at Manipal University Technology Business Incubator, India
24. September,	

	<p>2014</p> <p>25. October, 2014</p> <p>26. December, 2014</p> <p>27. December, 2014</p>	<p>24. Workshop on ‘Investigator Training Program’ conducted by Pfizer at KMC, Manipal</p> <p>25. Regional workshop on ICD-10, at School of Allied Health Sciences, Manipal</p> <p>26. 2nd International Conference on Ayurveda, Unani, Siddha and Traditional Medicine, at Institute of Indigenous Medicine, Colombo, Sri Lanka</p> <p>27. 47th Annual Conference of the Indian Pharmacological Society (IPSCON Guwahati-2014), Guwahati, Assam, India</p>
Manjunath Shetty	<p>1. March, 2014</p> <p>2. September, 2014</p> <p>3. December, 2014</p>	<p>1. Workshop on ‘Pharmacoeconomics’, at KMC, Manipal</p> <p>2. Workshop on ‘Investigator Training Program’ conducted by Pfizer at KMC, Manipal</p> <p>3. 47th Annual Conference of the Indian Pharmacological Society (IPSCON Guwahati-2014), Guwahati, Assam, India</p>
Shakta Mani Satyam	<p>1. March, 2014</p> <p>2. March, 2014</p> <p>3. May, 2014</p>	<p>1. A workshop on “Fundamentals of mass spectrometry-based proteomics for beginners” held at Institute of Bioinformatics, Bangalore</p> <p>2. A workshop on “Pharmacoeconomics” held at Department of Biochemistry, Kasturba Medical College, Manipal</p> <p>3. A CME and workshop on “Diabetes mellitus and cardiovascular disease: Therapeutics and Investigations” held at Department of Pharmacology, Kasturba Medical College, Manipal</p>

	<p>4. September, 2014</p> <p>5. October, 2014</p>	<p>4. A workshop (8 hrs) on “Investigator training program” held at Department of Pharmacology, Kasturba Medical College, Manipal conducted by Pfizer Ltd.</p> <p>5. A workshop on “Digitized Lab-based teaching in human physiology” held at Department of Physiology, Melaka Manipal Medical College, Manipal conducted by AD instruments.</p>
Ujjal Bose	<p>1. March, 2013</p> <p>2. February, 2013</p> <p>3. December, 2013</p> <p>4. May, 2014</p>	<p>1. Training for COSH/DESEAR and procedure risk assessment form guidelines</p> <p>2. Post-genomics and bioinformatics’ on the Sutton Bonnington Campus</p> <p>3. Good Clinical Practice</p> <p>4. Introduction to quantitative research’. University Park Campus, University of Nottingham, UK</p>

9. Participation / contribution of teachers to the academic activities including teaching, consultancy and research

Faculty - year	Academic activities including teaching , consultancy and research (Guest lectures/chairing sessions/awards/resource person in workshop)
Dr. Vasudha Devi – 2012	<ul style="list-style-type: none"> ➤ Guest lecture: ‘Research methodologies for descriptive studies’ in World Siddha Doctors Meet at Chennai, India - 2012, April ➤ Second prize for Audio Visual Material ‘preparing drug for parenteral administration and setting up an intravenous infusion’: Awarded during MMMC annual day in 2012.

Mr.Ujjal Bose – 2012	<ul style="list-style-type: none"> ➤ PhD Sponsorship: International Office ; University of Nottingham(UoN), UK - September 2012 ➤ Grant by School of Medicine, Division of Graduate Entry Medicine. Derby, UoN, UK – to cover expenses for PhD covered through: - October 2012
Dr.Arul Amuthan - 2012	<ul style="list-style-type: none"> ➤ Associate editorship in International Journal of Pharmacology and Clinical Sciences (www.ijpcs.net), an official publication of Indian Siddha Medical Graduates Association, India - January.2012 ➤ Resource talk on Recent researches in Traditional Medical systems for cancer – in World Siddha Doctors Meet organized by Indian Siddha Medical Graduates Association, at Chennai - April 2012 ➤ Talk given on “Traditional & Complementary Medicine (TCM)” to first year medical students of Melaka Manipal Medical College, during PPD session. – 2012
Dr. Vasudha Devi – 2013	<ul style="list-style-type: none"> ➤ Resource person: ‘Assessment in clinical setting’ Assessment in higher education workshop organized by Manipal Center for Professional and Personal Development, Manipal (MCPD) - 2013, January ➤ Resource person: ‘PBL case design’ workshop organized by Kasturba Medical College, Mangalore, India during 1st National Conference on Pediatric Education - 2013, August-September ➤ Judged oral presentations during IPSCON - 2013 - December. <ul style="list-style-type: none"> ➤ Best Poster award for the poster entitled ‘Impact of Mentored student project on students’ knowledge, skills and attitude regarding research at National Workshop on “Assessment in Higher Education” by Manipal Centre for Professional and Personal Development (MCPD) , Manipal University, Manipal 10th – 12th January, 2013.
Dr.Arul Amuthan – 2013	<ul style="list-style-type: none"> ➤ Travel grant obtained from ICMR, India (No. 3/2/TG-37/HRD-2013, dated 19.2.2013) To present my research paper on “<i>Kadukkai Maathirai</i> (A Traditional Indian Polyherbal Formulation) Improves Haemoglobin, Mean

	<p>Corpuscular Volume and Serum Ferritin: Open-Label, Single Arm Study in Anaemia of South India” in Hong Kong Pharmacy conference 2013, at Hong Kong – March 2013</p> <ul style="list-style-type: none"> ➤ Resource talk on Comparative in-vitro studies of three herbometal anticancer Siddha drugs in World Siddha Doctors Meet organized by Indian Siddha Medical Graduates Association, India. - April 2013 ➤ Travel grant obtained from DST, India (SB/ITS-Y/02789/2013-2014) To present my research “Chemical analysis and evaluation of anticancer activity of <i>thamira kattu chendooram</i>, a siddha nano-formulation in Ehrlich Ascites Carcinoma bearing mice.” In 8th International Conference on Traditional Asian Medicines, at Sancheong, South Korea – September 2013. ➤ Best poster award for ‘Tender coconut water enhances the activity of hydrochlorothiazide in rates: in reducing renal excretion of calcium and uric acid’ in Symposium on ‘Food as Medicine’ jointly organized with Indo-Queensland Research Initiative Project Fund and Department of Pharmacy Practice, at MCOPS, Manipal University – Oct. 2013
Ms. Tatiyana Mandal – 2013	<ul style="list-style-type: none"> ➤ Best poster award for the paper “ Reflective Summaries in assessing students’ attitudes towards end-of-life care” at National Workshop on “Assessment in Higher Education” by Manipal Centre for Professional and Personal Development (MCPD) , Manipal - January, 2013 ➤ Speaker in Great Ideas in Medical Education (GIME) category at 10th Asia Pacific Medical education Conference (APMEC) , NUS, Singapore - January, 2013
Dr. Vasudha Devi – 2014	<ul style="list-style-type: none"> ➤ Resource person: ‘PBL case design’ workshop on PBL during 47th ISHACON, organized by ISHA, Manipal Chapter, India - 2014, March ➤ Chairperson in ‘Pharmacoeconomics’ workshop conducted by the department of Pharmacology, KMC, Manipal. on 22nd March 2014
Arul Amuthan 2014	<ul style="list-style-type: none"> ➤ Invited as an expert in curriculum committee for BSMS course in Central Council for Indian Medicine, New Delhi. - May 2014

	<ul style="list-style-type: none"> ➤ One of the invited expert among 23 members to discuss the new Indian govt. agenda for Suggestions regarding functioning of Medial councils and steps for achieving task on Traditional Medicine, conducted by Central Council for Indian Medicine, New Delhi.- July 2014 ➤ Talk given on “Home Herbal garden : A Live Pharmacy” to faculties of Manipal University at Dept. of MCPD - June 2013 ➤ Certificate of appreciation for my talk ‘Home Herbal garden: A Live Pharmacy’ by Manipal Centre for Professional and Personal Development, Manipal University. - Sept, 2014 ➤ Elected as Chairman Scientific committee of Indian Siddha Medical Graduates Association, Kanyakumari - Sept 2014 ➤ Demonstrator in Hands-on workshop on Basic Techniques of Molecular Biology, organized by Dept. of Pharmacology, KMC and MMMC, Manipal University - October, 2014 ➤ Co-Chairperson In a scientific session of oral presentation in 2nd International Conference on Ayurveda, Unani, Siddha and Traditional Medicine, Colombo - December, 2014 ➤ Key note speaker in a scientific session of 2nd International Conference on Ayurveda, Unani, Siddha and Traditional Medicine, Colombo - December, 2014
Ms. Debasree Deb – 2014	Dept. of Pharmacology and Dept. of Biochemistry, KMC, Behavioral biochemical and histological analysis of effects of ACEIs and ARBs on learning and memory – ongoing, 2014
Mr. Manjunath Shetty- 2014	<ul style="list-style-type: none"> ➤ Dept. of Pharmacology, KMC Manipal, Kasturba Medical college Manipal - Effect of acacia auriculiformis leaves on scopolamine induced amnesia - Completed (2014) ➤ Dept. of Psychiatry, Baliga hospital Udupi - Alcohol de-addiction and dependence, withdrawal symptoms in south karnataka (A sociodemographic study) - Completed (2014)
Ms. Tatiyana Mandal – 2014	Second prize in poster competition on “Ethics in laboratory medicine” organized by School of Allied Health Sciences, Manipal University, Manipal - April, 2014

Dr. Vishal – 2014	➤ Demonstrator for Hands-on workshop on Basic Techniques of Molecular Biology, organized by Dept. of Pharmacology, KMC and MMMC, Manipal University- October, 2014
Mr. Shakta Mani Satyam	➤ Chaired a scientific session in an International Conference on Pharmacy and Pharmaceutical Sciences held at Singapore as “Chairperson” - September, 2014
Mr. Ujjal Bose – 2014	<ul style="list-style-type: none"> ➤ Best Abstract: EBCOG 2014, 23 European Congress of Obstetrics and Gynaecology, Glasgow, Scotland, UK. – May 2014 ➤ Resource Person : Hands-on workshop on basic molecular techniques & effective use of samples, Dept of Pharmacology, KMC, Manipal University – Oct. 2014

10. Collaboration with other departments/ institutions, at the State, National and International levels, and their outcome during the past two years

Faculty	Department, Institution, Name of the project - Outcome (completed/ongoing) (Month, year)
Arul Amuthan 2012	<ul style="list-style-type: none"> ➤ Dept .of Pharmacognosy, Manipal College of Pharmaceutical Sciences - Physicochemical properties of selected Siddha formulations - Completed, 2012 ➤ Dept .of Pharmacognosy, Manipal College of Pharmaceutical Sciences - Invitro and in vivo anticancer activity of four Siddha polyherbal formulations.- Completed, 2012
Arul Amuthan 2013	➤ Dept. of Biotechnology, Manipal Institute of Technology - Physicochemical evaluation of mineral based siddha drugs - Completed, 2013
Arul Amuthan – 2014	➤ Dept. of Pharmacology, SDM Research Center, Udupi - Phytochemical screening and HPTLC fingerprint of selected herbal preparations - Ongoing 2014
Ms. Smita Khandelwa 1 – 2014	➤ Radiotherapy and Oncology, KMC, Manipal - Intensive Monitoring of Adverse Drug Reactions and their Impact on Pharmacoeconomics and Quality of Life in Cancer Patients on Chemotherapy - Ongoing, December 2014

Ms.Tatiyana - 2014	Department of Pharmacology and department of Psychiatry, KMC, Manipal - Genotyping of CYP450 genes and SERT genes in depressive patients in a south Indian population – ongoing 2014
Dr.Vishal – 2014	Dept .of conservative dentistry and endodontics, Manipal College of Dental Sciences, Manipal and Mangalore - Effect of calcium hydroxide and triple antibiotic paste as intracanal medicaments on the incidence of inter-appointment flare-up in diabetic patients: An in vivo study - Completed, 2014
Arul Amuthan 2013	<ul style="list-style-type: none"> ➤ Dept. of Siddha, National Institute of Siddha, Chennai - Kadukkai Maathirai (A Traditional Indian Polyherbal Formulation) Improves Haemoglobin, Mean Corpuscular Volume and Serum Ferritin: Open-Label, Single Arm Study in Anaemia of South India. - Completed, 2013 ➤ Dept. of Siddha, Sree Sairam Siddha Medical College and Research center, Chennai, Chemical standardization of few traditional medicines: Miruthar singi and Pavala parpam - Completed, 2013
Mr. Ujjal Bose – 2012	➤ International PhD at the University of Nottingham, United Kingdom, Research Grant Application: Submitted ; under review internally for resubmission in 2015 - 2012 onwards – ongoing till now.
Mr. Ujjal Bose – 2014	<p>➤ Dr Raheela Khan, Obstetrics and Gynaecology, School of Medicine, Derby, University of Nottingham; Repton School, Repton, Derby; Nuffield Foundation – Topic: Expression of Potassium channels that regulate proton dynamics exposes a kink in cancer metabolism as potential targets – Gold Crest award – Nuffield Foundation – Ongoing 2014.</p> <p>1. As co-investigator : Newton Fund: MRC-DBT-DFID Joint Case for Support Form for Global Research Programme: Addressing the health needs of women and children in the most disadvantaged populations globally. Research Project summary information Project title: An evaluation of hypertensive diseases of pregnancy based on clinical, social and biological factors in a Nepalese population. Project sites include School of Medicine, University of Nottingham, UK, School of Life Sciences, Manipal University, India, Manipal College of Medical Sciences, Pokhara, Nepal, Paropkar Maternity and Women’s Hospital, Kathmandu, Nepal. - November 2014 ongoing.</p>

11. Priority areas for Research and details of the ongoing projects, important and noteworthy publications of the faculty, during past two years.

Areas of research: Ethnopharmacology, behavioral pharmacology, drug discovery from natural products, integrative medicine, Traditional Medicine for cancer and reproductive diseases, Dental pharmacology, Experiments on animal models of human diseases- Pain, Inflammation, Diabetes, Myocardial Ischemia-Reperfusion Model, Hyperlipidemia, Drug toxicity, Cataract, Macular degeneration, Hepatotoxicity, Nephrotoxicity, Membrane stabilizing activity, Immunotoxicity, in vitro and in vivo antioxidant potential, Allergic conjunctivitis, Allergic rhinitis, Epistaxis, Epilepsy, Aging, Topical bacterial and fungal infections, Medical education, basic research in pharmacology and clinical research, Wound healing, neuropharmacology, Pharmacovigilance and Quality of Life in Cancer patients.

Ongoing:

Category	Number
Funded research projects	2
Non-funded research projects	5
PhD research projects	5
PG research projects	0
UG research projects	4

Last 3 years (January 2012- December 2014):

		2012	2013	2014
Completed funded research projects		2	1	2
Completed non-funded research projects		8	7	8
Completed PhD research projects				
Completed PG research projects				
Completed UG research projects		7	5	13
Publications	International	10	9	13
	National	5	8	12
Books				
Chapters in books				
Conference presentations	International	7	15	6
	National	1	6	4

Ongoing funded research projects

SI#	Title	Principal Investigator	Funding agency	Funding amount
1.	Behavioral, biochemical and histological analysis of the effects of ACEIs and ARBs on learning and memory in Wistar rats	Dr. Veena Nayak, Co-investigator – Debasree Deb	ICMR	Rs. 12 lacs
2.	Canakinumab Antiinflammatory Thrombosis Outcome Study	Dr Tom Devasia (sub-I: Dr Yeshwanth Rao K	Novartis	INR 10 Lacs

Ongoing non funded research projects

SI No.	Title	Faculty involved
1.	Impact of mentored student projected on students' learning and self-regulated learning	Dr Vasudha
2	Are drug promotional literatures providing balanced and reliable medication information: A critical evaluation using WHO guidelines.	K. Ganesh Shenoy, Dr. Anoosha Bhandarkar, Manjunath Shetty, Dr. Vasudha Devi
3	Efficacy and Safety of Tadalafil versus Sildenafil in Pulmonary Arterial Hypertension: A Prospective Randomized Open label Comparator Study	Dr Yeshwanth Rao K
4	Item Analysis of Multiple True False Questions (MTFs) of Undergraduate Pharmacology Examinations in an International Medical School in India	Dr Yeshwanth Rao K
5	Nephroprotection studies based on bioactivity guided fractions of Vernonia cinerea (Asteraceae) against cisplatin induced damage - An experimental pharmacological approach.	Arul Amuthan

Ongoing PhD projects in the department:

SI No.	Title	Name of the student	Guide
1	Intensive Monitoring of Adverse Drug Reactions and their Impact on Pharmacoeconomics and Quality of Life in Cancer Patients on Chemotherapy.	Smita Khandelwal	Dr. MS Vidyasagar
2	Behavioral, biochemical and histological analysis of the effects of ACEIs and ARBs on learning and memory in Wistar rats	Debasree Deb	Dr. K.L. Bairy
3.	Impact of functional polymorphisms in SLC6A4 gene and CYP2C19 gene on treatment response of escitalopram in patients with major depression	Tatiyana Mandal	Dr. KL Bairy
4	Influence of gender and obesity on analgesic modulation of tramadol in rats: A neuroendocrinological approach	Shakta Mani Satyam	Dr. K. L. Bairy Dr. Vasudha Devi
5	Nephroprotection studies based on bioactivity guided fractions of Vernonia cinerea (Asteraceae) against cisplatin induced damage - An experimental pharmacological approach	Dr.Arul Amuthan	Dr.Vasudha Devi

Publications in 2012:

1. Devi V. International Journal of Pharmacology and Clinical Sciences: a knowledge base for scientific enquiry and better patient care. IntJPharmacol and CliSci 2012;1:1-2.

2. Devi V. Teaching P-drug selection: experiences from a medical school in India. *IntJPharmacol and CliSci* 2012;1:9-14.
3. Devi V, Abraham RR, Adiga S, Ramnarayan K, Kamath A. Fostering research skills in medical students through mentored student project: Example from an Indian medical School. *Katmandu University Medical Journal* 2012; 8: 294-8.
4. Devi V, Devan D, Soon CP and Han.PW Comparison of self-directed learning readiness among students experiencing hybrid and traditional curriculum. *Journal of Clinical and Diagnostic Research*. 2012 August, Vol-6(6): 1047-1050.
5. Abraham RR, Ramnarayan K, George BM, Adiga I, Kumari GR, Suvarna N, Devi V et al. Effects of PBL along with other active learning strategies on short-term learning outcomes of students in an Indian medical school. *International Journal of Health & Allied Sciences* 2012;1:98-103.
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12. Velayudam, Ilavarasan, Amuthan A. Physico-chemical evaluation of kadukkaimaathirai and its tablet formulation, a Siddha iron preparation used in anaemia. *Int J Pharmacol and ClinSci* 2012;1:3-8.
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14. Sathish R, Madhavan R, Vasanthi RH, Amuthan A. In-vitro alpha-glucosidase inhibitory activity of abragachendhooram, a Siddha drug. *Int J Pharmacol and ClinSci* 2012;1:74-6.

15. Velayudam, Amuthan A, Ilavarasan. Hepatoprotective activity of kadukkaimaathirai (A Siddha polyherbal formulation) against carbon tetrachloride induced liver damage in Rat. *Res J Pharmaceutical Sci* 2012;1:17-21.

2013

1. Vasudha Devi, Alicia Tan Wei Ping, Tan Tuan Ying, Sadhin Subhash, Samia Mahmood Hafez Amir. Alcohol use, its predictors and academic performance among Malaysian students of a medical college in India. *Education in Medicine Journal* 2013; 5: e72-e76.
2. Devi V, Upadhye P, Ram P, Menezes RG. Development of a teaching module for parenteral drug administration and objective structured practical examination stations in pharmacology. *Indian J Pharmacol* 2013;45:587-92.
3. Vashe A, Devi V, Rao R, Abraham RR, Pallath V. "Link between self-directed learning readiness and academic performance of medical students," in 2013 IEEE International Conference in MOOC, Innovation and Technology in Education (MITE), IEEE conference Publications, 2013, Page(s): 130 – 133. DOI: 10.1109/MITE.2013.6756320
4. Rao Y K. Undergraduate Pharmacology: Student's view – A Questionnaire Study. *J. Phys. Pharm. Adv.*, 2013, 3(2):27-32.
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10. Amuthan A, Subramaniam BS. 18 Siddhars and Siddha Medicine: The forgotten Indian Saints and their Medical Knowledge. *University News* 2013;51:41-44 & 53.

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Details of conference presentations

2012

International

Sl. No	Title of the presentation	Name of the faculty	Details of Conference (Name, place, date, month, year)
1	Teaching P-drug selection-experiences from an Indian medical School	Dr. Vasudha Devi	DUPHAT 2012, between 12th-14th March 2012 at Dubai International Convention and Exhibition center, Dubai.
2	Introducing Team Based Learning (TBL) in Undergraduate Pharmacology.	Yeshwanth Rao K	2 nd Saudi International Medical Education Conference (SIMEC2012) held from 24 – 26 apr 2012 at King Faisal Conference Hall, Intercontinental Hotel, Riyadh, Soudi Arabia
3	Wound healing activity of oil extract of <i>Ficus religiosa</i> bark on burn wound and dexamethasone suppressed burn wound models in	Tatiyana Mandal	Dubai International Pharmaceuticals and technologies Conference, Dubai, UAE (12 th -14 th March,

	rats		2012)
4	Memory Enhancing and Antioxidant Effects of Angiotensin Receptor Blockers in Scopolamine-Induced Amnesia Model	Debasree Deb	International Conference on Biological and Life Sciences (ICBLS 2012), Singapore, 23-24 July,2012.
5	Intensive Monitoring of Adverse Drug Reactions in Cancer Patients on Chemotherapy.	Smita Khandelwal	International Conference on Biological and Life Sciences (ICBLS 2012), Singapore, 23-24 July, 2012.
6	Evaluation of efficacy of stem cell conditioned media in excision wound healing in male Wistar rats	Devasrita Dash	International Conference on Biological and Life Sciences (ICBLS 2012), Singapore, 23-24 July,2012.
7	Hepatoprotective activity of <i>Kadukkaimaathirai</i> (a Siddha polyherbal formulation) against carbon tetrachloride induced liver damage in rat	Arul Amuthan	International Conference on Global public health at Colombo, Sri Lanka – Dec. 2012.

National

Sl. No	Title of the presentation	Name of the faculty	Details of Conference (Name, place, date, month, year)
1	Economic Impact of Adverse Drug Reactions in Cancer Patients on Chemotherapy.	Smita Khandelwal	58th Annual Conference of Association of Physiologists and Pharmacologists of India (APPICON 2012), Meerut, 18-20 December, 2012.

2013

International

Sl. No	Title of the presentation	Name of the faculty	Details of Conference (Name, place, date, month, year)
1	Evaluating the impact of a program developed to inculcate research essentials among undergraduate students	Dr. Vasudha Devi	18th-20th January 2013 at APMEC organised by the NUS, Singapore
2	A Critical Analysis of the Policies of Human Subject Protection & Basic	Yeshwanth Rao K	AAHRPP (Association for the Accreditation of Human

	Ethical Principles in an Institution Sponsored, Open, Randomised Comparator Study: An Indian Perspective		Research Protection Programme) Conference from 4-6 apr'13 in Miami US
3	Item Analysis of Multiple Choice Questions (MCQs) in Pharmacology in an International Medical School in India	Yeshwanth Rao K	International Conference on Medical Education (ICME 2013) held from 4-6 Oct'13 in Mauritius
4	A Prospective Evaluation And Comparison Of Pain Assessment And Post-Operative Pain Management In Patients After Abdominal Surgery At Government And Private Hospitals	Vishal B	Trends, challenges and opportunities in multidisciplinary healthcare, Kuala Lumpur– 14 th -16 th March 2013.
5	Evaluation of the role of pH in cancer cell proliferation	Ujjal Bose	37 th Congress of the International Union of Physiological Sciences International Convention Centre, Birmingham UK from 21 to 26 July 2013
6	Evaluation of the role of pH in cancer cell proliferation Poster	Ujjal Bose	Satellite Meeting for the 37 th Congress of the IUPS. 'H ⁺ SSS: H ⁺ Ion Sensing, Signalling and Servo-Control'. 27 th July 2013. Department of Physiology, Anatomy and Genetics, University of Oxford, UK.
7	Evaluation of the role of pH in cancer cell proliferation	Ujjal Bose	The 4th Annual Meeting of the International Society of Proton Dynamics in Cancer .Institute of Medical Engineering (IMETUM) TechnischeUniversitaetMuenche n. Munich 2013
8	Use of Reflective Summary Writing Activity in a Personal and Professional Development Curriculum	Tatiyana Mandal	10 th Asia Pacific Medical education Conference (APMEC) , NUS, Singapore 16 th -20 th January, 2013
9	Dose-dependent effects of Angiotensin Converting Enzyme (ACE) Inhibitors in Scopolamine-Induced Amnesia Model: A Biochemical Analysis	Debasree Deb	12 th Meeting of the Asia Pacific Federation of Pharmacologists, Shanghai, July 23 rd -24 th , 2013
10	Poster presentation on Intensive Monitoring of Adverse Drug	Smita Khandelwal	12th Meeting of the Asia Pacific Federation of

	Reactions in Cancer Patients on Chemotherapy.		Pharmacologists (12 th MAPFP), Shanghai, China, 9-13 July, 2013.
11	Wound healing activity of stem cell conditioned media in burn wounds in male Wistar rats	Devasrita Dash	12th Meeting of the Asia Pacific Federation of Pharmacologists (12 th MAPFP), Shanghai, China,9-13 July, 2013.
12	<i>KadukkaiMaathirai</i> (A Traditional Indian Polyherbal Formulation) Improves Haemoglobin, Mean Corpuscular Volume and Serum Ferritin: Open-Label, Single Arm Study in Anaemia of South India	Arul Amuthan	Hong Kong Pharmacy conference 2013, at Hong Kong – March 2013
13	Chemical analysis and evaluation of anticancer activity of <i>thamirakattuchendooram</i> , a siddha nano-formulation in Ehrlich Ascites Carcinoma bearing mice.	Arul Amuthan	VIII International Conference on Traditional Asian Medicines, at Sancheong, South Korea – September 2013.
14	Safety profile of <i>kadukkaimaathirai</i> (A siddha polyherbal formulation) in Wistar rats.	Arul Amuthan	5 th International Conference on Medicinal Plants and Herbal Products at Manipal – Jan 2013.
15	<i>ThamiraKattuChendooram</i> induces apoptosis by intrinsic pathway in human hepatic carcinoma cells: Scientific evidence for anticancer activity of traditional Siddha herbo-metal nano formulation.	Arul Amuthan	International Humboldt Kolleg on Bench to Bedside Translational Research : Potential Benefits of Interdisciplinary Collaboration, at KMC, Manipal – Nov.2013

National

Sl. No	Title of the presentation	Name of the faculty	Details of Conference (Name, place, date, month, year)
1	Effect of different stage tender coconut water on urine excretion in rats	Arul Amuthan	National Seminar on Anthropology of Traditional Indian Food, at Mysore – March 2013
2	Comparative in-vitro anticancer activity of neera	Dr. Vasudha Devi	46 th IPSCON, Bangalore, India held between 16 to 18 th

	dimuthuvallathymezugu and thamirakattuchendooram		December 2013
3	Impact of Mentored student project on students' knowledge, skills and attitude regarding research.	Dr.Vasudha Devi	National Workshop on "Assessment in Higher Education" by Manipal Centre for Professional and Personal Development (MCPD), Manipal University, Manipal 10 th – 12 th January, 2013.
3	Use of Reflective Summaries in Assessing Students' Attitudes toward End-of-life Care	Tatiyana Mandal	National Workshop on "Assessment in Higher Education" by Manipal Centre for Professional and Personal Development (MCPD), Manipal University, Manipal 10 th – 12 th January, 2013.
4	Tender coconut water enhances the activity of hydrochlorothiazide in rats: in reducing renal excretion of calcium and uric acid	Arul Amuthan	Symposium on Food as Medicine, jointly organized with Indo-Queensland Research Initiative Project Fund and Department of Pharmacy Practice, at MCOPS, Manipal University – Oct. 2013
5	Analgesic modulation of amitriptyline and gabapentin in male and female Wistar rats	Shakta Mani Satyam	Neuropsychology Conference held at MGIMS, Wardha in February, 2013
6	Acute and long term safety evaluation of Zincovit tablets with grape seed extract (Nutritional food supplement) in rodents	Shakta Mani Satyam	ICMPHP 2013 held at Manipal University, Manipal in January, 2013

2014

International

Sl. No	Title of the presentation	Name of the faculty	Details of Conference (Name, place, date, month, year)
1	Evaluating impact of students' educational experiences in research through reflective summaries	Dr. Vasudha Devi	3 rd conference of the South East Asian Regional Association for Medical Education (SEARAME) held between 12 th -15 th November 2014 at

			Colombo, Sri Lanka.
2	Pain Management Of Symptomatic Apical Periodontitis And Interappointment Flare- Ups Using Triple Antibiotic Paste As Intracanal Medicament In Diabetic Patients- Case Series	Vishal B	UAE International Dental Conference & Arab Dental Exhibition, AEEDC Dubai 2014, 4 th – 6 th February 2014
3	Evaluation of the Effect of <i>Chromolaena odoratum</i> Burn Wound Infection by <i>Pseudomonas aeruginosa</i> in Wistar Rats	Tatiyana Mandal	International conference on food, biological and medical sciences (FBMS 2014) held in January 28-29, 2014 at Bangkok, Thailand
4	Topical Treatment Of Common Warts Using Kaalaanikalimpu (A Siddha Drug): A Report	Arul Amuthan	2 nd International Conference on Ayurveda, Unani, Siddha and Traditional Medicine, at Institute of Indigenous Medicine, Colombo, Sri Lanka – 16-18 December 2014
5	Grape seed extract and Zinc containing multivitamin-mineral nutritional food supplement protects heart against myocardial ischemic-reperfusion injury in Wistar rats	Shakta Mani Satyam	International Conference on Pharmacy and Pharmaceutical Sciences held at Singapore during September, 11-12, 2014
6	Effect of pyramid exposure on learning memory in kainite induce temporal lobe epilepsy in adult Wistar rats- a behavioral study	Durgaprasad S	Indo-Global Healthcare Summit & Expo 21-23 June 2014. Hyderabad, India

National

Sl. No	Title of the presentation	Name of the faculty	Details of Conference (Name, place, date, month, year)
1	Effects of ACEIs in ameliorating scopolamine-induced memory impairment in rats: behavioural, biochemical and histological analysis	Debasree Deb	47 th Annual Conference of Indian Pharmacological Society, Guwahati, 28 th -30 th Dec, 2014.
2	<i>In-vitro</i> anticancer activity of chloroform extract of <i>nandhimezugu</i> (A Siddha anticancer formulation) in different cancer cell lines	Arul Amuthan	47 th Annual Conference of the Indian Pharmacological Society (IPSCON Guwahati-2014), Guwahati, Assam, India – 28 th – 30 th December 2014.

3	A neuroendocrinological approach to develop an inimitable analgesic molecule	Shakta Mani Satyam	Innovation day held at MUTBI, Manipal in December, 2014
4	Biochemical evaluation of cholinergic activity of acacia auriculiformis in rat brain	Manjunath Shetty	47 th Annual Conference of the Indian Pharmacological Society (IPSCON Guwahati-2014), Guwahati, Assam, India – 28 th – 30 th December 2014.

12. Placement record of the past students and the contribution of the department to aid student placements

After successful completion of Stage IIA or year 2, students proceed to stage IIB or year 3

13. Plan of action of the department for the next five years

- ✓ Preparation MBBS record book
- ✓ Further strengthening of integrated curriculum of MBBS course based on students' and faculty feedback
- ✓ Incorporating Multiple choice questions (MCQs) in place of MTFs
- ✓ Revision of BDS syllabus
- ✓ Conducting workshops for undergraduate students
- ✓ Incorporation of clinically relevant practical exercises in BDS curriculum
- ✓ Conducting research project collaborating with other Institution of Manipal University
- ✓ Guiding PhD theses
- ✓ Involving in basic and clinical pharmacology research projects
- ✓ Publishing research works in indexed journals with impact factors
- ✓ Organizing guest lectures and workshops
- ✓ Organizing intra and inter collegiate competition for students.

MICROBIOLOGY

1. Faculty profile - adequacy and competency of faculty

There are fourteen teaching faculty members who meet the requirements for teaching Phase I Stage IIA MBBS, Phase I Year 2 BDS and Second year allied health science programs as per the requirements of the regulatory bodies

Sl No.	Name	Qualification	Designation	Teaching experience
1	Dr. Girija Ratna Kumari	MBBS MD	Professor & Head	21
2	Dr. Indira Bairy	MBBS MD	Professor	24
3	Dr. Shobha K L	MBBS MD	Professor	19
4	Dr. Ciraj A M	M. Sc, Ph. D	Professor	18
5	Dr. Amita Shobha Rao	M. Sc, PhD	Associate Professor	27
6	Dr. Sujatha Bhat	M. Sc, Ph. D	Associate Professor	07
7	Mr. Gowrish Rao S	M. Sc	Selection Grade Lecturer	17
8	Mr. Anand K M	M. Sc	Selection Grade Lecturer	16
9	Dr. Vinod Pallath	M. Sc, Ph. D	Asst Prof.	10
10	Dr. G. Sreejith	M. Sc, Ph.D	Asst Prof.	10
11	Mr. Nishanth B Bhat	M. Sc	Sr Grade Lecturer	09
12	Ms. Jessica Sushma D'Souza	M. Sc	Sr Grade Lecturer	09
13	Ms. Rituparna Chakraborty	M. Sc	Sr Grade Lecturer	06
14	Ms. Nagalakshmi N.	M. Sc	Lecturer	04

Number of faculty positions sanctioned and filled: 14

The department has adequate number of faculty members. Two faculty members have received the good teacher award and many faculty members have been rated among the top 5 teachers on several occasions at the institutional level. Students find all the teachers in the department competent and helpful.

2. Student profile –

Entry level competency: Refer to appendix No.1

Socioeconomic status: Generally most students are from middle-income group (detailed information not available)

Language proficiency: English

3. Changes made in the courses or programmes during the past two years and the contribution of the faculty to those changes

The MBBS and BDS programs are conducted in compliance with the requirements of the Malaysian Qualifications Agency (MQA) which is the regulatory body governing the health sciences education in Malaysia. Microbiology is taught in Phase I Stage IIA for MBBS and Phase I Year 2 for BDS students. Based on the feedback received from the students and faculty, the intended learning objectives were reviewed and revised accordingly. Two faculty members were assigned to work on individual blocks. They identified objectives to be revised or deleted. More active and student centered learning strategies like team based learning, site visits, crosswords and creating microbial models were included. Assessment was also revised so as to align with the curricular outcomes.

4. Trends in the success and drop out rates of students during the past two years

Batch 24 : Melaka March 2009 Phase I Stage II (held in February 2011)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Microbiology	106	4	110	101	3	104	94.55

Batch 25 : Melaka September 2009 Phase I Stage II (held in August 2011)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Microbiology	153	7	160	146	7	153	95.63

Batch 26 : Melaka March 2010 Phase I Stage II (held in February 2012)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Microbiology	119	8	127	116	7	123	96.85

Batch 27 : Melaka September 2010 Phase I Stage II (held in August 2012)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Microbiology	138	3	141	126	3	129	91.49

Batch 28 : Melaka March 2011 Phase I Stage II (held in February 2013)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Microbiology	147	11	158	124	10	134	84.81

Batch 29 : Melaka September 2011 Phase I Stage II (held in August 2013)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Microbiology	179	24	203	149	21	170	83.74

Batch 30 : Melaka March 2012 Phase I Stage II (held in February 2014)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Microbiology	120	32	152	106	31	137	90.13

Batch 31 : Melaka September 2012 Phase I Stage II (held in August 2014)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Microbiology	254	15	269	216	11	227	84.38

Batch 32 : Melaka March 2013 Phase I Stage II (held in February 2015)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Microbiology	140	42	182	126	37	163	89.5

BDS Batch 1 : Phase I Year 2 (held in July 2011)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Microbiology	21	-	21	21	-	21	100

BDS Batch 2 : Phase I Year 2 (held in July 2012)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Microbiology	49	-	49	49	-	49	100

BDS Batch 3 : Phase I Year 2 (held in July 2013)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Microbiology	70	-	70	70	-	70	100

BDS Batch 4 : Phase I Year 2 (held in July 2014)

Subjects	Total appeared			Passed			
	Regulars	Refreshers	Total	Regulars	Refreshers	Total	(%)
Microbiology	68	-	68	67	-	67	100

Number of dropouts in the last two years: MBBS - 19 out of 700 students (2.7 %)

BDS – 1out of 138 students (0.72%)

5. Learning resources of the departments - library, computers, laboratories and other resources

- Faculty members and students have access to the air conditioned Health Sciences Library of the University which has large numbers of latest editions of textbooks, journals, e-journals, internet facility, photocopying and e-books. Faculty can access the MMMC staff library which has sufficient copies of latest editions of textbooks in Microbiology.
- The faculty members have access to the academic section of MMMC which has common computer terminals with internet connection and scanner.
- There are two air conditioned fully equipped laboratories for the students.
- Faculty are given individual laptops with free internet access
- Audio visual materials for student learning prepared by faculty are also in use

6. Modern teaching methods practiced and use of ICT in teaching – learning

Active learning is emphasized in the curriculum. Self-Directed Learning (SDL), Problem Based Learning (PBL), Case Based Learning (CBL), audio-visual aids and practical sessions are part of teaching learning methods.

PBL: Students are introduced to a conceptually and clinically significant topic, presented in the format of a case scenario. These are designed specially to illustrate the relevance of Microbiology concepts to medical practice. The students are divided into small groups. Each group has a faculty as facilitator. PBL is conducted in two sessions. In the first session (brain storming session), cases are given and the students work together to analyze the problem and clarify difficult terms, identify key issues, formulate a hypothesis, and list the learning objectives. In the second session (presentation session), which is conducted after a week, students present the specified learning objectives.

The mode of teaching makes use of both traditional blackboard teaching and modern techniques such as power point presentations with good use of quality images and videos. Students can access audiovisual learning materials prepared by faculty members in the health sciences library of the university.

Case based learning: Using cases (real or paper based), to enhance the critical thinking and reasoning is extensively used during teaching-learning sessions.

Team based learning: To inculcate the spirit of collaborative and cooperative learning, some topics are conducted using the team based learning approach.

Gaming: To make learning fun and to enhance retention, methods like crosswords, puzzles and other gaming approaches have been incorporated.

Additional strategies: Studies on infectious diseases featuring in Mentored student projects have helped students develop research skills necessary in the field

7. **Participation of teachers in academic and personal counseling of students**

Each one of the teachers is involved in mentoring a group of students. The responsibilities of a mentor include

- Providing academic and personal counseling to their mentees
- Arrange remedial measures for students who are at the risk of failure
- Guiding the mentored student research projects.
- Helping the students to get acclimatized to campus life in Manipal.
- Promote cultural integration.
- Support co-curricular and welfare activities of the students.

8. **Details of faculty development programmes and teachers who have been benefited during the past two years**

- Guest lecture on “Antibiotic stewardship: Everybody’s bussiness” by Prof. Victor Lim, Dean and Professor of Pathology, Faculty of Medicine, Pharmacy and Health Sciences, International Medical University, Kaula Lumpur, Malaysia organized by Dept. Of Microbiology, MMMC, Manipal Campus, Manipal University on August 22, 2013.
- Manipal Centre for Personal and Professional Development of Manipal University conducts Pedagogic and personal effectiveness workshops on a regular basis. All

faculty members of the department have attended this workshop. Some faculty members act as resource persons in these workshops.

- One guest lecture was organized in each year and all the faculty of the department benefitted from them
- A CME was organized on ‘Antibiotic resistance: current challenges’ in February 2012. Eminent speakers included Prof. Victor Lim from Malaysia and Dr Joy Michael, CMC, Vellore
- Lt. Col. Dr Nandita Hazra, Assistant Professor of Microbiology, AFMC, Pune delivered a guest lecture in microbiology on “ Diagnostic dilemmas in Mycology: Patients to Bench” in August 2011

9. **Participation / contribution of teachers to the academic activities including teaching , consultancy and research**

- All faculty are involved in teaching MBBS, BDS and allied health students
- All faculty members are providing diagnostic consultancy in the department of Microbiology, KMC, Manipal
- All are actively involved in various research activities. Two faculty members have registered for PhD.
- Three of the faculty members have successfully completed FAIMER fellowships from various regional institutes in India
- Few of the faculty are:
 - Members of organizing committee and functioned as resource persons for Workshop on Problem Based Learning for faculty members of Manipal University, organized by Manipal Center for Personal and Professional Development
 - Resource persons for Workshop on Integrated Teaching, organized by Manipal Center for Personal and Professional Development and Chair microbiology, Manipal University.
 - Resource person in National Workshop on Pedagogic and Personal Effectiveness for Physiotherapy teachers (Contact hours : 28), organized by Dept. of Physiotherapy, Manipal College of Allied health sciences, Manipal University
 - Resource persons and adjunct faculty in the Manipal Center for Personal and Professional Development, Manipal University, Manipal.

- Two faculty members have completed two distance education courses by WFME and Open University of UK on Institutional Accreditation
- One faculty has completed a postgraduate diploma in epidemiology and a certificate course in Geographic information system from Indian Institute of Public Health, New Delhi
- Coordinated more than 100 faculty development workshops for medical, dental and allied health teachers as organizer and resource person
- Consultant in curriculum design and evaluation for health science courses
- Global faculty at the FAIMER institute, Philadelphia
- Course Director, MUFILPE, Manipal University-FAIMER International Institute for Leadership in Interprofessional Education, a two-year fellowship program that emphasizes development of leadership competencies for interprofessional education and practice.
- Deputy Director, Manipal Centre for Professional and Personal Development (MCPD)
- Curriculum convention for medical schools, November 2013
- Workshop on active learning at Indian Association of Medical Microbiologists conference, November 2013
- Workshop on interprofessional education, National Conference of Health Professions Education, Mumbai, September 2013
- Faculty development workshop on Teaching, learning and assessment for engineering, management and biotechnology faculty, Manipal University Dubai, July 2013
- Problem Based Learning at the National conference in Pediatric education, Mangalore September 2013
- Invited faculty at the national consultation for professionalism in health profession education at Karmasad, delivered session on faculty development, April 2013
- Workshop on Assessment Strategies, at MMMC Melaka Campus, Malaysia March 2013
- Classroom Assessment Techniques at the National workshop on assessment in higher education, January 2013
- For Faculty development workshops (from 2012-2014) conducted for the members of the Indian Society of Periodontology at various locations in India

- National workshop on Assessment skills for the national faculty of the Indian Association of Palliative Care, Bangalore, January 2013
- Training of Trainers in Palliative care, Calicut, 2014

Chairing sessions/guest faculty/awards/resource person in workshop

1. P.Girija Ratna Kumari. Chaired a session on High level Sterilization at GISICON 2011 in Manipal, 13th & 14th May, 2011
2. Dr Ciraj A M, Professor of Microbiology and Deputy Director of Manipal Centre for Personal & Professional Development received the following awards/fellowships/visiting faculty positions
 - The International Educators Award by the American Society for Microbiology & UNESCO for outstanding contribution in microbiology education.
 - Fullbright Visiting Professorship at Florida International University, USA
 - International Fellowship in Medical Education & Academic Leadership, FAIMER Institute, Philadelphia
 - Invited faculty, National Consultation on Faculty Development for Medical Education, VISION 2020
 - Visiting faculty at Jefferson Medical College, Philadelphia and Herbert Wertheim College of Medicine, Miami.
 - Faculty at FAIMER regional centres, India
 - Training on PBL facilitation at the Drexel University, USA
 - Regional representative at Network Conference at Kathmandu, Nov 2010
3. Dr. Vinod Pallath, was selected as a Faculty for the Fellowship for Advancement in International Medical Education and Research (FAIMER) Regional Center (Seth GS Medical College, Mumbai) program, in July, 2011
4. Ms. Nagalakshmi N, Lecturer in Microbiology received a travel award to attend 1st Global Forum on Bacterial infections at New Delhi in October, 2011
5. Dr. Shobha K.L. BLS-ACLS provider Workshop on 5-7th July 2012 at simlab, Manipal
6. Dr. Ciraj AM, Dr. Vinod Pallath, and Mr. Anand KM participated as a resource person in training workshop “Frame it – Designing instructional objectives” organized by Manipal Centre for Professional and Personal Development (MCPD), Manipal in June 2012

7. Dr. Shobha K.L, Professor of Microbiology was a guest speaker at the symposium in 1st Asia –Pacific Joint PBL Conference, TAIPEI - TAIWAN in October 22-25 2010
8. Dr. Vinod Pallath, Assistant Professor of Microbiology was an invited speaker at the Saudi International Medical Education Conference, April 2010
9. Indian Academy of Science sponsored to attend refresher course in Modern biotechnology techniques - 2012
10. Summer research fellowship – 2012 from Indian Academy of Sciences, Bangalore
11. Dr Indira Bairy was resource person in two day workshop on Autoimmune Diseases & Diagnosis on 2 – 3 Sept, 2013 held at KMC Mangalore
12. Dr Indira Bairy chaired a scientific session in the SIHAM 2014, 10th National Conference between 10 – 12 Jan 2014, held at Coimbatore, Tamil Nadu India
13. Dr Indira Bairy chaired a scientific session in the Manipal Research Colloquium- 2014 held at Manipal University on April 11 & 12, 2014
14. Visiting Scientist Fellowship – 2014 from Indian National Science Academy, New Delhi
15. Dr.P.Girija Ratna Kumari chaired a session in the Manipal Infectious Diseases CME 2014 on 21 December 2014 conducted by Department of Internal Medicine, Kasturba Medical College, Manipal University, Manipal
16. Dr.P.Girija Ratna Kumari judged poster presentation in XVII Annual State Conference of Indian Association of Medical Microbiologists – Karnataka Chapter on “Health Care Associated infections – Clean, Care and Control” organized by Dept. of Microbiology, Kasturba Medical College, Mangalore on 24th February 2013
17. Dr.P.Girija Ratna Kumari given a guest lecture on “Emerging Infectious Diseases” in Fourth Euro-India International Conference on Holistic Medicine ICHM 2014 on 23-26 October 2014 organized by Institute for Holistic Medical Sciences (IHMS), Parumbaikadu, Kottayam, Kerala, India
18. Mr. Anand KM, was selected as a Faculty for the Fellowship for Advancement in International Medical Education and Research (FAIMER) Regional Center (PSG Institute of Medical Sciences and Research, Coimbatore) program, in April, 2014
19. Mr. Anand KM, was selected as a Faculty for the Manipal University- FAIMER International Institute for Leadership in Interprofessional Education (MUFILPE) (Manipal University, Manipal) program, in May, 2015
20. Mr. Anand KM and Dr. Shobha KL, have conducted training workshop on “Mentorship” for students and Faculty members of Father Muller’s Medical College,

Mangalore (2013) AJ Medical college, Mangalore (2013), Yenepoya Medical College, Mangalore (2013), Pondicherry Institute of Medical Sciences, Pondicherry (2014)

Student learning activity organized

1. The department organised 'Model your microbe' and 'Probe' – an intercollegiate undergraduate microbiology quiz as a part of Microfest in 2012, 2013 and 2014

10. Collaboration with other departments/ institutions, at the State, National and International levels, and their outcome during the past two years

- Dr.Vinod Pallath visited GSMC FAIMER (Foundation for Advancement of the International Medical Education and Research) regional institute at Seth G.S. Medical College, Mumbai, India as faculty for teaching and research - 7th to 10th June, 2012
- Mr. Anand K.M. completed the 2 year FAIMER (Foundation of Advancement In Medical Education and Research) fellowship (2010-2012) from PSG FAIMER Research Institute, Coimbatore on a project entitled "Evolving a training program for PBL tutors at MMMC for enhancing their facilitation skills" in April 2012.
- Dr Shobha K.L. completed the 2 year FAIMER (Foundation of Advancement In Medical Education and Research) fellowship (2011-2013) from PSG FAIMER Research Institute, Coimbatore.

11. Priority areas for Research and details of the ongoing projects, important and noteworthy publications of the faculty, during past two years

Five faculty of the department are recognized as PhD guides

Priority areas for research include

- Epidemiology of infectious diseases:
 - Nasal carriage of MRSA among school going children of Udupi taluk; an epidemiological study (Sreejith G. ICMR grant, Rs. 2.64 lakhs)
 - Molecular epidemiology of MRSA nasal carriage among school children (Sreejith G, DBT grant Rs. 3.55 lakhs)
- Evaluation of bactericidal activity of lysostaphin on MRSA
 - Neuroprotective effects of Heparin, Indomethacin and Antibiotics in Acute Pneumococcal Meningitis: A Functional Study on Rat Hippocampal Neurogenesis (Daphne Santhosh, DST grant Rs. 3.54 lakhs)

- Clinical, Geographical, Epidemiological and Molecular Characterization of Scrub Typhus in South Karnataka (Indira Bairy, ICMR grant Rs 29.12 lakhs)
- Medical Education
 - Evolving a training program for PBL tutors at MMMC for enhancing their facilitation skills
- Editorial Assignment:
 - Journal of Medical Microbiology
 - Journal of Microbiology and Biology Education

Ongoing research projects

Category	Number
Funded research projects	2
Non-funded research projects	4
PhD research projects	3
PG research projects	0
UG research projects	5

Last 3 years (2010-2012):

	2010	2011	2012	2013	2014	
Completed funded research projects	0	1	0	-	2	
Completed non-funded research projects	5	7	11	4	-	
Completed PhD research projects	0	1	1	1	-	
Completed PG research projects	1	1	1	-	-	
Completed UG research projects	7	9	8	6	2	
Publications	International	2	7	18	9	23
	National	0	1			
Books	0	0	0	-	-	
Chapters in books	0	1	0	2	-	
Conference presentations	International	1	4	3	8	5
	National	4	6	6	1	3

Ongoing funded research projects

Sl #	Title	Principal Investigator	Funding agency	Funding amount
1.	Molecular epidemiology of Methicillin Resistant Staphylococcus aureus colonizing anterior nares of school going children of Udupi taluk	Mr. Sreejith G.	DBT	Rs. 3.55 lakhs
2.	Clinical, Geographical, Epidemiological and Molecular	Dr Indira Bairy	ICMR	Rs 29.12 lakhs

	Characterization of Scrub Typhus in South Karnataka			
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Completed funded research projects

Sl#	Title	Principal Investigator	Funding agency	Funding amount
1	Neuroprotective effects of Heparin, Indomethacin and Antibiotics in Acute Pneumococcal Meningitis: A Functional Study on Rat Hippocampal Neurogenesis	Dr. Daphne Santhosh	DST	3.54 lakhs
2.	Nasal carriage of MRSA amongst school going children of Udupi taluk, an epidemiological study	Mr. Sreejith G.	ICMR	Rs. 2.64 lakhs

Ongoing PhD research projects

No	Title	Name of the student	Guide
1	Lysostaphin: A Potential Therapeutic Agent for Methicillin Resistant <i>Staphylococcus aureus</i>	Mrs. Nagalakshmi	Dr Indira Bairy
2	Phytochemical investigation and bio prospecting of selected lichen species	Mr. Nishanth B Bhat	Dr. Goutham G shenoy
3	Molecular characterization of <i>Clostridium difficile</i>	Ms. Rituparna Chakraborty	Dr. Mamatha Ballal

Completed PhD research projects

No	Title	Name of the student	Guide
1	Neuroprotective effects of Heparin, Indomethacin and Antibiotics in Acute Pneumococcal Meningitis: A Functional Study on Rat Hippocampal Neurogenesis	Dr. Daphne Santhosh	Dr Indira Bairy
2	Perceptions of teaching learning environment with special reference to Microbiology. A study on undergraduate medical students of Melaka Manipal Medical College, Manipal University	Dr. Vinod Pallath	Dr. K. Ramnarayan (Guide) Dr. Ciraj A.M. (Co-Guide)
3	Epidemiology of Methicillin Resistant <i>Staphylococcus aureus</i> : An investigation among the school going children of Udupi taluk	Mr. Sreejith G	Dr Indira Bairy (Guide) Dr. Ciraj A.M. (Co-Guide)

Publications 2010

1. Reem Rachel Abraham, Vinod Pallath, Asha Kamath.
Inculcating practices based on adult learning principles in medical schools-a possible framework for professional development?
Medical Teacher 2010; 32(6): 538.
2. Bincy M. George, Niveditha Suvarna, Jessica Sushma D'Souza.
Twelve tips for medical students to improve identification of "Learning Issues" in Problem Based Learning
South-East Asian Journal of Medical Education 2010; 4(1): 61

Publications 2011

3. Santhosh D., Rao M.S., Bairy I.,
Pneumococcal Meningitis induced neuronal injury in Wistar rats- A study on neurodegenerative changes in the sub regions of hippocampus.
Australasian Medical Journal 2011, 4: (4) 168-174
4. Daphne Santhosh, Indira Bairy
Neurodegenerative changes in the motor cortex and cerebellum in waster rats following acute pneumococcal meningitis.
International Conference on Bioscience, Biochemistry and Bioformatics 2011; 978-1-4144-9388-3/11: 447-452
5. Jaijesh Paval, Srinivasan Keloth Kaitheri, Arunachanalm Kumar, Sreejith Govindan, Ciraj Ali Mohammed, Raju Suresh Kumar, Sareesh Naduvil Narayanan, Prasad Alathady Maloor
Anti-arthritic activity of the plant tinospora cordifolia willd
Journal of Herbal Medicine and Toxicology 2011; 5(1): 5-10
6. Vasudha Devi, Reem Rachel Abraham, Vinod Pallath, Ciram AM
Students' perspective regarding an ideal PBL case
Medical Teacher 2011; 3: 169-170
7. Reem Rachel Abraham, Ciraj A.M., K. Ramnarayan. C.V. Raghveer.
Collaborative learning in PBL
Medical Teacher 2011; 33: 338-341

8. Vasudha Devi, Vinod Pallath, Tatiyana Mandal, Smita Khandelwal, Deabsree Deb, Sunita

Perspective regarding intended learning outcomes in Pharmacology.

Kodidela Indian Journal of Pharmacology 2011, 43(4): 481-482

9. Anand Kukkamalla, Shobha KL and Jessica D'souza.

Pathway MCQs as an active learning strategy for students in Microbiology; A preliminary study.

Recent Research in Science and Technology 2011, 3(10); 07-13

10. Anand Kukkamalla, Shobha K Lakshminarayana.

Developing a facilitation skills training programme for problem-based learning tutors

Medical Education 2011, 45; 1131-1162

Publications 2012

11. Aradhana A Vipra, Srividya N Desai, Panchali ROY, Raghu Patil, Juliet M Raj, Nagalakshmi Narasimhaswamy, Vivek D Paul, Ravisha Chikkamadaiah, Bharathi Sriram.

Antistaphylococcal activity of bacteriophage derived chimeric protein P128.

BioMed Central Microbiology 2012, 12; 41

12. Bincy M. George, Muddanna S. Rao, Arunachalam Kumar, Niveditha Suvarna, Jessica Sushma D'souza.

Health of coconut tree climbers of rural southern India- Medical emergencies, body mass index and occupational marks: A quantitative and survey study.

Journal of Clinical and Diagnostic Research 2012, 6(1);57-60

13. Devi V, Mandal T, Pallath V. Integrating students' reflection-in-learning and examination performance as a method for providing educational feedback.

Journal of Postgraduate Medicine 2012, 58(4): 270-274

14. Vasudha Devi, Vinod Pallath, Benny Lim, Chia Wue, Cheng Kok Mun, Jacinta Agnes Adward, Law De Zhi.

Perceptions regarding the quality of group interactions during brainstorming session of problem based learning (PBL) at Melaka Manipal Medical College (Manipal Campus), India.

Education in Medicine Journal 2012

15. Surekha R. Kamath, Jessica S.D.

Prevalence of myopia among students of Melaka Manipal Medical College at Manipal in India.

Indian J Bioinformatics & Biotechnology 2012, 1(1): 19-22

16. Reem R Abraham, K. Ramnarayan, Bincy M George, Indira Adiga, Girija R Kumari, Niveditha Suvarna, Vasudha Devi, Shobha KL, Madeeha B Mamot, Wan Nayitah BWJ, Nai'mah BA Haripin.

Effects of problem-based learning along with other active learning strategies on short term learning outcomes of students in an Indian medical school.

Int J Health & Allied Sciences 2012, 1(2): 98-103

17. Shobha K, D'Souza A, Mridula M, Gowrish SR.

Urinary tract infection due to Salmonella typhimurium in a HIV seropositive adult male. WebmedCentral:

International Journal of Medicine and Molecular Medicine 2012, 3(1): WCM002930

18. S Govindan, B Chakrakodi, S Prabhakara, G Aarkere, S Kumar, I Bairy.

Necrotizing fasciitis caused by a variant of epidemic Methicillin resistant Staphylococcus aureus – 15.

Indian Journal of Medical Microbiology 2012, 30(4): 476-479

19. Anand Kukkamalla, Shobha Karabylyu Lakshminarayana, Jessica D'Souza, Shyamala Hande.

Designing problems for Problem-Based Learning (PBL) sessions: students and faculty perceptions.

South-East Asian J Medical Education 2012, 5(2): 68-72

20. Isolated tuberculous epididymo-orchitis: an unusual presentation of

tuberculosis. Shenoy VP, Viswanath S, D'Souza A, **Bairy I**, Thomas J.

J Infect Dev Ctries. 2012 Jan 12;6(1):92-4.

21. Acute Streptococcus pneumonia meningitis causes Neurodegeneration in the subregions of the Hippocampus in Wistar Rats daphne Santhosh, **Indira Bairy**. International Journal of Scientific and Research Publications Vol 2 , Issue 2, Feb 2012, 237 – 243

22. Can tissue PCR augment diagnostic accuracy in genitourinary tract tuberculosis? Chawla A, Chawla K, Reddy S, Arora N, **Bairy I** Rao S, Hegde P, Thomas J . Urol. Int 2012; 88(1); 34 – 38

23. Honey as an antimicrobial agent against *Pseudomonas aeruginosa* isolated from infected wounds. Vishnu Prasad Shenoy, Mamatha Ballal, P G Shivananda, **Indira Bairy**. J Global Infect Dis 2012, 4(2);page 102 – 105
24. Comparison Between Avidity Test And Detuned Elisa Test In Detecting The Recent And Established Hiv-1 Infection Vinay Khanna 1, Indira Bairy , Ravindra Maradi. International Journal of Pharma and Bio Sciences, Oct; 3(4): (B) 865 – 873
25. "Significance of interleukin-6 (IL-6) and C-reactive protein (CRP) in children and young adults with febrile neutropenia during chemotherapy for cancer: A prospective study" Narendra Chaudhary, Kranthi Kosaraju, Kamalakshi Bhat,, **Indira Bairy**, Anupama Borker. Journal of Pediatric Hematology and Oncology, September 2012
26. Cross Sectional study of Symptomatology among patients with Recent and established HIV - 1 infection. Khanna Vinay, **Bairy Indira** , Maradi Ravindra, Khanna Ruchee, Vishwanath Shashidhar, Satyanarayanachar Manjunath. Journal of Pharmaceutical and Biomedical Sciences; 23(23), 2012
27. Antimicrobial Activity of Mupirocin and Fusidic Acid Against Methicillin resistant *Staphylococcus aureus* . Shashidhar V, **Bairy Indira** International Journal of Pharmacology and Technology No 1 Vol 4 June 2012 Pages : 53 – 55
28. A study of antibacterial and antifungal properties of human cerumen. Sumit Gupta, Rohit Singh, Kranthi Kosaraju, **Indira Bairy**, Balakrishnan Ramaswamy Indian Journal of Otolaryngology October 2012, Vol 18 Issue 4, page 189 – 192

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29. Acute kidney injury in scrub typhus. Ravindra Prabhu Attur Sujatha Kuppasamy Manohar Bairy Shankar Prasad Nagaraju Nageswara Reddy Pammidi Veena Kamath Asha Kamath Lakshmi Rao Indira Bairy Clin Exp Nephrol, 2013, Oct;17(5):725-9
30. Clostridium difficile Infection at a Tertiary Care Hospital in South India. Shashidhar Vishwanath, Arpita Singhal, Annet D'Souza, Chiranjay Mukhopadhyay, Muralidhar Varma, Indira Bairy. Journal of the association of physicians of india • november 2013 • VOL . 61, pages 30 – 32
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34. Exploring attributes of effective teachers - student perspectives from an Indian medical school, South-East Asian Journal of Medical Education. 2013;7(1):
35. Surekha Kamath, Jessica D'Souza "Prevalence of obesity among the medical students: a cross-sectional study in a south Indian medical college". Al Ameen J Med Sci 2013;6(1):93-95.ISSN 0974-1143
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38. Immunological Profile of Children Infected with HIV Through Vertical Transmission, in Southern India. Praveen R Shahapur, Indira Bairy Journal of Clinical and Diagnostic Research. 2014 Jun, Vol-8(6): DC09-DC11
39. A prospective study on distribution of eschar in patients suspected of scrub typhus. Munegowda K, Nanda S, Varma M, Bairy I, Vidyasagar S. Trop Doct. 2014 Apr 15;44(3):160-162.
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 45. Shobha, KL and Kusumakshi, * and Anand, KM and Rao, Gowrish S and D'Souza, Jessica and Ramachandra, L (2014) Isolation of streptococcus species from throat swabs of school going children. International Journal of Pharmacology and Toxicology, 2 (2). pp. 86-87.
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 49. Comparison of screening tests with urine culture in urinary tract infection. Shobha K.L, Amita Shobha Rao., Shilpa K., Ramachandra L., International Journal Of Medicine. 2(2); 2014 81-83.
 50. RAPD – PCR typing of pseudomonas aeruginosa strains isolated from peripheral venous catheters. Amita Shobha Rao, Malathi Shekar, CV Raghuvver, Indrani Karunasagar, Iddya Karunasagar. Current Research in Microbiology and Biotechnology (CRMB). Vol. 2, No-5 (2014): 462-465.
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 53. Absorption Spectroscopy for the discrimination of Normal serum samples from Differentiated Thyroid Carcinoma patients: A pilot Study
 54. Journal of Medical Imaging and Health Informatics Vol. 4, 1-5, 2014.
 55. Sudarson Sundarajan, Junjappa Raghupatil, Aradhana Vipra, Nagalakshmi Narasimhaswamy, Sanjeev Saravanan, Chemira Appaiah, Nethravathi Poonacha, Srividya Desai, Sandhya Nair, Rajagopala Narayana Bhatt, Panchali Roy, Ravisha Chikkamadaiah, Murali Durgaiyah, Bharathi Sriram, Sriram Padmanabhan, and Umender Sharma. Bacteriophage derived CHAP domain protein, P128, kills Staphylococcus cells by cleaving interpeptide cross bridge of peptidoglycan. Microbiology. October 2014; 160:2157-2169

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57. Govindan, S., Mohammed, C., Bairy, I. Inducible Clindamycin Resistance Among the Staphylococcus aureus Colonizing the Anterior Nares of School Children of Udupi Taluk. **Nepal Journal of Epidemiology**, 4, mar. 2014.
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60. K.Meena Anand, Syed Suhail, Vadlamudi Murali Krishna, Satheesha BC, Meera A, Anand KM. Finite element analysis in dentistry. International Journal of Engineering and Technical Research (IJETR), Volume-2, Issue-8, August 2014

Book chapters contributed

Sl No.	Title	Faculty	Publisher
1.	Three chapters in 'Principles of Assessment in Medical Education' (2011), 1 st edition	Dr. Ciraj A.M	Jaypee Brothers, New Delhi

Sl No.	Title	Faculty	Publisher
1.	Three chapters on selection type questions, construction of MCQs, question banking and item analysis in the book "Principles of assessment in medical education" 2 nd edition	Dr. Ciraj A.M	Jaypee Brothers, New Delhi
2.	Five chapters in Mycology and parasitology of BMLT text book for Sikkim Manipal University distance education programme	Mr. Nishanth B Bhat	SMU

Details of conference presentations

2011

National

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1	Student's performance in the qualifying Examination versus their	Dr. P.Girija Ratna Kumari	National Conference of Health Professions Education,

	performance in the Progress Examination in Microbiology		Christian Medical College, Vellore. 16 th and 17 th September 2011
2	Non-Dermatophytic mycosis	Dr. P.Girija Ratna Kumari	Xxxv National Conference of Indian Association of Medical Microbiologists, Institute of Medical Sciences, Banaras Hindu University, Varanasi. 23-26 th November 2011
3	Methicillin resistant <i>Staphylococcus aureus</i> : Is lysostaphin the answer	Ms. Nagalakshmi.N	1 st Global Forum on Bacterial Infections: Balancing Treatment Access and Antibiotic Resistance, New Delhi. Oct 3 rd - 5 th , 2011
4	Effectiveness of Anthelmintic treatment for intestinal infections in children and adults	Ms. Nagalakshmi.N	GISICON conducted by KMC-IC, Manipal. May 13 th to 14 th , 2011

International

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1	Faculty perceptions on the effectiveness of training program on enhancing PBL facilitation skills among PBL tutors	Mr. Anand K.M	Frontiers in Medical and Health Sciences Education - HKU 2011, "Holistic approach in Medical and Health Sciences Education", Li Ka Shing Faculty of Medicine. The University of Hong Kong, Hong Kong. December 2-3, 2011

2012

National

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1	Standard setting in Objective Structured Clinical Examination in an Undergraduate medical school	Dr. Shobha K.L	FAIMER fellowship workshop at PSG-FAIMER REGIONAL INSTITUTE, Coimbatore no 19-23 April, 2012
2	Awareness of HIV/AIDS among Undergraduate Allied Health Science Students	Dr. Shobha K.L	ASICON 2012 in Bangalore from 23 rd to 25 th November, 2012
3	Cell Phones: A breeding paradise for germs	Ms. Jessica Sushma D'Souza	IAMM - KC, CME Indian Association of Medical Microbiologists in ESIMC, Bangalore on 15 th Sep 2012

4	Antibacterial susceptibility pattern of uropathogenic enterococcus species at a tertiary care hospital	Dr. Shobha K.L	IAMM - KC, CME Indian Association of Medical Microbiologists in ESIMC, Bangalore on 15 th September, 2012
5	Assessment of self-directed learning	Dr. P.Girija Ratna Kumari	SEARAM NCHPE 2012 in PSG Institute of Medical Sciences and Research, Coimbatore, India from 6 th to 8 th September, 2012
6	Mentorship programme in a medical school: Students' experience and perception	Dr. Shobha K.L	SEARAM NCHPE 2012 in PSG Institute of Medical Sciences and Research, Coimbatore, India from 6 th to 8 th September, 2012

International

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1	Research participants outreach program	Dr. Indira Baiy	2012 AAHRPP Conference: Protecting Vulnerable Participants held on April 18-20, 2012 at the Embassy Suites Denver-Downtown/Convention Center in Denver, CO, USA
2	Restructuring the paradigm of learning approaches through psychometric evaluation of Revised Two factor Study Process Questionnaire	Dr. Vinod Pallath	15 th Ottawa conference, held at Kuala Lumpur, Malaysia, from 9th to 13th march, 2012
3	Isolation and drug susceptibility testing of Mycobacterium tuberculosis from sputum specimens using phenotyping and genotyping methods	Dr. Indira Baiy	6 th Conference of the Union Europe Region, International Union Against Tuberculosis and Lung Disease in Imperial College, London, UK from 4 th -6 th Jul 2012

2013

National

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1.	Effects of Paragraph Reading and Mind Mapping on Visual Short Term Memory	Dr. P.Girija Ratna Kumari	National Conference on Health Professions Education on 25-28 th September, 2013 at Seth GS Medical College & KEM Hospital, Parel, Mumbai

International

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
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1.	Extended spectrum Beta Lactamases among multi drug resistant Escherichia coli and Klebsiella species causing urinary tract infection	Dr.P.Girija Ratna Kumari	“9th International Symposium on Antimicrobial Agents and Resistance (ISAAR 2013) : containing antimicrobial resistance: a global mission to be achieved” held from March 13 to 15, 2013 at Kuala Lumpur Convention Centre, Kuala Lumpur, Malaysia
2..	Risk factors for UTI due to Norfloxacin resistant E.coli : A case control study in a south Indian tertiary care hospital,	Dr.Ciraj A.M	9th International Symposium on Antimicrobial Agents and Resistance (ISAAR 2013) Malaysia, March 2013
3	Standard setting in objective structured clinical examination (OSCE) in an undergraduate medical school”	Dr Shobha K.L	South African Association of Health Educationalists (SAAHE 2013)at Durban, South Africa from 27 th – 29 th June 2013
4	Awareness about the side effects of tattoo among medical undergraduate students of Melaka Manipal Medical College (Manipal Campus),	Ms. Nagalaskh mi N.	SAAHE 2013 from 27 to 29th June 2013, Durban, South Africa
5	“Antibiogram of Uropathogens Isolated from Paediatric Patients from a Tertiary Hospital”	Jessica Sushma D’Souza	9th International Symposium on Antimicrobial Agents and Resistance (ISSAR- 2013) held at Kuala Lumpur, Malaysia from 13-15th march 2013
6.	Molecular characterization of MRSA colonizing the anterior nares of school children	Dr. G. Sreejith	9th International Symposium on Antimicrobial Agents and Resistance (ISSAR- 2013) held at Kuala Lumpur, Malaysia from 13-15th march 2013
7	“ESBL producing uro-pathogens and their antibiogram from a tertiary care hospital: A retrospective analysis	Mr. Anand KM	9th International Symposium on Antimicrobial Agents and Resistance (ISSAR- 2013) held at Kuala Lumpur, Malaysia from 13-15th march 2013
8.	“Evolving a training program for PBL tutors at Melaka Manipal Medical College (MMMC) for enhancing their Facilitation Skills: Students and Faculty perceptions”	Mr. Anand K.M.	South African Association of Health Professionals (SAAHE 2013) on June 27 to 29, 2013, Durban, South Africa

2014

National

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1	Positive urine cultures foe <i>Candida</i> species	Dr. P.Girija Ratna Kumari	SIHAM 2014, 10 th National Conference on 10-12 th January, 2014, at Coimbatore, Tamilnadu, India
2	Small colony variant of <i>Escherichia coli</i> isolated from a recurrent urinary tract infection- a case report	Ms. Nagalashmi N.	IAMM KC MICROCON 2014 at Kasturba Medical College, Manipal on 23rd February, 2014
3	Evaluation of Minimum Inhibitory Concentration of Lysostaphin Against Methicillin Resistant <i>Staphylococcus aureus</i>	Ms. Nagalashmi N.	DFID 2014 at NIPER Hyderabad from 27-28 March 2014

International

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1	Minimum biofilm inhibitory concentration of lysostaphin on clinical isolates of methicillin resistant <i>Staphylococcus aureus</i>	Dr. Indira Bairy	International Conference on Pharmacy and Pharmaceutical Sciences 2014 held at Singapore on 11 and 12 September 2014
2	Environmental and social factors : influence on undergraduate students academic performance “	Dr Shobha K.L	SEARAME 2014 Conference from 12 th – 15 th November 2014 at Colombo, Srilanka
3	Learning and teaching in small groups: Is it beneficial to undergraduate students?	Dr. Amita Shobha Rao	3 rd South East Asian Regional Association for Medical Education (SEARAME) on 12 th - 15 th November 2014, Sri Lanka.
4	Detection of Pantone -Valentine Leukocidin Gene by Polymerase Chain Reaction in Methicillin Resistant <i>Staphylococcus aureus</i> Isolates from Tertiary Care Hospital	Ms. Nagalashmi N.	MEEGID 2014 at Bangkok from December 11-13, 2014
5.	“Learning Difficulties Experienced By Undergraduate Medical Students In A Medical Curriculum : Students' Perceptions	Mr. Anand K.M.	International Journal of Arts & Sciences' (IJAS) International Conference for Teaching and Education on 28 to 31 October 2014 at the American University of Rome, Rome.

AWARDS and FELLOWSHIPS

- International fellowship in medical education (IFME) – 2013, to pursue masters in

health professions education (MHPE) at Keele University, United Kingdom specializing in Assessment and Accreditation

- Recipient of the Good Teacher Award 2014, in recognition and appreciation of excellence in teaching medical students

PARTICIPATION IN TRAINING PROGRAMMES/ CONFERENCES/ WORKSHOPS

- Interprofessional care for 21st century - Redefining education and practice at Jefferson's University, USA, October 2014
- Reflective Practice: Looking back to look forward at National Conference of Health Professions Education, Wardha, September 2014

12. Placement record of the past students and the contribution of the department to aid student placements

After successful completion of Stage IIA or year 2, students proceed to stage IIB or year 3

13. Plan of action of the department for the next five years

- Organize various academic events like quiz competition and “model your microbe” for the benefit of undergraduate students.
- Organize continued medical education programmes and work shops in microbiology.
- Development of a microbiology diagnostic laboratory for serving the teaching hospitals of MMMC.
- Development of research laboratory for microbiology to enable the research of faculty

MEDICINE

1. Faculty profile - adequacy and competency of faculty

All the faculty members meet the requirements for teaching Phase I Stage IIB MBBS program as per the requirements of the regulatory bodies

Sl No.	Name	Qualification	Designation	Teaching Experience
1	Dr. Shashikiran U.	MBBS, MD	Professor & Head	16
2	Dr. Balachandran	MBBS, MD (Derm)	Professor	29
3	Dr. Seema Shetty M.	MBBS, MD	Associate professor	11
4	Dr. Afsal P.M.	MBBS, MD	Assistant Professor	05
5	Dr. Pushwinder Dhunputh	MBBS, MD	Assistant Professor	03
6	Dr. AlladaVenkata Srikar	MBBS	Junior Resident	< 01
7	Dr. RohiniGopal	MBBS	Junior Resident	< 01
8	Dr. Varalakshmi Chandrasekaran	MBBS	Lecturer	02

Number of faculty positions sanctioned and filled: 6/6 (Medicine)

1/1 (Psychiatry)

2/2 (Community Medicine)

The department has adequate number of faculty members. One faculty member has received the good teacher award more than once based on student voting.

2. Student profile –

Entry level competency: Refer to appendix No.1

Socioeconomic status: Generally most students are from middle-income group (detailed information not available)

Language proficiency: English

3. Changes made in the courses or programmes during the past two years and the contribution of the faculty to those changes

The MBBS program is conducted in compliance with the requirements of the Malaysian Qualifications Agency (MQA) which is the regulatory body governing the health sciences education in Malaysia. Medicine, Psychiatry and Community Medicine are taught in Phase I Stage IIB for MBBS students.

- We have reduced the didactic content (lectures) in the curriculum of medicine and introduced small group sessions in the form of moderated student presentations.
- Clinical teaching itself has remained constant, as the content is limited (semester 5 being the first clinical semester).
- We have introduced assessment of learning portfolio in the end of posting test in medicine
- All the faculty members of dept of medicine have contributed in the implementation of these changes.

4. **Trends in the success and drop out rates of students during the past two years**

Not applicable since there is no university examination in this subject in Manipal Campus

5. **Learning resources of the departments - library, computers, laboratories and other resources**

The institution has common air conditioned library where adequate standard text books are available for the faculty members. All faculty members are provided with individual laptops with free 24-hour internet access. Also, the faculty members have access to computers in the college office with scanner and printer facility and a photo copying machine. All faculty members have access to subscribed online academic content including UpToDate, MDConsult, BMJ Case Reports and other journals

6. **Modern teaching methods practiced and use of ICT in teaching – learning**

Modern methods are employed in teaching such as powerpoint slides and videos.

7. **Participation of teachers in academic and personal counseling of students**

Not applicable

8. **Details of faculty development programmes and teachers who have been benefited during the past two years**

- Manipal Centre for Personal and Professional Development of Manipal University

conducts Pedagogic and personal effectiveness workshops on a regular basis. Two faculty members have attended the workshop in the past two years

9. **Participation / contribution of teachers to the academic activities including teaching, consultancy and research**

- Faculty are involved in teaching MBBS students
- Faculty provide clinical consultancy at Dr. TMA Pai Hospital, Udupi
- Faculty are actively involved in clinical research
- Faculty attended ADA conference in Bangalore in 2012
- Faculty attended ICDA at Father Mueller's hospital, Mangalore in 2012
- Faculty attended HIV Congress 2012 at Mumbai in 2012
- Faculty attended the 10th World Congress on Insulin Resistance Syndrome, November 2012, **San Francisco, USA**
- Faculty attended the American Academy of Clinical Endocrinologists (AACE) Gulf Chapter Conference, 23-25 October 2014, **Abu Dhabi, UAE.**
- Faculty delivered two **Guest Lectures** on (i) Novel Approaches in Lipid Management and (ii) Raising HDL-cholesterol – the controversy. Egyptian Association of Endocrinology, Diabetes and Atherosclerosis (EAEDA). 12-14 November 2014, **Alexandria, Egypt**

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**

Ongoing:

Category	Number
Funded research projects	0
Non-funded research projects	0
PhD research projects	0
PG research projects	6
UG research projects	0

Last 3 years (2012-2014):

	2012	2013	2014
Completed funded research projects	0	0	0
Completed non-funded research projects	0	0	0
Completed PhD research projects	0	0	0
Completed PG research projects	3	2	0
Completed UG research projects	0	0	0
Publications	2	3	1
	1	-	0
Books	0	0	0
Chapters in books	0	0	0
Conference presentations	2	0	1
	0	0	0

Ongoing PG research projects

Sl No.	Title	Faculty involved
1.	Study of Cardiac Troponin-T in Acute Ischemic Stroke	Dr. Shashikiran U & Dr. Afsal PM
2.	A Comparison of the Clinical Profile and Complications of Plasmodium vivax and Plasmodium falciparum Malaria	Dr. Seema Shetty
3.	Clinical and Biochemical Profile of Hyponatremia and Comparison of Response to Vaptans Vs Standard Care	Dr. Shashikiran U
4.	A comparative study of APACHE II score in the prognosis of sepsis in patients with and without diabetes	Dr. Seema Shetty
5.	Efficacy, Safety & Tolerability of Bromocriptine in Type 2 Diabetes Mellitus	Dr. Shashikiran U
6.	Comparison of Metoprolol and Diltiazem in Chronic Atrial Fibrillation – Effect on Rate Control & Quality of Life	Dr. Seema Shetty

Publications:**2012:**

1. 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. doi: 10.4103/0973-1075.110242.

2. Ibrahim SB, Bm Y, **Umakanth S**, Kanagasabai S.

Pemphigus vulgaris in a pregnant woman and her neonate.

BMJ Case Rep. 2012 Jun 28;2012. pii: bcr0220125850. doi:

10.1136/bcr.02.2012.5850.

3. Dixit S, Maiya AG, Umakanth S, Shastry BA.

Closure of non-healing chronic ulcer in Klippel-Trenaunay syndrome using low-level laser therapy.

BMJ Case Rep. 2012 Jun 14;2012. pii: bcr2012006226. doi: 10.1136/bcr-2012-006226.

2013:

1. Vikram K, Shivashankara KN, Chakraborty J, Umakanth S.

A complicated case of altered sensorium.

BMJ Case Rep. 2013 Aug 16;2013. doi:pii: bcr2013009841. 10.1136/bcr-2013-009841.

2. Nanjegowda N, Umakanth S, Undrakonda V.

Laryngospasm during extubation. Can nasogastric tube be the culprit?

BMJ Case Rep. 2013 Jun 18;2013. doi:pii: bcr2013009645. 10.1136/bcr-2013-009645.

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. doi: 10.4103/0973-1075.110242.

2014:

1. Nayak DM, Belurkar SV, Manohar C, Umakanth S.

Cold Agglutinins associated with Plasmodium falciparum malaria: A case report.

International Journal of Scientific and Research Publications. March 2014; 4(3):1-3

[<http://www.ijsrp.org/research-paper-0314/ijsrp-p2734.pdf>]

Conference Presentations:

2012

Sl#	Title of the presentation	Name of the faculty	Details of Conference
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1.	The Conundrum of Birth Weight in Well-controlled GDM: Relationship with Maternal BMI, Weight Gain and Glycemic Status at Diagnosis.	Dr. Shashikiran U	10 th World Congress on Insulin Resistance Syndrome, November 2012, San Francisco, USA
2	A case of dengue fever presenting as ADEM	Dr. Afsal PM	KAPICON 2012, Mysore, India

2013

Sl#	Title of the presentation	Name of the faculty	Details of Conference
1.	-	-	-

2014

Sl#	Title of the presentation	Name of the faculty	Details of Conference
1.	Voglibose in Type 1 Diabetes Mellitus – Two Case Studies.	Dr. Shashikiran U	American Academy of Clinical Endocrinologists (AACE) Gulf Chapter Conference, October 2014, Abu Dhabi, UAE

12. Placement record of the past students and the contribution of the department to aid student placements

After successful completion of Phase I Stage IIB, students proceed to Phase II in Melaka, Malaysia

13. Plan of action of the department for the next five years

- Early exposure to clinical subjects in the second year itself
- Students of semester 3 or 4 can start coming to the hospital about once in 3 weeks to medicine enabling early exposure to hospital and interaction between semesters in the clinical setting.

SURGERY

1. Faculty profile - adequacy and competency of faculty

All the faculty members meet the requirements for teaching Phase I Stage IIB MBBS program as per the requirements of the regulatory bodies

Sl No.	Name	Qualification	Designation	Teaching experience
1	Dr. Upendra Santosh Pai	MBBS MS	Professor	35
2	Dr. M.G. Shenoy	MBBS MS	Professor	38
3	Dr. Sarita Kanth	MBBS MS	Associate prof.	13
4	Dr. K. Vinayaka Shenoy	MBBS MS	Associate prof.	12
5	Dr. Rajaram Pai T.	D Ortho, DNB	Associate prof.	12

Number of faculty positions sanctioned and filled: 4/7 (Surgery), 1/1 (Orthopaedics)

The department has adequate number of faculty members. One faculty member has received the good teacher award more than once based on student voting.

2. Student profile –

Entry level competency: Refer to appendix No.1

Socioeconomic status: Generally most students are from middle-income group(detailed information not available)

Language proficiency: English

3. Changes made in the courses or programmes during the past two years and the contribution of the faculty to those changes

The MBBS program is conducted in compliance with the requirements of the Malaysian Qualifications Agency (MQA) which is the regulatory body governing the health sciences education in Malaysia. Surgery and Orthopaedics are taught in Phase I Stage IIB for MBBS students.

- ✓ Self-directed learning, MCQ pattern at end of posting test
- ✓ Development of MCQ Bank.

✓ Surgical Faculty teach clinical skills sessions in the 3rd and 4th semesters regarding the following skills for which the Clinical Skills Lab has very good quality mannequins.

- Suturing
- Digital rectal examination
- Breast examination
- Endotracheal intubation
- Intravenous injection
- Intravenous blood drawing
- Male urinary catheterization
- Female urinary catheterization
- Bandaging and dressing

4. Trends in the success and dropout rates of students during the past two years

Not applicable since there is no university examination in this subject in Manipal Campus

5. Learning resources of the departments - library, computers, laboratories and other resources

Faculty members and students have access to the air conditioned University Health Sciences Library where adequate standard text books, journals, e-journals, internet facility, photocopying and e-books are available. All faculty members are provided with individual laptops with free 24 hour internet access. Also, the faculty members have access to computers in the college office with scanner and printer facility and a photo copying machine.

6. Modern teaching methods practiced and use of ICT in teaching – learning

Modern methods are employed in teaching such as powerpoint slides and videos

7. Participation of teachers in academic and personal counseling of students

Mentor scheme in place.

8. Details of faculty development programmes and teachers who have been benefited during the past two years

- Manipal Centre for Personal and Professional Development of Manipal University conducts Pedagogic and personal effectiveness workshops on a regular basis. Two faculty members of the department have attended this workshop during the past two years.
- Faculty have attended CMEs organized by Department of General Surgery, KMC, Manipal
- One faculty has attended CME in Breast cancer update organized by Department of Oncology, KMC, Manipal
- One faculty has attended CME in gastrointestinal surgery organized by IASG and KMC, Manipal

9. Participation / contribution of teachers to the academic activities including teaching , consultancy and research

- Faculty are involved in teaching MBBS students
- Post graduate clinical teaching for Kathmandu University post graduates
- Faculty provide clinical consultancy at Dr. TMA Pai Hospital, Udupi
- Faculty are actively involved in clinical research

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

Ongoing:

Category	Number
Funded research projects	-
Non-funded research projects	-
PhD research projects	-
PG research projects	-
UG research projects	-

12. Placement record of the past students and the contribution of the department to aid student placements

After successful completion of Phase I Stage IIB, students proceed to Phase II in Melaka, Malaysia

13. Plan of action of the department for the next five years

Integrated teaching of Applied Anatomy during the first and second semesters.

OBSTETRICS AND GYNAECOLOGY

1. Faculty profile - adequacy and competency of faculty

There are twelve faculty members who meet the requirements for teaching Phase I Stage IIB MBBS program as per the requirements of the regulatory bodies

Sl No.	Name	Qualification	Designation	Teaching experience
1	Dr. Parvathi V. Bhat	MBBS DGO, MD, DNB	Professor&Medical Superintendent	25
2	Dr Sathisha Nayak	MBBS MD, DNB	Professor and HOD	21
3	Dr. Shashikala K. Bhat	MBBS MD	Professor&Unit Head	20
4	Dr. Sujatha J.	MBBS DGO, MD, DNB	Assoc.Prof.	15
5	Dr. Rajeshwari G. Bhat	MBBS, MD	Assoc.Prof	13
6	Dr. Sanjay Kumar K.R.	MBBS DGO, DNB	Assoc.Prof	11
7	Dr. Krupa H. Shah	MBBS DGO, MD	Assoc.Prof	11
8	Dr. Sandhya Aletty	MBBS MD	Asst Prof	06
9	Dr Nida Zahoor	MBBS, MS	Senior Resident	<01
10	Dr. Vinutha	DGO, DNB	Asst Prof	04
11	Dr Jyothi M Bali	MBBS,MS	Senior Resident	<01
12	Dr. Thiencherry Rema	MBBS	Senior resident	05

Number of faculty positions sanctioned and filled: 12/12

The department has adequate number of faculty members. Students find all the teachers in the department competent and helpful.

2. Student profile –

Entry level competency: Refer to appendix No.1

Socioeconomic status: Generally most students are from middle-income group (detailed information not available)

Language proficiency: English

3. Changes made in the courses or programmes during the past two years and the

contribution of the faculty to those changes

The MBBS program is conducted in compliance with the requirements of the Malaysian Qualifications Agency (MQA) which is the regulatory body governing the health sciences education in Malaysia. OBG is taught in Phase I Stage IIB for MBBS students.

We used to take lectures for them even during clinical posting both in the morning and afternoon. Now in the morning we take clinical cases and discuss required information regarding the case. In the afternoon it is moderated students presentation. The topics have remained same but we have committed more clinically oriented topics. All the faculty members involved in teaching MMMC students follow the protocol.

Students are given clinical exposure in Labour room, OT, Scan room, in patient wards and OPD to have comprehensive approach to learning.

Learning modules and outcomes are defined and are reflected in learning methods and assessments

Learning domains of practical knowledge, Skills and attitude are defined in modules

Emphasis is being given on Medical ethics, good communications skills, empathy, gender sensitivity and sociocultural aspects of Medicine.

Innovation in new teaching-Learning methods:

We have introduced TWO student centered ,interactive, ahnds on teaching-learning methods from Batch 27 onwards during their postings in Karkala.

- Handson Workshop on Infection Control module. Every student is given an opportunity to LEARN BY DOING in realtime in LT/OT. Students practice handwashing, surgical scrub, gloving, wearing surgical mask/gown, waste disposal and sharps disposal.
- B. Role-Play: Communication skills are learned through Role palying in each student groups. Students come out with their own ideas on real life seanrios and perform role play for 10 -20 minutes. Students feedback is asked on how they felt and how it could have been improved. Importance on Verbal and non verbal communication ,listening skills, courtesy, empathy ,sensitivity, handling difficult situations, breaking bad news, pre operative counselling etc are played out and discussed. Faculty member gives the practicakl perspective on the real case scenairio base on his/her experiance

4. Trends in the success and dropout rates of students during the past two years

Not applicable since there is no university examination in this subject in Manipal Campus

5. Learning resources of the departments - library, computers, laboratories and other resources

Faculty members and students have access to the air conditioned University Health Sciences Library where adequate standard text books, journals, e-journals, internet facility, photocopying and e-books are available. All faculty members are provided with individual laptops with free 24 hour internet access. Also, the faculty members have access to computers in the college office with scanner and printer facility and a photo copying machine.

Faculty members can also access Health Sciences library through remote access in both the campuses or while travelling. Faculty have access to more than 1000 indexed Journals, databases, SCOPUS, Web Of Science, E-Books etc

All the academic, administrative communications are sent via intranet which faculty members can access 24x7.

6. Modern teaching methods practiced and use of ICT in teaching – learning

- Power point presentations
- Videos: anatomy, surgical procedure etc
- Interactive learning through Workshop
- Communications/Counseling skills through Role-playing
- E-learning resources through Health Sciences Library

7. Participation of teachers in academic and personal counseling of students

Faculty are available for student mentoring when needed. At both Udupi and Karkala students can freely approach faculty members for any clarifications or guidance needed.

8. Details of faculty development programmes and teachers who have been benefited during the past two years

Manipal Centre for Personal and Professional Development of Manipal University conducts Pedagogic and personal effectiveness workshops on a regular basis. Two faculty members have attended the workshop in the past two years

1. Dr.Parvati V.Bhat, Dr.Shashikala Bhat, Dr.Shipra Sonkusare, Dr.Kurupa Shah and Dr.Sandhya Aletty have attended Philips ultrasound usability study, which was conducted by BOP, Philips, Manipal University, Manipal, between 25th July, 2012 and 27th July, 2012 at MIT, Manipal
2. Dr.Parvati V.Bhat attended 16 hours course on ‘ Perspectives on Disability’ conducted by Dept.of Physiotherapy, Manipal College of Allied Health Sciences(MOAHS) and Manipal Centre for Philosophy and Humanities(MCPH) Manipal University, Manipal, which was held from 4th to 25th February, 2012.
3. Dr.Parvati V.Bhat attended the “SEARCH” – the information literacy skills workshop organized by Manipal Centre for Professional and Personal Development(MCPD) on 27th August, 2012
4. Dr.Krupa Shah attended workshop on “Medical Genetics” from 27/7/12 to 12/8/2012 at Lucknow
5. Dr Tiencherry Rema attended Workshop on Pedagogic and Personal effectiveness from 22nd to 26th July 2014
- 6 Dr Shashikala attended:
 - Non Communicable Diseases Research" in Manipal on February 9 and 10, 2013 at Manipal
 - Attended Fetal Medicine Scientific Workshop conducted by ISUOG, 23-24 November 2013, Colombo, Sri Lanka.
 - Underwent Advanced Laparoscopic & Hysteroscopic training from October 1st - October 31st 2013 in Dr. Ramesh Laparoscopy Hospital, Bengaluru.
 - CME on “Polycystic ovarian syndromes” in November 2014 at Manipal
 - CME on “Manipal Genetics update” on 7th December 2014
 - Workshop and CME on advances in gynaecologic oncology on 20th December, 2014 at Manipal
 - zEthical on Reproduction” CME at Manipal in December 2014
- 7 Dr.Krupa Shah attended L
 - Workshop on “Medical Genetics” from 27/7/12 to 12/8/2012 at Lucknow

- Workshop on “Human Genome bioinformatics in Genetics” in November 2013:
- Workshop on Effective electronics communication” organized by Medical Education department, KMC, Manipal on December 2014.
- Wrkshop on“Laparoscopic surgery” in 2014 at Bombay
- CME on “Polycystic ovarian syndromes” in November 2014 at Manipal
- CME on “Manipal Genetics update” on 7th December 2014
- Workshop and CME on advances in gynaecologic oncology on 20th December, 2014 at Manipal
- “Ethical on Reproduction” CME at Manipal in December 2014.

8. Dr Parvati Bhat:

1. Attended the workshop on Data Analysis & Report Drafting (DARD) which was held on 17th September 2014 at Bangalore.
2. Attended the workshop on Copy Editing which was held on 27th October 2014 at Manipal University.
3. Attended a ‘CME a Seminar on PCOS’ which was held on 16th November 2014 at Hotel Sharada International, Udupi.
4. Attended the workshop on Nurturing an Effective Workplace which was held on 28th & 29th November 2014 at TAPMI, Manipal.
5. Attended the ITREOH meeting & workshop which was held on 5-9 May 2014 at Hotel Renuka, Colombo, Sri Lanka.
6. Credit Points:
 - Manipal Genetics update held on 7th December 2014 at KMC, Manipal – 2 credit hours
 - Advances in gynaecologic oncology, held on 20th December 2014 at Shirdi Sai baba, KMC, Manipal – No credit hours
 - Manipal Surgery clinifest 2014 held on from 12th December 2014 to 14th December 2014 at KMC, Manipal – 6 credit hours
 - Polycystic ovarian syndrome, EVIDENCE BASED MANAGEMENT STRATEGIES, held on 16th November 2014 – 2 credit hours

9. Dr Vinuta attended:

- Pedagogic Workshop & Personal Effectiveness on July 2013 at Manipal.
- RCOG Conference on March 2014 at Hyderabad – 30 credit point

10. Dr Rajeshwari attended international conference on gynaecological endoscopy workshop at Cochin on October 2014.
11. Dr Sujatha attended:
 - Workshop on Fetus at Risk on 27 March 2015@Hyderabad RCOG World Congress 2014
 - RCOG World Congress 28-30 March 2014 @Hyderabad
12. Dr Sathisha attended :
 - Polycystic ovarian syndrome, EVIDENCE BASED MANAGEMENT STRATEGIES, held on 16th November 2014 – 2 credit hours
 - Workshop on TOT/TVT sling surgeries workshop at KMC ,Mnagalore
13. Dr Sanjay attended:
 - Cadaveric hands on workshop on TLH on 12th October 2014 MSRALC, Bangalore
 - Endoscopy workshop and Congress,RAGE-2014,23-24 August,2014

8 Participation / contribution of teachers to the academic activities including teaching , consultancy and research

- Faculty are involved in teaching MBBS students
- Faculty provide clinical consultancy at Dr. TMA Pai Hospital, Udupi and Dr. TMA Pai Rotary Hospital, Karkala.Faculty are fulltime and work in Out patient clinics, Inpatients, Labor rooms , OT,Ultrasound scan,counseling services and on call duties.
- Faculty members are trained and are actively involved in clinical research
- One candidate has registered for PhD with the faculty of the department

Guest lectures/chairing sessions/awards/resource person in workshop

2012

- Dr.Parvati V.Bhat gave a lecture on “Adolescent related health problems” at SVS College, Katapady, Udupi on 24/8/2012.
- Dr.Parvati V.Bhat gave a talk on “ High risk pregnancy” in spandana T.V. on 25th August, 2012

- Dr.Parvati V.Bhat gave a lecture on anemia in Govt Girls training College, Udupi
- Dr.Shashikala Bhat gave a talk on “ Diabetes and thyroid in pregnancy” in Namma T.V. in 2012

2013

- Dr Parvathi conducted Half Day Seminar for students of St. Mary’s High School ,Udupi regarding Puberty, Physiological, Emotional changes, Nutrition and Health & Hygiene on 17th September 2013.
- Dr Sathisha conducted workshop on First aid and emergency care for NSS student at Mala,Karkala
- Dr Sathisha was coordinator for Taskforce for Prevention of Child sex abuse, Corporal punishment and Unsafe school environment for Karkala Taluk(277 Schools)
- Dr Sathisha delivered lecture on Adolescent Health for SVT College Girls in Karkala in October 2013

2014

- Delivered a guest talk on “Adolescent Health” for girl students at Government Degree College at Hiriyaadka, Udupi District on 20 September 2014.
- Dr. Krupa Shah received award of “Fellowship in Medical Genetics” at KMC, Manipal in 2014.
- Talk on Women’s Health Problem at St. Francis Xavier English Medium School, Udyavara on 19th October 2014.
- Dr Sathisha was resource person for workshop on Safe sex and Wellness workshop at NSS camp Muniyal,Karkala June 2014
- Dr Sathisha conducted 10 workshops across Udupi Districts for Teachers, Govt officials, Police and NGOS on Child safety in Schools and prevention of Child sex abuse and POCSO
- Dr Sathisha conducted 10 Good touch-Bad touch programs for rural Govt/Pvt Schools kids and parents

9 Collaboration with other departments/ institutions, at the State, National and International levels, and their outcome during the past two years

2012

- “ The amniotic fluid index as predictor of fetal Macrosoma” done by by Vikas,M.Sc,IV (Sem) Dept.of Post graduate studies and research in statistics,Mangalore University, Mangalagathri, under supervision of Dr. Parvathi Bhat
- “Working Environment and Nursing Profession: A case study at Dr.TMA Pai Hospital,Udupi done by Ms. Sushma T, Government First Grade College,Thenkanidiyur, Udupi, under supervision of Dr. Parvathi Bhat.
- “ Efficacy of Care HPV DNA testing in detection of premalignant lesions of cervix “
Principal investigator : Dr.Parvati V.Bhat
- Dr,Shipra S, ‘Pre term birth’ done in Kasturba hospital Manipal with Dr.Lavanya Rai, KMC, Manipal
- Dr,Shipra S, ‘Self rated health in pregnant women’ done in Melaka Manipal Medical College, Malaysia
- Dr,Shipra S, ‘Insulin in hyper emesis’ done with Dr.Urala, KMC, Manipal
- Dr,Shipra S is an examiner for dissertation evaluation for MS Obstetrics from Maharastra University of Health Sciences, Nashik.
- Dr,Shipra S is a member of Board of Medical Section of Bio Meddend community Toronto, Canada as a scientist for regular scientific consultation of manuscripts

2013

- Dr. Krupa Shah, “Mutation study in Wernal Mesomelia” study at KMC Manipal.

2014

- Dr. Krupa Shah, “Uro rectal septum malformation” study on terminated fetuses at Medical Genetics Department, KMC, Manipal

10 Priority areas for Research and details of the ongoing projects, important and noteworthy publications of the faculty, during past two years

One faculty member is a recognized PhD guide.

Priority areas for research include maternal infections and adverse pregnancy outcomes, risk factors for spontaneous pre-term birth, prevalence of Human Cytomegalovirus infection in pregnant women and mercury and infant neurological development

Ongoing research projects:

Category	Number
Funded research projects	0
Non-funded research projects	0

PhD research projects	2
PG research projects	4
UG research projects	0

Last 3 years (2012-2014):

	2012	2013	2014
Completed funded research projects	0	0	0
Completed non-funded research projects	0	0	0
Completed PhD research projects	0	1	1
Completed PG research projects	0	2	2
Completed UG research projects	0	0	0
Publications	0	0	6
	0	0	0
Books	0	0	0
Chapters in books	3	0	0
Conference presentations	1	0	0
	0	0	0

Ongoing externally funded research projects are:

Sl#	Title	Principal Investigator	Funding agency	Total amount received
1	A comparative study to find the effectiveness of antepartum breathing exercises on the outcome of labor among primigravid and multigravida women in selected hospital of Udupi District	Ms. Sushmitha Karkada	Dr. Parvati V. Bhat	
2	Prevalance of Human Papilloma Virus in Udupi, Taluk, Udupi District	Dr. Sabeena	Dr. Parvati V. Bhat	

Details of publications

2012

- Dental neglect and adverse birth outcomes; a validation and observation study- S Acharya , KC Pentapati, PV Bhat; 2012 August 6.
- Association of Low Maternal Plasma Glucose after Oral Glucose Challenge Test with Small for Gestational Age Neonate
Rajeshwari Gurumoorthy Bhat, KV Bhagya, Pratap Kumar
International Journal of Infertility and Fetal Medicine, Vol. 3, No. 1 Jan 2012

- Sonographic diagnosis of fetal suprarenal masses: A report of two cases –
Rajeshwari G Bhat, Vijay Kumar, Ranjini Kudva, Parvati V Bhat
Genetic clinics 2012, Vol 5, issue 2
- Evaluation of hysterosalpingoscintigraphy (HSSG) as a tool for tubal patency test,
Smita Sinha, Amar Ramachandran, Rajesh Kumar, Rajesh Bhakta, Akhila Vasudeva,
Rajeshwari Bhat, Pratap Kumar
National Journal of Integrated Research in Medicine

2013

- Infection and acute respiratory distress syndrome during pregnancy: A case series of preventable maternal deaths from southern India
Akhila Vasudeva*, Rajeshwari G. Bhat, Amar Ramachandran, Pratap Kumar
Journal of Infection and Public Health (2013) 6, 55—57
- Influence of Endometriotic Cyst Diameter and the Severity of Endometriosis on the Ovarian Parenchyma Excised During Laparoscopic Cystectomy,
Amar Ramachandran, Sushma Dhulkhed, Rajesh Bhakta, Rajeshwari G Bhat,
Anuradha CK Rao, Akhila Vasudeva, Ashwini Vishalakshi, Pratap Kumar
Journal of Clinical and Diagnostic Research. 2013 Oct, Vol-7 (10): 2241-2243

2014

- Articles published on 13th March 2014 with Chythra Rao, Lara E.E de Ruiter, PV Bhat, Veena Kamath, Asha Kamath & Vinod Bhat -Case control study on risk factors for preterm deliveries in a secondary care hospital
- Presented a poster during the student research poster competition 2014 organised by manipal university students Research forum on 11th & 12th April 2014 held at manipal university, Manipal.
- Articles published on 15th April 2014 with Rajeshwari G Bhat, Anitha Nathan, Amar, Akhila Vasudeva, Prashanth Adiga, PV. Bhat, Prathap kumar- Correlation of Fetal Abdominal Subcutaneous tissue thickness by ultrasound to predict Birth Weight.
- Articles published on 07th July 2014 with Chaitanya Tellapragada, vandana Kalwaje Eshwara, Ruqaiyah johar, Tushar Shaw, Nidhi Malik, PV Bhat, Asha Kamath & Chiranjay Mukhopadhyay- Antifungal Susceptibility patterns, In vitro production of

virulence factors, and evaluation of Diagnostic modalities for the speciation of pathogenic candida from blood stream infections and vulvovaginal candidiasis.

- Articles published on July 27 – August 1, 2014 with Sabeena Sasidharan Pillai, PV Bhat, Veena Kamath, Aswathy Raj, Hindol maity, Giselle D Souza, Kiran Chandra bharani, Anjali Aithal, G. Arunkumar - A population based study of Human Papilloma virus (HPV) infection among women in a rural village in south india.
- Articles published on 14th October, 2014 with Jenu maria Thomas, Revathi P Shenoy, PV Bhat, & Pragna Rao - Pathophysiology of preeclampsia & possible role of Zinc in its Genesis.
- Case Report: Tubercular Ascites Simulating Ovarian Hyperstimulation syndrome following In Vitro Fertilization and Embryo Transfer Pregnancy
Amar Ramachandran, Pratap Kumar, Naveen Manohar, Raviraj Acharya, Anita Eipe, Rajeshwari G. Bhat, Lorraine Simone Dias, and Padmaja Raghavan

Hindawi Publishing Corporation ISRN Obstetrics and Gynecology Volume 2013, Article ID 1764

- An audit of indications, complications and justification of hysterectomies at a teaching hospital in India," by Deeksha Pandey, Kriti Sehgal, Aashish Saxena, Shripad Hebbar, Jayaram Nambiar and Rajeshwari G Bhat
- International Journal of Reproductive Medicine 2014
- Original Article: Is there a Need for Luteinizing Hormone (LH) Estimation in Patients undergoing Ovarian Stimulation with Gonadotropin-Releasing Hormone Antagonists and Recombinant Follicle-Stimulating Hormone? Amar Ramachandran, Kshitij Jamdade, PratapKumar, Satish Kumar Adiga, Rajeshwari G Bhat, SinatraR Ferrao

Journal of Clinical and Diagnostic Research. 2014 Jan, Vol-8(1): 90-92

- Correlation of Fetal Abdominal Subcutaneous Tissue Thickness by Ultrasound to Predict Birth Weight
Rajeshwari G Bhat¹, Anitha Nathan², Amar³, Akhila Vasudeva⁴, Prashanth Adiga⁵, Parvati V Bhat⁶, PratapKumar⁷
- Laparoscopic cystectomy of endometrioma: Goodsurgical technique does not adversely affect ovarian reserve

Rajeshwari G. Bhat, Sushma Dhulked, Amar Ramachandran, Rajesh Bhaktha, Akhila Vasudeva, Pratap Kumar, Anuradha C. K. Rao

Journal of Human Reproductive Sciences / Volume 7 / Issue 2 / Apr - Jun 2014

- Original Article: Foetoprotein in the Diagnosis of Prelabour Rupture of Membranes
Chhavi Rana Singh¹, Rajeshwari Gurumoorthy Bhat²
Journal of Clinical and Diagnostic Research. 2014 Nov, Vol-8(11): OC01-OC02

Details of conference presentations

2012

Sl#	Title of the presentation	Name of the faculty	Details of Conference
1	Correlation of Pre-gravid Body Mass Index (BMI) and Proportional Gestational BMI Gain on Glucose Challenge Test in a South Indian Cohort – A Prospective Study.	Shashikala K Bhat	10 th World Congress on Insulin Resistance Syndrome, November 2012, San Francisco, USA

2013

Sl#	Title of the presentation	Name of the faculty	Details of Conference
1	.		

2014

Sl#	Title of the presentation	Name of the faculty	Details of Conference
1	Guided a postgraduate student and co-authored a presentation “Management of Hepatitis B in pregnancy – a case report and review of literature” in Yuva-FOGSI held at Mysore in June 2014.	Shashikala K Bhat	Yuva-FOGSI held at Mysore in June 2014.
	Title of the presentation	Name of the faculty	Details of Conference

Presented a free communication on “Predictability of Gestational Diabetes Mellitus using Glycosylated Hemoglobin in First Trimester”	Shashikala K Bhat	American Academy of Clinical Endocrinologists (AACE) Gulf Chapter Conference at <u>Abu Dhabi, UAE</u> ” on 23-25 October 2014
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Title of the presentation	Name of the faculty	Details of Conference
Co – authored the paper Presentation on “Predictability of Gestational Diabetes Mellitus using Glycosylated Hemoglobin in First Trimester”	Dr. Jyoti	American Academy of Clinical Endocrinologists (AACE) Gulf Chapter Conference at <u>Abu Dhabi, UAE</u> ” on 23-25 October 2014

Title of the presentation	Name of the faculty	Details of Conference
Co – authored the paper Presentation on “Predictability of Gestational Diabetes Mellitus using Glycosylated Hemoglobin in First Trimester”	Dr. Nida Zohor	American Academy of Clinical Endocrinologists (AACE) Gulf Chapter Conference at <u>Abu Dhabi, UAE</u> ” on 23-25 October 2014

Sl#	Title of the presentation	Name of the faculty	Details of Conference
1	Poster presentation on Nephrotic Syndrome in pregnancy	Dr. Vinutha	Attended RCOG Conference at Hyderabad on March 2014

11 Placement record of the past students and the contribution of the department to aid student placements

After successful completion of Phase I Stage IIB, students proceed to Phase II in Melaka, Malaysia

12 Plan of action of the department for the next five years

Early exposure to clinical subjects and correlation between pre and paraclinical subjects and clinical subjects to be stressed upon.

Focus will be on student Curriculum innovation, Research Impact and faculty development.

Curriculum innovation: From Batch 33 onwards (October 2015)

- Innovative skill based teaching-learning modules
- Focus on excellent communication skills
- Refining and well structured learning modules
- MCQ as assessment method
- E-learning modules/utilization of e-Resources

Faculty development:

- Faculty contributions to be promoted in curriculum
- Each faculty member to train in at least one workshop in Medical Education Department, Manipal University.
- Objective Student feedback to improve effectiveness
- Faculty exchange program from other Colleges in India

Research Impact

- Each faculty member to get trained in research methodology
- Faculty members to publish at least ONE publication indexed in SCOPUS/WEB of Science
- Research will be one of the faculty assessment parameter
- Department will have at least ONE research project and 2 Phds guidance every year

PEDIATRICS

1. Faculty profile-adequacy and competency of faculty

There are three faculty members who meet the requirements for teaching Phase I Stage IIB MBBS program as per the requirements of the regulatory bodies

Sl No.	Name	Qualification	Designation	Teaching experience
1	Dr. Dinesh M. Nayak	DCH, DNB	Professor & Head	18 years
2	Dr. Asha P. Hegde	DCH, MD	Professor	15 years
3	Dr. Nagesha Kendatti Muniyappa	DCH, MD	Asst. Prof.	3 years
4	Dr. Sai Laxman Pirdi	MD	Senior Resident	1 year

Number of faculty positions sanctioned and filled: 6/5

The department has adequate number of faculty members. Students find all the teachers in the department competent and helpful.

2. Student profile—

Entry level competency: Refer to appendix No.1

Socioeconomic status: Generally most students are from middle-income group (detailed information not available)

Language proficiency: English

3. Changes made in the courses or programmes during the past two years and the contribution of the faculty to those changes

The MBBS program is conducted in compliance with the requirements of the Malaysian Qualifications Agency (MQA) which is the regulatory body governing the health sciences education in Malaysia. Pediatrics is taught in Phase I Stage IIB for MBBS students. No significant changes have been made in the past two years in the course material and programme as 5th semester training is basic clinical training in pediatrics.

4. Trends in the success and dropout rates of students during the past two years

Not applicable since there is no university examination in this subject in

Manipal Campus

5. Learning resources of the departments- library, computers, laboratories and other resources

Faculty members and students have access to the air conditioned University Health Sciences Library where adequate standard text books, journals, e-journals, internet facility, photocopying and e-books are available. All faculty members are provided with individual laptops with free 24 hour internet access. Also, the faculty members have access to computers in the college office with scanner and printer facility and a photo copying machine.

6. Modern teaching methods practiced and use of ICT in teaching-learning

Modern methods are employed in teaching such as PowerPoint slides and videos

7. Participation of teachers in academic and personal counseling of students

Not applicable

8. Details of faculty development programmes and teachers who have been benefited during the past two years

- Manipal Centre for Personal and Professional Development of Manipal University conducts Pedagogic and personal effectiveness workshops on a regular basis. One faculty has attended this workshop in the past two years.
- Dr. Asha Hegde: attended a four week certificate course in February 2012 on 'Perspectives on Disability' organized by Department of Physiotherapy, Manipal College of Allied Health Sciences (MCOAHS) and Manipal Centre for Philosophy and Humanities (MCPH)
- Department of Pediatrics organized an IAP sponsored Advanced Science of Vaccinology (ASOV) Workshop in August 2012. Participants included the local Practicing Pediatricians of Udupi, Manipal and Pediatric postgraduates

9. Participation / contribution of teachers to the academic activities including teaching, consultancy and research

- Faculty are involved in teaching MBBS students

- Faculty provide clinical consultancy at Dr. TMA Pai Hospital, Udupi and Dr. TMA Pai Rotary Hospital, Karkala
- Faculty members provide consultancy services for monthly comprehensive hemophilia clinics.
- The department organised ‘Advance Science of Vaccinology’ workshop at Kasturba Hospital, Manipal for local pediatricians and Pediatric post graduates in August 2012.
- Faculty are actively involved in clinical research
- One candidate has registered for PhD with the faculty of the department

Guest lectures/chairing sessions/awards/resource person in workshop

2012

1. Dr. Asha Hegde was a guest at Talk Show on Spandana TV on 27th October 2012
Topic “Feeding the Young Child”
2. Dr Dinesh M Nayak, Professor & Head of Pediatrics was the chief guest and delivered a talk at the ‘Newborn week celebrations’ in Manipal in 2012.

2013

1. Chairperson-Newer vaccines including Pentavalent vaccine – Dr. Pavan Murthy, Regional Team Leader – South, WHO Country Office for India as part of National Immunisation Workshop, March 2013 conducted by Dept. of community medicine, KMC, Manipal.
2. Interview about Hemophilia in 90.4 FM channel in April 2013

2014

1. Dr. Dinesh M Nayak:Talk on common presentation of malaria in children and panel discussion – CME organized by department of Community Medicine, KMC, Manipal in April 2014.
2. Dr. Dinesh M Nayak: Resource person for CME on pediatric HIV organized by Department of Microbiology in June 2014.
3. Dr. Dinesh M Nayak: Resource person for Update on Seasonal Pediatric Infections organized by IAP, Udupi Dist. Branch and department of Pediatrics in October 2014.

4. Dr. Asha Hegde chaired one session at State Level Conference on Pediatric Pulmonology at Hubli in July 2014

10. Collaboration with other departments/institutions, at the State, National and International levels, and their outcome during the past two years

The department has research collaboration with the department of OBG and Hemophilia society

11. Priority areas for Research and details of the ongoing projects, important and noteworthy publications of the faculty, during past two years

Ongoing projects:

Category	Number
Funded research projects	5
Non-funded research projects	0
PhD research projects	2
PG research projects	0
UG research projects	0

Last 3 years (2012-2014):

	2012	2013	2014
Completed funded research projects	0	0	1
Completed non-funded research projects	0	0	0
Completed PhD research projects	0	0	0
Completed PG research projects	0	0	0
Completed UG research projects	0	0	0
Publications	1	0	2
	1	0	0
Books	0	0	0
Chapters in books	0	0	0
Conference presentations	0	0	1
	1		

Ongoing funded research projects:

Sl#	Title	Principal/Co-Investigator	Funding agency	Funding amount
1.	Dr. Dinesh M . Nayak: 'Assessment of risk factor and predictor for spontaneous	Dr. Dinesh M Nayak, Co-Investigator	ICMR	Rs 50 Lakhs

	preterm birth in a South Indian antenatal cohort. Grant amount Rupees 50 lakhs, 2012			
2.	Phase III, multicenter, randomized, double-blind, placebo-controlled study to evaluate the efficacy and safety of live attenuated bovine-human rotavirus reassortant pentavalent vaccine (brv-pv) against severe rotavirus gastroenteritis in healthy indian infants	Dr. Dinesh M Nayak, Study Pediatrician	PATH & Serum Institute	Rs 5 crores
3.	Extension Study for Patients who completed GENA-05 (Nu Protect) – to Investigate Immunogenicity, Efficacy and Safety of Treatment with <i>Human-cl rh FVIII. 2015</i>	Dr. Dinesh M Nayak, Principal Investigator	Max Neeman	
4.	Adolescent Health Care in two districts of Coastal Karnataka- An Exploratory Study	Dr. Asha Hegde, Principal Investigator	ICMR	Rs 21 Lakhs
5.	The lost focus on males in Adolescent friendly health care services - A qualitative analysis	Dr. Asha Hegde, Co Investigator	ICMR	Rs 25 Lakhs

Completed Research Project

SI#	Title	Principal/Co-Investigator	Funding agency	
1.	Title: Inhibitor Development in Previously Untreated Patients (PUPs) or Minimally Blood Component-Treated Patients (MBCTPs) when Exposed to plasma-derived von Willebrand Factor-Containing Factor VIII Concentrates and to Recombinant Factor VIII Concentrates: An	Dr. Dinesh M Nayak	Max Neeman	

Independent, International, Multicentre, Prospective, Controlled, Randomised, Open Label, Clinical Trial. Protocol No.: ABB-09-001 - SIPPET			
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Ongoing PhD research projects

#	Title	Name of the student	Guide
1	Identification of new cases and empowerment of patients with bleeding disorders to improve their quality of life.	Ms. Sulochana	Dr. Dinesh M Nayak
2	Effectiveness of comprehensive hemophilia education program on health related quality of life and clinical outcomes of children and young people with hemophilia; and knowledge among their parents.	Ms. Angeline D'Souza	Dr. Dinesh M Nayak

Ongoing PG research projects

No	Title	Guide
1		

Publications- 2012

- Chandrika D. Nayak, Vaibhav Agarwal, Dinesh M. Nayak,
Correlation of Cord Blood Lipid Heterogeneity in Neonates with Their Anthropometry at Birth Indian Journal of Clinical Biochemistry Online since 28 August 2012
- Chandrika D Nayak, Madhava Kamath, Dinesh M Nayak, and Nagesha KM
Status of pituitary-thyroid axis of newborns and its relationship with anthropometry and maternal factors at birth. International Journal of Pharma and BioSciences Oct 2012; 3(4): B51-57.

Conference Presentations:

2014

Sl#	Title of the presentation	Name of the faculty	Details of Conference
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1.	Clinical profile of children presenting with Convulsive Status Epilepticus	Dr. Dinesh M Nayak	3 rd Emirates International Pediatric Neurology conference held at Dubai from 7 th to 8 th February, 2014
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12. Placement record of the past students and the contribution of the department to aid student placements

After successful completion of Phase I Stage IIB, students proceed to Phase II in Melaka, Malaysia

13. Plan of action of the department for the next five years

- To have adequate faculty for smooth running of the training programme.
- Ensure individual attention to students by small group discussions
- Have training / practice modules for certain core topics like growth and development.

FACULTY OF DENTISTRY

1. Faculty profile - adequacy and competency of faculty

There are twelve faculty members who meet the requirements for teaching Phase I Year 1 and Year 2 BDS program as per the requirements of the regulatory bodies

#	Name	Qualification	Designation	Teaching Experience
1	Dr. Arun Prakash C.	MDS	Assoc. Dean & Assoc. Prof. of Prosthodontics & Maxillofacial Prosthetics	05
2	Dr. Arunima Chauhan	MDS	Assoc. Prof. of Oral Pathology	05
3	Dr. Smitha Sammith Shetty	MDS	Asst. Prof. of Oral Pathology	04
4	Dr. Bharath Rao K.	MDS	Asst. Prof. of Oral Pathology	04
5	Dr. Swapna B.V.	MDS	Asst. Prof. of Prosthodontics & Maxillofacial Prosthetics	03
6	Dr. S. Karthik	MDS	Asst. Prof. of Prosthodontics & Maxillofacial Prosthetics	02
7	Dr. Sheetal Shetty	MDS	Asst. Prof. of Conservative Dentistry & Endodontics	01
8	Dr. Sandhya Yelamali	MDS	Asst. Prof. of Conservative Dentistry & Endodontics	01
9	Dr. Narmatha V J	MDS	Asst. Prof. of Conservative Dentistry & Endodontics	<01
10	Dr. Runki Saran	BDS, M. Sc.	Lecturer in Dental Materials	05
11	Dr. Arul Amalan L.	BDS, M. Sc.	Lecturer in Dental Materials	04

Number of faculty positions sanctioned and filled: 11/11

The department has adequate number of faculty members.

2. Student profile –

Entry level competency: Refer to appendix No.1

Socioeconomic status: Generally most students are from middle-income group (detailed information not available)

Language proficiency: English

3. Changes made in the courses or programmes during the past two years and the contribution of the faculty to those changes

The BDS program is conducted in compliance with the requirements of the Malaysian Qualifications Agency (MQA) which is the regulatory body governing the health sciences education in Malaysia. Dental subjects are taught in Phase I Year 1 and Year 2.

- Accredited by Malaysian Qualifying Agency (MQA)
- All the faculty members are involved in revising the syllabus. For this regular weekly meetings are held
- No. of PBL hours were reduced from three to one PBL per block with three sessions each. The PBL sessions were made integrated.
- Following Outcome based education
- Revision of Curriculum done
- Printing new record manual

4. Trends in the success and dropout rates of students during the past two years

Year – 1 (Oral Biology)	Appeared	Passed	Failures	Dropouts
2012-2013	67	66	-	1
2013-2014	78	77	-	1

Year-2 (Dental Materials)	Appeared	Passed	Failures	Dropouts
2012-2013	70	70	-	-
2013-2014	68	68	-	1

5. Learning resources of the departments - library, computers, laboratories and other resources

- Faculty members and students have access to the air conditioned Health Sciences

Library of the University which has large numbers of latest editions of textbooks, journals, internet facility, photocopying and e-books. Faculty are given individual laptops with free internet access

- The faculty members have access to the academic section of MMMC which has common computer terminals with internet connection, printers, scanner and photocopying machine
- LCD projectors in all the lecture halls /seminar rooms/ practical labs
- Fully equipped – (Oral Biology, Preclinical Prosthodontics, Dental Materials, Preclinical Conservative Dentistry) Laboratories
- Various study models are available to teach students regarding different aspects of oral biology, dental materials, prosthodontics and conservative dentistry.
- Developmental study models with different ages are used to study the teeth development.
- Tooth anatomy models are also available to learn the morphology of teeth.
- Enlarged resin study models, dentulous jaws, caries progression models and also models showing removable, fixed, implant prosthesis are used for demonstrations.
- Latest impression materials are given to students for hands on experience

6. **Modern teaching methods practiced and use of ICT in teaching – learning**

Active learning is emphasized in the curriculum. Self-Directed Learning (SDL), Problem Based Learning (PBL), Case Based Learning (CBL) and audio-visual aids are part of teaching learning methods., MSP (mentored student projects)

PBL: Students are introduced to a conceptually and clinically significant topic, presented in the format of a case scenario. The students are divided into small groups. Each group has a faculty as facilitator. PBL is conducted in two sessions. In the first session (brain storming session), cases are given and the students work together to analyze the problem and clarify difficult terms, identify key issues, formulate a hypothesis, and list the learning objectives. In the second session (presentation session), which is conducted after a week, students present the specified learning objectives.

The mode of teaching makes use of both traditional blackboard teaching and modern techniques such as power point presentations with good use of quality images, animations and videos rich with useful interactive sessions. Students can access audiovisual learning materials prepared by faculty members in the health sciences library of the university. Microscope image processing system is employed and certain concepts are highlighted using Cross words/ quizzes.

MSP:

Research and review topics based are selected and students are involved in research methodology. They present a poster which is judged by a neutral judge and also they submit a project book. They are encouraged to take minor active research topics, getting ethical clearance etc.

7. Participation of teachers in academic and personal counseling of students

Each teaching staff member has been designated as a mentor for an average of ten students from different batches for counseling on academic and personal matters. Students are at liberty to take appointments from mentors to seek guidance at a time suited for both. The responsibilities of a mentor include

- Providing academic and personal counseling to their mentees
- Helping the students to get acclimatized to campus life in Manipal.
- Promote cultural integration.
- Support co-curricular and welfare activities of the students.
- Arrange remedial measures for students who are at the risk of failure
- Guiding the mentored student research projects.

8. Details of faculty development programmes and teachers who have been benefited during the past two years

- Induction program
- Pedagogy and personal effectiveness workshop
- Workshop on PBL facilitation skills
- Workshop on mentoring skills
- All faculty members have benefitted from these workshops in the past two years
- One faculty attended a workshop in PBL conducted at UITM, Kuala Lumpur, Malaysia and attended a workshop in curriculum documentation based on outcome based education, in Melaka, Malaysia.
- Workshop in curriculum – outcome based education.
- Organizing guest talks by external examiners from eminent universities from Malaysia.

9. Participation / contribution of teachers to the academic activities including teaching ,

consultancy and research

- All faculty are involved in teaching BDS students
- Faculty are providing clinical consultancy in the evening clinics at Dr. TMA Pai Hospital, Udupi
- Research: Faculty are involved in conducting research, presenting their findings in conferences and publishing in journals, and guiding students in their projects.

10. Collaboration with other departments/ institutions, at the State, National and International levels, and their outcome during the past two years

None

11. Priority areas for Research and details of the ongoing projects, important and noteworthy publications of the faculty, during past two years

Ongoing:

Category	Number
Funded research projects	0
Non-funded research projects	0
PhD research projects	0
PG research projects	0
UG research projects	14

Last 3 years (2013-2015):

	2013	2014	2015
Completed funded research projects	0	0	0
Completed non-funded research projects	0	0	0
Completed PhD research projects	0	0	0
Completed PG research projects	0	0	0
Completed UG research projects	4	4	5
Publications	International	4	2
	National		16
Books	0	0	0
Chapters in books	0	0	0
Conference presentations	International	0	5
	National	1	1

Publications

2013

1. Bilateral bifid mandibular condyle. Madhumitha Natarajan, Ritesh singla, Bharath Rao. eJournal of Dentistry Oct –Dec 2013 Vol 3 Issue 4 page 513-516.
2. Palateless Magnetic Retained Overdenture: An Innovative Technique to Treat Patient with Severe Gag Reflex. IJCD; 4(2),2013 pg 26-28
3. Palateless magnetic retained over-denture- an innovative technique to treat patient with severe gag reflex. International journal of contemporary dentistry 2013; 4(2):26-30. **(Dr. Karthik)**
4. Antimicrobial activity of gutta percha points containing root canal medications against E. Faecalis and Candida albicans in simulated root canals- an in vitro study. Endodontology 2013;25 (2): 8-18. **(Dr. Sheetal)**

2014

Dr. Arun Prakash C.

1. Evaluation of the effect of desensitizing agents on the retention of complete cast crowns: An in vitro study. – Arun prakash chandrasekaran, Nargunan deepan, Bharath Karikurve Rao, Swathi Pai, Abhay Sonthalia, Swapna Venkatesh Bettanpalya. SRM journal of research in dental sciences vol. 5, issue 3, July 2014
2. Multi disciplinary management of a severe cleft lip and palate : a case report. Dr.Arun prakash , Dr. Abhay Sonthalia, Dr. Bharath Rao K. Guident vol 7(7) june 2014 page 15-18.
3. Invitro evaluation and comparison of transverse and impact strength of heat polymerized acrylic resin reinforced with polyethylene fibers and polypropylene fiber. DeepanN, Arun prakash.C , Bharath Rao.K, Abhay Sonthalia. Journal of advanced medical and dental sciences research, vol 2, issue 2, april-june 2014,page 46-56.
4. Use of Ceka Preci-Clix Post System for the Tooth Supported Mandibular Over denture: A Case Report; Indian journal of stomatology vol 5(4) 2014

Dr. Arunima Chauhan

5. International Journal of Current Research. Vol. 6, Issue, 11, pp.9576-9582, November, 2014
6. International Journal of Health Sciences & Research. 158, Vol.4; Issue: 9; September, 2014

7. Journal of Medical Science and Clinical Research. Volume 2;Issue :12, Page 3509-3519, December-2014
8. Dental Journal of Advance Studies Vol. 2 Issue I- 2014, page 43-45

Dr. Bharath Rao K

9. Evaluation and comparison of lip print patterns among indians, chinese and malay. Dr. Bharath Rao, Dr. Sam raj srinivasan, Dr. Madhumitha Natarajan. Guident April 2014, page 16-18.
10. Evaluation of myofibroblasts by expression of alpha smooth muscle action. A marker in fibrosis, dysplasia and carcinoma. Bharath rao.K, N.Malathi, Sangeetha Narashiman, Sharada T Rajan. Journal of Clinical and diagnostic research. 2014 Apr: vol – 8(4), page 14- 17.
11. Evaluation of the effect of desensitizing agents on the retention of complete cast crowns: An in vitro study. – Arun prakash chandrasekaran, Nargunan deepan, Bharath Karikurve Rao, Swathi Pai, Abhay Sonthalia, Swapna Venkatesh Bettanpalya. SRM journal of research in dental sciences vol. 5, issue 3, July 2014
12. Multi disciplinary management of a severe cleft lip and palate : a case report. Dr.Arun prakash , Dr. Abhay Sonthalia, Dr. Bharath Rao K. Guident vol 7(7) june 2014 page 15-18.
13. Invitro evaluation and comparison of transverse and impact strength of heat polymerized acrylic resin reinforced with polyethylene fibers and polypropylene fiber. DeepanN, Arun prakash.C , Bharath Rao.K, Abhay Sonthalia. Journal of advanced medical and dental sciences research, vol 2, issue 2, april-june 2014,page 46-56.
14. Rationale for a bi-jaw surgery in an asymmetric class III mandible – a case report. Dr. Madhumitha, Dr.Bharath Rao, Dr. Parul Dasson. Guident March 2014 page 50-54.

Dr. Smitha Shetty

15. Effectiveness of study skills on academic performance of dental students. Journal of Education and Ethics in Dentistry. 2014; 4(1):28-31.
16. Assessment and comparison of p53 and p63 expression in oral epithelial dysplasia and squamous cell carcinoma. SRM Journal of Research in Dental Sciences. 2014;5(3);149-54

Dr. Swapna BV

17. Immediate Dentures Using Natural Teeth – A Simple Solution; Annals and Essences of Dentistry; Vol. VI, Issue 1 Jan– Mar 2014,pg 11-13
18. Use of Ceka Preci-Clix Post System for the Tooth Supported Mandibular Over denture: A Case Report;Indian journal of stomatology vol 5(4) 2014

Dr. Karthik S

19. Use of ceka preci clix post system for the tooth supported mandibular denture- a case report 2014; 5(4):150-2
20. Calcium Phosphate as barrier for augmentation of bone in non-contained periodontal defects: a novel technique. (The Journal of Contemporary Dental Practice, November-December 2014; 15(6):779-783. [Pub Med]

Dr. Sheetal Shetty

21. The complex radicular groove: interdisciplinary management with mineral trioxide aggregate and bone substitute. Journal of Contemporary Dental Practice 2014; 15(6): 792-6.

Dr. Runki Saran

22. Kumar S, Saran R, Pentapati K. General Anaesthesia in Paediatric Dentistry – An Institutional Experience, Global Journal of Medical Research: J Dentistry and Otolaryngology Vol: 14(6) 2014.

2015

Dr. Bharath Rao K

1. Non surgical management of a lateral open bite using micro implants – a case report. Dr. Madhumitha, Dr. Bharath. Rao. Guident January Jan 2015 page 46-49.
2. Dr. Sheetal Shetty
Mandibular first molars with middle mesial and middle distal canals- A report of two cases. IOSR Journal of Dental and Medical Sciences 2015; 14 (3):43-45.

Dr. Sandhya Yelamali

3. Endodontic Treatment of a Maxillary First Molar with C- Shaped Canal Configuration: Case Report. IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) Volume 14, Issue 1 Ver. I (Jan. 2015), PP 82-85

Dr. Runki Saran

4. Saran R, Kumar S, Pentapati KC. Assessment of learning preferences among dental students using Visual, Aural, Read-Write, Kinesthetic questionnaire: An institutional experience. J Dent Res Rev, Vol: 2(1) 2015.
5. Saran R, Kumar S. Use of crossword puzzle as a teaching aid to facilitate active learning in dental materials. IJAR Vol : 5(4) 2015.

Dr. Narmatha V J

6. Mandibular first molars with middle mesial and middle distal canals- A report of two cases. IOSR Journal of Dental and Medical Sciences 2015; 14 (3):43-45.
7. Evaluation of manual dynamic activation, passive ultrasonic irrigation and canalbrush on smear layer removal - a scanning electron microscopic study. Narmatha VJ, Sophia Thakur. International Journal of Advanced Research 2015, 3 (3), 390-400

The details of our conference presentations have been listed below:

2013

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1	Learning styles of 1 st year dental students	Dr. Runki Saran	Indian Dental Conference, Coorg, 2013

2014

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1	Determining learning preferences among dental students for effective teaching	Dr. Runki Saran	IADR-SEAADE Conference Sarawak, Malaysia, 2014
2	General anesthesia a boon in pediatric dentistry	Dr. Runki Saran	Indian Dental Conference, Hyderabad, 2014
3	Invitro Evaluation and comparison of transverse and impact strength of heat polymerized acrylic resin reinforced with polyethylene fibers and polypropylene fibers.	Dr. Arun Prakash	AAEDC Dubai.
4	Perception of Practice Management Skills Amongst Undergraduate Indian Dental Students	Dr. Swapna	90th Annual session of the Greater New York Dental Meeting November 2014
5	Evaluation Of Feasibility Of	Dr. Swapna	Aeecd Dubai February

	Recementation Of Fixed Partial Dentures		2014
6	Lip prints forensic tool comparison between different races	Dr. Bharath rao	Aeedc Dubai February 2014

2015

Sl. No.	Title of the presentation	Name of the faculty	Details of Conference
1	A novel method for reinforcement of glass ionomer cement	Dr. Runki Saran	3 rd annual conference, Karnataka Prosthodontic society, Manipal, 2015
2	Antimicrobial activity of gutta-percha points containing root canal medications against <i>Enterococcus faecalis</i> in simulated root canals - an in vitro study.	Dr. Sheetal Shetty	Indian Dental Conference And Exhibition 13 th -15 th February 2015 in Bangalore
	Comparison of study skills with academic performance among the Malaysian dental students	Dr. Smitha S. Shetty	68 th Indian Dental Conference. 13-15 th February 2015, Bangalore

12. Placement record of the past students and the contribution of the department to aid student placements

On successful completion of Phase I students proceed to Phase II in Melaka, Malaysia

13. Plan of action of the department for the next five years

- Increase in student intake to 100 per year
- To motivate the new faculty to register for Ph.D
- To make an effort towards obtaining grants from external funding agencies
- To encourage faculty to strive for external fellowships
- To elevate the standards of teaching by proper counseling of junior faculty
- To incorporate more audio-visual aids such as animations, videos and audios for more interactive sessions in the classrooms
- Publishing research work in indexed journals

- Appointment of additional faculty members
- Organizing guest lectures, intra and inter collegiate competition for students.
- To introduce digital lab concept for undergraduate practical teaching
- To organize faculty development programs
- To set up dental museum.

FACULTY OF MEDICINE
DEPARTMENT OF INTERNAL MEDICINE

1. Faculty profile, adequacy and competency of faculty:

There are 8 full time faculty in the Internal Medicine department, besides the part time faculty from the attached hospitals. All 8 have adequate clinical experience to teach undergraduate medical students.

Sl. No.	Name	Educational Qualifications:	Designation	Total Clinical/ Teaching Experience
1	Dr. Uduman Ali Mohamed Yousuf	MBBS, MD , DM (Neurology)	Professor & Head	29 / 13
2	Datuk Dr. Jaswant Singh Grewal	MBBS , MRCP(UK)	Clinical Professor	44 / 23
3	Dr. Lakshmi Nagappa Naik	MBBS ,MD	Professor	22 / 16
4	Dr. Bashir Ahmad Dar	MBBS , MD	Assoc. Prof.	30 / 13
5	Dr. Yashodhara Byagoti Math	MBBS, MD , MRCP (UK)	Assoc. Prof.	16/ 12
6	Dr N. Nivedita G S Nadarajah	MBBS, MRCP , FRCP(UK)	Clinical Professor	37 / 14
7	Dr Mra Aye	MBBS , M.Med Scm, FACTM (Australia)	Professor	39 / 24
8	Dr Senthil Kumar Palaniappan	MBBS, MD	Assoc. Prof.	

The faculty in the department are continuously improving their academic competence by undertaking research in contemporary issues and serving to the best satisfaction of students. They are regularly attending National and International level conferences and presenting papers on relevant topics. Thus the faculty has the required competency and there is a sustained effort on their part to improve it. The faculty strength is adequate. Faculty is competent to handle the MBBS and BDS courses offered by the Department. Our faculty is also supported by other empanelled Consultants and clinical faculty from government hospitals in Melaka and Muar General Hospitals.

2. Student profile according to programmes of study, gender, region etc.

The students are those in the Phase II of the M.B.B.S. program. As the college is recognized by the Malaysian Medical Council the students almost entirely (99%)

consists of Malaysian citizens. They do come from all the states of east and west Malaysia. The students comprise of various racial backgrounds viz. Malay, Chinese and Indian. They are of both genders with a slight predominance of females.

3. Changes made in the courses or programmes during the past five years and the contribution of the faculty to those changes.

To make the courses more relevant and useful, the course structures and contents are regularly revised. The programme contents are restructured by inculcating the contemporary issues. Revised Lecture topics, learning outcome documents, pre-final year and final year logbooks, Problem based learning topics & documents are updated every year.

A new e-learning website called Moodle was updated along with remodeled student hand outs for all the semesters were prepared. The entire team of department Medicine has contributed its best to revamp the course documents as per curriculum requirements.

4. Trend in the success rate and drop out of students during the last five years.

The pass rate in final MBBS examination has ranged between 94 -98% in last 8 final MBBS University Examinations. There is an average of 3-5 % of failure rate. 1-2 students dropped out of MBBS course per year after failing in 3 maximum attempts allowable in final MBBS examinations or if they are unable to complete the 5 Year course in a 8-year period after registering for MBBS course.

In the last two MBBS university examinations, the performance of students in Internal Medicine discipline was the best among all other departments in practical marks in Long and short cases.

5. Learning resources of the department like library, computers, laboratories and other such resources.

The department utilizes the upgraded college library which is well equipped with all the latest medical books and journals along with access to numerous online journals and database. The department also utilizes Lecture theatres, Class rooms & Computer lab of the college which are well equipped with Overhead LCD projectors, adequate number of desktop and laptop computers with free Wi-Fi & cabled Internet connectivity which are used as tools to promote teaching – learning process. Each faculty is also provided with a laptop computer, free internet access, printer and scanner to aide teaching to the students.

The department runs the Clinical Skill's lab training of students, which has procured state of the art human patient Simulator and various upgraded mannequins to train for simulated procedures and case scenarios. The department faculty also runs BLS training of all the final year medical students.

The newer editions of textbooks and latest journals are regularly recommended by the department and added to the college library. The learning outcomes and log-books are also regularly updated.

6. Modern Teaching methods in practice other than the lecture method.

To improve the academic caliber of students various innovative and new teaching methods like Small Group Discussion, Problem based learning, e-Learning, Self-Directed Learning, OSCE, OSPE, Portfolio challenge, Flip Class Room technique, Narrative teaching, Interactive lecture etc. are used.

7. Participation of teachers in academic and personal counseling of students.

There is a 'Mentorship' programme successfully run by the college, which is headed & guided by the Deputy Dean of the college in which the department participates very actively. All the students are divided into subgroups and each such group has a mentor. Each faculty in our college is a mentor for one of the groups of students. The mentors hold regular meetings with students or a mentee can seek help whenever needed. The students are counseled, motivated and guided to solve their problems and are encouraged & appreciated for their achievements.

8. Details of faculty development programmes and teachers who benefited during the past five years.

In the last five years, 8 teachers in our department have attended workshops, refresher courses, orientations and faculty development programmes on medical education, research methodologies and conduct of clinical trials, organized at our college or at different Universities and institutions.

9. Participation of teachers in academic activities other than teaching and research.

All the teachers are regularly attending National and International conferences and seminars and presenting papers on contemporary issues.

10. Collaborations with other Departments and Institutions at the National and International level and their outcome during the past five years.

Clinical collaboration has been done with the department of Medicine of Melaka General Hospital and Jasin General Hospital to provide clinical services in the respective wards and OPD. This has resulted in improved teaching resource availability for the students as well as better patient outcomes. The department also runs 'Common Programme' with 5 other departments in the college on clinical topics spanning various other specialties.

The faculty also has various research participation and initiatives in clinical trials of CRC – Melaka, Malaysia and institutes in USA & Srilanka.

11. Priority areas for Research and details of the on-going projects, important and noteworthy publications of the faculty during the past two years.

3 members in the department are respectively Principal Investigator, Co-investigator and Consultant in 4 major clinical trials in Malaysia and 1 trial in Srilanka.

The thrust areas of research are Ischaemic Stroke, Stem Cells, Parkinson's disease, Dengue infection, Snake bite, Non-invasive haemodynamic assessment methods with Echocardiography and drug trials in Type 2 Diabetes Mellitus.

On-going research projects:

1. Stroke Asia Study a Multinational (Asian countries) Study on the outcome of stroke patients (Prof. Uduman Ali)
2. Intravenous Stem cell therapy in stroke – National Study monitored by CRC & My- SMO, Malaysia (Prof. Uduman Ali)
3. International, multicentre, Phase III –drug trials on Diabetes Mellitus (Prof. Uduman Ali with Co-Investigator Prof. Lakshmi Naik)
4. “Why do I always see double?” A misdiagnosed case of ocular myasthenia gravis for 10 years. *BMJ Case Reports* 2014; doi:10.1136/bcr-2013-203488.
5. A case of fronto-temporal dementia. *IJCRI* 2013
www.ijcasereportsandimages.com
6. Multidrug and extensively drug-resistant tuberculosis from a general practice perspective - *Dovepress Journal* October 2010 , Volume 2010:3 Pages 115 - 122
Efficacy of SCORPIO methodology in teaching short cases – A FAIMER project.
Poster presentation was done in 3 places. (Prof. Lakshmi Naik)
7. Pemphigus vulgaris in a pregnant woman and her neonate. *BMJ Case Reports* 2012; doi:10.1136/bcr.02.2012.5850. (Prof Yashodhara B.Math)
8. Determinants of contraceptive usage among Myanmar migrant women in Phang-Nga Province, Thailand. *Journal of Medicine and Medical Sciences*. 2012 Nov; 3(11):721-728. (Dr Senthil Kumar Palaniappan)
9. High Risk Behavior, Knowledge and Attitude of HIV/AIDS among Workers in Factories Manufacturing Alcohol in Mandalay, Myanmar. *World Journal of AIDS*
Vol. 3 No. 2 (2013) , Article ID: 32762 , 7 pages (Prof Mra Aye)
10. Waist circumference and BMI cut-off points to predict risk factors for metabolic syndrome among outpatients in a district hospital. *Singapore Medical Journal* 2012, 53(8):545-550. (Prof Mra Aye)

Publications:

Since last five years, over 40 publications have been done by department faculty including research papers, review articles, case reports and chapters in various indexed

journals, Annual update books and Text-books. Some papers have received more than 100 citations internationally.

12. Placement record of the past students and the contribution of the department to the student placements.

Passing the final University exam enables the students to be accredited by respective Medical councils and placed as House Officer in various Government Hospitals of Malaysia or their respective countries. Faculty members are actively involved in advising and counseling students about various career opportunities before and after completion of their course.

100% of passed out students in past have been placed as house officers.

13. Plan of action of the Department for the next five years.

The department has planned to modify and improve various teaching & assessment methods and collaborate with international Universities for effective updates and their implementation in delivery of medical education.

It also has plans to support the initiative of the college and start post-graduate training programme in Internal Medicine subject to approval process.

Further, the department plans to undertake additional clinical responsibility of coordinating patient care in General Hospitals of Melaka, Muar and Jasin and its own upcoming hospital in Melaka and other parts of Malaysia.

It also has plans to regularly organise National level update courses in various medical sub-specialities and to start International training centre in collaboration with American Heart Association (AHA) for delivering AHA certified BLS and ACLS courses.

The faculty plans to be more active in clinical research and publications.

DEPARTMENT OF SURGERY

1. Faculty profile, adequacy and competency of faculty

There are 11 full time faculty including 6 Professors of which 2 are Clinical Professors. The rest comprise 2 Associate Professors, 2 Clinical Faculty, and 1 Assistant Professor in the Surgery department, not including the part time faculty from the attached hospitals. All 11 faculty have more than adequate clinical experience to teach undergraduate medical students.

Sl. No.	Name	Educational Qualifications:	Designation	Total Clinical/ Teaching Experience
1.	Dr M Nachiappan	MBBS, FRCS	Head & Clinical Professor	39 / 8
2.	Dr Kumar M V	BSc ,MBBS, FRCS	Professor	48 / 14
3.	Dr Pranab Kumar Sen	MBBS, MS , FRCS	Professor	35 / 14
4.	Dr Jyotirmay Das Gupta	MBBS, MS	Professor	39 / 25
5.	Dr.Ananda Rao B H	MBBS, MS	Professor	40 / 36
6.	Dr Aung Win Thein	MBBS ,FRCS	Assoc. Prof.	29 / 19
7.	Dr Bikramjit Pal	MBBS ,FRCS	Clinical Faculty	25 / 11
8.	Dr B. Selvaraj	MBBS, MS, MCH	Clinical Faculty	37 / 12
9.	Dr Krishna Kumar Mallick.	MBBS, MS(Gen. Surg.),FCGP(Ind)	Clinical Professor	38 / 20
10	Dr Sundarprakash Sivalingam	MBBS, MS	Asst. Prof.	15 / 5
11	Dr.Raveender Nagaraju	MBBS , MD	Assoc. Prof.	29 / 12

2. Student profile according to programmes of study, gender, region etc

The students are those in the Phase II of the M.B.B.S. program. As the college is recognized by the Malaysian Medical Council the students almost entirely (99%) consists of Malaysian citizens. They do come from all the states of east and west Malaysia. The students comprise of various racial backgrounds viz. Malay, Chinese and Indian. They are of both genders with a slight predominance of females.

3. Changes made in the courses or programmes during the past five years and the contribution of the faculty to those changes

Changes made in the Department of Surgery are:

- a. Increase use of clinical skills centre for teaching procedural skills
- b. Revision of curriculum to define the *Must Know and Nice to Know* topics

- c. Increase use of Small Group Teaching

4. Trend in the success rate and drop out rate of students during the last five years

N/A

5. Learning resources of the department like library, computers, laboratories and other such resources.

N/A

6. Modern teaching methods in practice other than the lecture method

- a. Introduction of High Fidelity simulation for teaching acute surgical emergency
- b. Problem Based Learning
- c. Introduction of Surgical Workshop

7. Participation of teachers in academic and personal counselling of students

There is a 'Mentorship' programme successfully run by the college, which is headed & guided by the Deputy Dean of the college in which the department participates very actively. All the students are divided into subgroups and each such group has a mentor. Each faculty in our college is a mentor for one of the groups of students. The mentors hold regular meetings with students or a mentee can seek help whenever needed. The students are counseled, motivated and guided to solve their problems and are encouraged & appreciated for their achievements.

8. Details of faculty development programmes and teachers who benefited during the past five years

- a. All faculty have attended various in-house and external medical education workshop dealing with teaching methodology and assessment
- b. Two of the faculty are regularly attending Cochrane workshop to enhance their ability to write Cochrane systematic review

9. Participation of teachers in academic activities other than teaching and research

Every member in the department is a member of different academic committee such as MEQ, MCQ, Library, E-learning, SDL, OSCE and Portfolio.

10. Collaborations with other departments and institutions at the national and international level and their outcome during the past five years

Nil

11. Priority areas for Research and details of the on-going projects, important and noteworthy publications of the faculty during the past two years.

- a. Cochrane systematic review
- b. Simulation in medical education

Ongoing projects:

- a. Cochrane systematic review: “Chemotherapy versus Surgery with or without adjuvant chemotherapy and radiotherapy for localized primary gastric diffuse large B-cell lymphoma”
(Protocol published on 13 June 2012- now authoring review stage)
- b. Use of simulation in trauma teaching to undergraduate medical students

Publications:

Prof. Dinker Pai

Papers published last 3 years

- a. Madan SS, Pai DR.
Crossed versus Lateral pinning in the treatment of displaced extension-type supracondylar fractures of humerus in children: A prospective study.
Internet journal of Orthopedic Surgery (publication in progress)
- b. T Zin, M Maw, SM Oo, DR Pai, RB Paijan and M Kyi.
How I do it: Simple and effortless approach to identify thoracodorsal nerve on axillary clearance procedure. *Ecancel* 2012; 6:255. DOI: 10.3332/ecancer.2012.255
- c. Zin T, Maw M, Pai DR, Paijan RB, Kyi M.
Efferent limb of gastrojejunostomy obstruction by a whole okra phytobezoar: Case report and brief review. *World J Gastrointest Endosc.* 2012; 4(5): 197-200. Available from: <http://www.wjgnet.com/1948-5190/full/v4/i5/197.htm>. DOI: <http://dx.doi.org/10.4253/wjge.v4.i5.197>
- d. Pai DR, Singh S.
Medical simulation: Overview, and application to wound modelling and management. *Indian Journal of Plastic Surgery* 2012; 45(2): 209-214
- e. Shah Jumaat, Effat Omar, Dinker R Pai, Suneet Sood.
Molecular biomarkers of wound healing. *Ind. J of Plastic Surgery* 2012; 45(2): 220-228
- f. Amit Bhardwaj, Mohamad F. Yusof, Dinker R. Pai.
Review of Marjolin’s ulcer arising at the elbow. *Hand.* 2012; 7(2): 223. Available from: <http://www.springerlink.com/openurl.asp?genre=article&id=doi:10.1007/s11552-012-9404-6>

Book chapter publications

- a. DinkerPai, G Sriram eds. Handbook of procedural skills. Melaka Manipal Medical College. Melaka 2012

Prof. MV Kumar

- a. (Ed) Medical Ethics for Students ; 2011. Penerbitan RZ; 93-107
- b. M.V.Kumar (Editor and Author). Clinical Companion in Surgery. Loh Printing Press. First edition. 2012.

Assoc. Prof Aung Win Thein

- a. Cochrane Systematic Review (Protocol): “Chemotherapy versus Surgery with or without adjuvant chemotherapy and radiotherapy for localized primary gastric diffuse large B-cell lymphoma” (Protocol published on 13 June 2012)
- b. “Painless pathological fracture rooted from advanced breast cancer”; a medical poster presented in 18th Asian Congress of Surgeon, Cebu, Philippine. “Painless pathological clavicle fracture rooted from advanced breast cancer”.
- c. “Left inguinal lymph metastases from adenocarcinoma of unknown primary”: A medical poster presented in AGM & Annual Scientific Meeting of the College of Surgeons, AMM, 25th -27th May 2012, Kuantan Pahang.
- d. Chapter author of “Handbook of Procedural Skills” published by Clinical Skill learning Centre, MMMC, Manipal University; 2012.
- e. Chapter author of the book: “150 + MEQs Modified Essay Questions” for medical undergraduates and house officers. Sachchithanatham, Nalliah S, Karanth KL, Nagandla K (Eds). 2012.
- f. Chapter author of the book: “Excellence in clinical case presentation in surgery and paediatric; 51 + Examination cases illustrated”. Nalliah S, Palayan, K, Sachchithanatham, Nagandla K. 2012.

Assoc. Prof. Myat Maw

- a. A Case of An Adult Synchronous Thyroglossal Cyst and BranchialSinus:Case Report The Internet Journal of Pathology ISSN: 1528-8307
- b. Chemotherapy versus surgery with or without adjuvant chemotherapy and Radiotherapy for localised primary gastric diffuse large B-cell lymphoma [Cochrane Protocol]
- c. Efferent limb of gastrojejunostomy obstruction by a whole okra phytobezoar: Case report and brief review. World J Gastrointest Endosc. 2012 May 16; 4(5): 197–200.
- d. A Groin Lump–Canal of Nuck 'Endometriocoele': Case Report. Internet Journal of Surgery 2012.
- e. A Case of An Adult Synchronous Thyroglossal Cyst and Branchial Sinus: Case Report. Internet Journal of Suregry 2012.

- f. Chemotherapy versus surgery with or without adjuvant chemotherapy and radiotherapy for localised primary gastric diffuse large B-cell lymphoma - - The Cochrane Library Published Online

12. Placement record of the past students and the contribution of the department to the student placements

N/A

13. Plan of action of the department for the next five years

- a. Increase use of simulation
- b. Improve assessment technique
- c. Publish Cochrane review

DEPARTMENT OF PSYCHIATRY

1. Faculty profile:

The department of psychiatry at Melaka-Manipal Medical College consists of both full time and part-time teaching faculty. The full-time faculty include three psychiatrists and one clinical psychologist. These include one Professor, one associate professor, one assistant professor and one senior lecturer. The part-time faculty includes five part-time psychiatrists.

Sl. No.	Name	Educational Qualifications:	Designation	Total Clinical/ Teaching Experience
1	Dr. Swamenathan M.	MBBS, M Psy Med (UM)	Dep. Dean, Assoc. Prof & Head	32 / 13
2	Brig Gen (Rtd) Datuk Dr Rajagopal N	MBBS , M Psy Med	Clinical Professor	39 / 13
3	Mr Shanker Ram	MA (Psychology) , DEVG ,MPhil (M&SP)	Senior Lecturer	28 / 14
4	Dr Minoo Pothen	MBBS, DPM ,DNB	Asst. Prof.	22 / 10

2. Student profile:

The students are those in the Phase II of the M.B.B.S. program. As the college is recognized by the Malaysian Medical Council the students almost entirely (99%) consists of Malaysian citizens. They do come from all the states of east and west Malaysia. The students comprise of various racial backgrounds viz. Malay, Chinese and Indian. They are of both genders with a slight predominance of females.

3. Changes in the course:

During the past five years we had to revise the curriculum delivery pattern. Earlier the clinical postings and the pedagogic theory lectures were during the seventh semester. However do to a change in the delivery pattern of other subjects the Psychiatry clinical training programs got shifted to the sixth semester. However the lecture series now continues through the seventh and eighth semesters. A new end of theory lectures test of hundred multiple choice questions has been added. The clinical training program for the final year (nine and ten semesters) remains the same.

4. Success/ dropout rate:

In the last five years ten batches have passed out of the department. Completion of the psychiatry posting is dependent on both the clinical attendance (90%) and the passing marks in the theory exam (50%) conducted at the end of the posting. The success rate is about 97%. However a student who has failed to complete may drop down to the next batch and do the training all over again. After considering the repeat postings the dropout rate comes to nil.

5. Enhancement of learning recourses:

In the past five years we have added recourses to the existing ones. This is mainly in the form of more books in the library and more e-learning resources which has been uploaded for the use of the student. The college has become a Wi-Fi campus so the students may view any of these materials at any place at any time. The department has also instituted a gold medal for the best student in psychiatry in association with MMA.

6. Teaching methods:

We have added different teaching methods in addition to traditional pedagogic methods. This includes methods like problem based learning sessions, tutorials where the students prepare and make presentations under the guidance of the faculty. Students participate in a common presentation program. Here all the departments jointly present on a single topic of significance. They also make home visits along with the nurse to observe how long-term patients are cared for at their residences. Students also make visits to special schools to observe the rehabilitations methods used for child cases having conditions like mental retardation, autism, cerebral palsy and other conditions. They also observe the administration of methadone to patients with substance dependence.

7. Personal counseling:

The department of psychiatry is the department of last resort in the college when it comes to all matters of behavioral and emotional issues arising in the student community. The department takes great care in advising students, parents and the college administration when it comes to the psychological well being of the students. This is in addition to the mentorship program of the college.

8. Faculty development program:

The college and the department encourage and support the faculty to enhance their knowledge and skills. This is done through in-house programs done regularly at the college as well as leave and financial grants for attending international conferences.

9. Faculty activities: non-curricular

The faculty of the department of psychiatry takes part actively in the various community programs. These include committee positions in professional bodies like the Malaysian Medical Association, Melaka mental health association, St, Johns Ambulance, Malaysian Hospice Council.

10. Extension activities of the department:

The department provides services to the general hospital at Melaka. It participates in community activities with other organizations like MMA.

11. Method of continuous assessment:

These students are assessed during their clinical training periods at different intervals. Initially during their posting in the sixth semester they have a MCQ test as well as a clinical exam. They are also assessed during their clinical case history taking and given formative feedback regarding their performances. During the seventh and eighth semesters they have a MCQ test after the lectures are over. Again in the final year, at the end of their clinical training posting they are assessed by a set of MCQs and also on a clinical exam in the hospital ward with a live patient. This is in addition to the formative assessments being done continuously during the clinical classes.

12. Significant achievements:

The department has contributed to the various community programs conducted by professional bodies and social organizations. The department has been instrumental in instituting a gold medal for the best student in Psychiatry.

13. Next five years:

The department is actively considering running clinical out-patient services at the college hospital which is under active consideration. The department is also planning to start post-graduate courses in Psychiatry as soon as we get the necessary clearances from the appropriate authorities.

14. Priority areas for Research and details of the on-going projects, important and noteworthy publications of the faculty during the past two years.

1. Effectiveness of group psycho-education on well-being and depression among breast cancer survivors of Melaka, Malaysia. Indian Journal of Palliative Care 2013;19(1):34-39.
(Prof Brig Gen (Rtd) Dr Rajagopal)
2. Effectiveness of group psycho-education on well-being and depression among breast cancer survivors of Melaka, Malaysia. Indian Journal of Palliative Care 2013;19(1):34-39. (Mr Shankar Ram)

DEPARTMENT OF ORTHOPAEDICS

1. Faculty profile:

There are five full time faculties in the Orthopaedic department, besides the part time faculty from the attached hospitals. All five have adequate clinical experience to teach undergraduate medical students.

Sl. No.	Name	Educational Qualifications:	Designation	Total Clinical/ Teaching Experience
1	Dr Nirmal Kumar Sinha	MBBS, MS, DOrtho	Professor & Head	24 / 10
2	Dr. Belpu Seetharama Rao	MBBS, DOrtho, MS Ortho, MCH Ortho	Professor	34 / 26
3	Dr. Aung Kyi Winn	MBBS, M Med	Clinical Faculty	34 / 20
4	Dr. Myat Myo Naing	MBBS, M Med	Asst. Prof.	13 / 5
5	Dr.P D Trivedy	MBBS, MS (Ortho)	Clinical Professor	35 / 12
6	Dr Simerjit Singh	MBBS, MS Ortho	Asst. Prof.	5 / 4

2. Student profile according to programmes of study, gender, region

The students are those in the Phase II of the M.B.B.S. program. As the college is recognized by the Malaysian Medical Council the students almost entirely (99%) consists of Malaysian citizens. They do come from all the states of east and west Malaysia. The students comprise of various racial backgrounds viz. Malay, Chinese and Indian. They are of both genders with a slight predominance of females.

3. Changes made in the courses or programmes during the past five year and contribution of the faculty to those changes

Addition of 2 workshops in Skills' centre for semester 7 & 8: for students to get a hands-on training in plaster cast & bandage, sling & traction technique

Addition of 2 clinical skills' test in Skills' centre for semester 7 & 8

On peripheral nerve exam & on reduction techniques

4. Trend in the success rate and drop out rate of students in the last five years

NA

5. Learning resources of the department

Addition of new orthopedic books in the library

Apley's & Adam's orthopaedics.

6. Modern Teaching methods other than traditional lecture method

Development of plaster room in Skills' centre

Addition of knee & hand models to learn Intra-articular injection technique

End of Posting tests consisting of

- Long case & short case –clinical examination
- Long case & short case-presentation
- MCQ tests
- PBL tests
- Clinical skills tests
- Portfolio evaluation

7. Participation of teachers in academic and counselling of students

There is a 'Mentorship' programme successfully run by the college, which is headed & guided by the Deputy Dean of the college in which the department participates very actively. All the students are divided into subgroups and each such group has a mentor. Each faculty in our college is a mentor for one of the groups of students. The mentors hold regular meetings with students or a mentee can seek help whenever needed. The students are counseled, motivated and guided to solve their problems and are encouraged & appreciated for their achievements.

8. Details of faculty development programmes and teachers who benefitted during the past five years

In house & outside conferences on medical education & orthopedic knowledge update

- E learning: Moodle sensitization Workshop, July 9, 2013,MMMC
- Cochrane Workshop,June20-21, 2013, MMMC
- Teaching, Learning& Mentorship Relationship, June 17, 2013,MMMC
- Designing Modified Essay Question,7 May 2013,MMMC
- Cochrane Workshop-Basic and Data extraxtion,3-6 Sept,2012,MMMC
- Medical Education in the New Millennium,16 Jun,2012,MMMC
- Assessment in Medical Education,14 June,2012,MMMC
- Student Portfolio Development,26 Jan 2012,MMMC

Workshops and Conferences attended:

1. Attended Congress of arthroscopy and sports medicine (CASM) Jaipur, India. 8-11th Nov, 2012.
2. Attended Workshop on Data Extraction for Cochrane Systematic Review- MMMC, Melaka-3-6th Sept, 2012.

3. Attended workshop on “Basic Medical Education” at MMMC, Melaka-9th July 2012.
4. Attended workshop on “Assessment in Medical Education and MEQ Preparation” at MMMC, Melaka-14th June 2012.
5. Attended as judge “POSTMED-1” a poster presentation event at MMMC, Melaka-2nd May 2012.
6. Attended workshop on “Small group teaching” at International medical university, Kuala Lumpur-8th March 2012.
7. Attended workshop on “Bed side learning” at International medical university, Kuala Lumpur-5th March 2012.
8. Conducted a workshop on “Student Portfolio Development” at MMMC, Manipal, Melaka-26 January 2012.

9. Participation of teachers in academic activities

There are several academic committees where faculties are involved which are listed below:

- E learning committee
- SDL committee
- Student portfolio development committee
- MEQ committee
- MCQ committee
- Internal audit committee
- Attending in medical camps

10. Collaborations with other departments and institutions at the national and international level

Professional Membership of ortho faculty

Dr Nirmal Kumar Sinha

- Malaysian Medical association, Z2109329
- Indian Orthopaedic Association, LM-1290
- Bombay Orthopaedic Society, BOS/BIR/S-6
- Indian Medical Association, BHR/3066/49/192/16229/95-96
- Indian Foot Society,
- Jamshedpur Surgical Society
- T.M.H. Clinical Society
- Jamshedpur Orthopaedic Society

Dr. Simerjit Singh

- Medical council of India Regd. -5592 dated 14-01-2008.

- Malaysia medical council
- Malaysia Medical Association
- Indo German Orthopaedic Foundation
- Indian orthopaedic association

11. Priority areas for Research and details of the on-going projects, important and noteworthy publications of the faculty during the past two years.

Thrust area of research in the department

Medical education & Skills' centre Simulation

Ongoing clinical research under Institute under National Medical Research Register, Malaysia

1. Undergraduate Medical Students' Perceptions Of Effective Medical Teachers In A Malaysian Medical School - The Internet Journal of Medical Education. 2013 Volume 3 Number 1.
2. Learning preferences of clinical students: A study in a Malaysian medical college. Int J Med Public Health 2013;3:60-3.
3. Treatment for osteoporosis in people with β -thalassaemia. The Cochrane Library Published Online: 28 MAR 2013.
4. A unique case of non- traumatic asymmetric shoulder dislocation with four-part fractures of proximal humeri following seizures. J Emerg Trauma Shock. 2013 Jul;6(3):231-2. doi: 10.4103/0974-2700.115358.
5. Qualities of an effective teacher: what do medical teachers think? BMC Med Educ. 2013 Sep 17;13:128. doi: 10.1186/1472-6920-13-128.
6. In defence of Girdlestone excision arthroplasty: A comment on 'Unusual way of loosened total hip arthroplasty treatment with an Austin Moore endoprosthesis'. Journal of Postgraduate Medicine 2014;60(2):222-223.

Accepted for Publication & assigned to July-Sept, 2013 issue

1. Pachydermodactyly does not need a rheumatologic workup, Sinha NK, Nema SK, Pai DR, Ping SL, in Journal of Postgraduate medicine
2. A unique case of non-traumatic asymmetric shoulder dislocation with four-part fractures of proximal humeri following seizures. Nema SK, Pai DR, Sinha NK, Gupta KK. Accepted [21.12.'12] in Journal of Emergencies, Trauma and Shock [Ref:1. <http://www.onlinejets.org/aheadofprint.asp>

Publications

1. Learning preferences of clinical students: A study in a Malaysian medical college. Sinha NK, Bhardwaj A, Singh S, Abas AL. Int. J Med Public Health 2012;3: 60-3

DOI: 10.4103/2230-8598.109325

2. Treatment for osteoporosis in people with beta-thalassaemia [Protocol published] Bhardwaj A, Swe KMM, Sinha NK, Osunkwo I. Treatment for osteoporosis in people with β -thalassaemia (Protocol). Cochrane Database of Systematic Reviews 2013, Issue 3. Art. No.: CD010429. DOI: 10.1002/14651858.CD010429 (Simerjit Singh)

Publications / Research

1. Pai DR, Singh S.
Medical simulation: Overview, and application to wound modelling and management. Indian journal of plastic surgery 2012; 45(2), 209.
2. Madan SS, Pai DR.
Crossed versus lateral pinning in the treatment of displaced extension-type supracondylar fractures of humerus in children: A prospective study.
The Internet Journal of Orthopedic Surgery.--publication in progress

As reviewer

Journals:

1. The Clinical Teacher
2. International Journal of Biomedical Research and Reviews
3. WebPub Journal of Medical Research
4. Journal of Diabetes & Metabolism

12. Placement record of the past students and the contribution of the department

NA

13. Plan of action of the Department for the next five years

The Department is planning to strengthen further the teaching methodologies within the Department by ensuring that faculty undergoes constant training and supervision with regards to medical education and their respective fields (Orthopaedics). Apart from teaching, the Department hopes to continue research activities which pertain to research on teaching activities and on Orthopaedics

DEPARTMENT OF COMMUNITY MEDICINE

1. Faculty profile

There are currently a total of 9 lecturers in the Department of Community Medicine. Post-wise the department boasts 1 Professor, 3 Associate Professors, 3 Assistant Professors and 1 Tutor. 2 faculty handle semesters 7 & 8 programs (Biostatistics and Research Methodology), 3 conduct the Family Medicine course from Semester 9 to 10, and 1 currently has the responsibility of the Maternal Child Health program in Semester 6. All are competent in their domains having attained respective master degrees and sufficient teaching experience in their particular fields. We have currently adequate number of staff.

Sl. No.	Name	Educational Qualifications:	Designation	Total Clinical & Admin Teaching Experience
1	Dr. Adinegara	MBBS ,MPH	Professor & Head	22 / 15
2	Dr. Soe Moe	MBBS , M Med Sc (Public Health)	Assoc. Prof.	24 / 11
3	Dr. Yadneshwar Khobragade	MBBS ,MD, PG-DMCH	Assoc. Prof.	34 / 5
4	Dr.Htoo Htoo Kyaw Soe	MBBS, MPH ,PhD	Assoc. Prof.	10 / 7
5	Dr. Nan Nitra Than	MBBS, DTM&H , MCTM	Asst. Prof.	14 / 5
6	Dr. Ruchita Dixit	MBBS ,MD	Asst. Prof.	11 / 5
7	Dr. Htay Lwin.	MBBS ,MPH ,CCFM, CCVM, MRACGP	Asst. Prof.	31 / 13
8	Dr. Sujata Khobragade	MBBS, MCH ,MBA (Hosp Mgmt)	Lecturer	31 / 16
9	Dr. Sudipta Pal	MBBS	Tutor	22 / 6

2. Student profile according to programmes of study, gender, region

The students are those in the Phase II of the M.B.B.S. program. As the college is recognized by the Malaysian Medical Council the students almost entirely (99%) consists of Malaysian citizens. They do come from all the states of east and west Malaysia. The students comprise of various racial backgrounds viz. Malay, Chinese and Indian. They are of both genders with a slight predominance of females.

The current total strength of students batch-wise is as follows:

Batch 27	:	115
Batch 28	:	164
Batch 29	:	215
Batch 30	:	139
Batch 31	:	247

3. Changes made in the courses or programmes during the past five year and contribution of the faculty to those changes

For the Department of Community Medicine, the change was in ensuring more hands-on training in the postings in all semesters. With regards to the Research and Biostatistics module, the module was made more interactive with more emphasis on sessions such as quiz, Problem Based Learning and actual research activities within and outside campus. Students are grouped into groups of four or five students and are given task to complete a research topic within a period of 8 weeks. They are required to present their research findings in the required format which are presented to faculty after every 2 weeks. Students are encouraged to present their work in international and national poster or oral presentations. Faculty are able to adapt to the change required. As for Theory lectures, faculty are reminded to ensure interactivity are continuously used within their lecture sessions. The faculty are encouraged to use whatever means to promote these interactive sessions which include the use of flash cards when answering objectively structured questions during these large group teaching sessions. Faculty of Department of Community Medicine have adapted well to these changes. They are also regularly attending medical education workshops conducted by the Medical Education Unit of the Institution.

4. Trend in the success rate and drop out rate of students in the last five years

Students have been doing well in the Phase II Stage I examinations (conducted at the end of Semester 8) and Phase II Stage II examinations (conducted at end of Semester 10). The passing rate for both P2S1 and P2S2 examinations have been over 90% with the latest results being 95.4% passing rate for Batch 24 and 93.5% passing rate for Batch 22 (**ANNEXURE 1**).

5. Learning resources of the department

The Department utilizes all facilities for their learning resources.

Lecture theatres are used for large group teaching and problem based learning sessions while tutorial rooms are used for small group learning.

There are also computer lab sessions for students looking for literature in assisting their work especially pertaining to the Maternal Child Health module and the Biostatistics and Research methodology module.

Students attend health centres for both their Maternal Child health module sessions and Family Medicine sessions.

The Department utilizes e-learning module in the form of Moodle software for dissemination of information to students. For instance, all learning outcomes of the Department are placed within the Moodle platform. Certain videos relating to topics such as Research and Biostatistics are also placed within this moodle platform.

6. Modern Teaching methods other than traditional lecture method

The Department utilizes the use of Problem Based Learning sessions for some of the topics in all semesters. The Department also uses the latest statistics software in imparting knowledge on statistics – Epi INFO 2003 and EPI 7 (year 2008). There are also great emphasis on the use of Information Technology in topics such as research whereby students are encouraged to read up literature from the Net before topics are discussed in class.

As for large group teaching sessions, the Department strongly advocates the use of interactive teaching sessions rather than just one direction teaching (from faculty). Lecture sessions are interspersed with quiz and questions to allow greater interactivity.

7. Participation of teachers in academic and counselling of students

The faculty have been assigned to act as mentors for some of the students. Faculty also advises students who have problems either in attendance or academic performance.

8. Details of faculty development programmes and teachers who benefitted during the past five years

A total of 46 workshops (both in-house and outside of the campus) have been attended by some of the faculty from the Department (as shown in ANNEXURE 2).

9. Participation of teachers in academic activities

The Department is actively involved with other academic activities –Medical Education Unit, MCQ Committee, MEQ Committee, Learning Outcomes Committee all of which are chaired by a faculty from the Department. The faculty are also involved in organizing medical education workshops in the Campus.

10. Collaborations with other departments and institutions at the national and international level

The faculty have been involved with the Research Committee of Hospital Melaka and State of Melaka. The faculty also collaborates on organizing workshops such as Quality Assurance Programmes, Research workshops and Statistics workshops with the Health Department of State of Melaka, Hospital Melaka, Hospital Muar and Health Department of State of Johor.

Internationally, the faculty have been involved with research with University of Alabama at Birmingham with publications at international level.

11. Priority areas for Research and details of the on-going projects, important and noteworthy publications of the faculty during the past two years.

The thrust areas of research for the Department – Cochrane projects, occupational injuries and medical education projects.

Ongoing projects:

The Department is actively involved in Cochrane Projects having published several titles, protocols. So far, one project has been fully published as full review paper. Aside from Cochrane, the Department is involved with medical education projects. One of the projects involved looking into structuring lectures and making these sessions interactive.

Publications

Adinegara	1. The Prevalence of Needle Sticks Injury among Medical Students in Melaka, Malaysia, A Cross Sectional Study European Journal of Scientific Research ISSN 1450-216X Vol.71 No.2 (2012), pp. 214-220
	2. Topical non-steroidal anti-inflammatory agents for diabetic cystoid macular oedema - The Cochrane Library Published Online.Cochrane Database of Systematic Reviews 2012, Issue 8. Art. No.: CD010009. DOI: 10.1002/14651858.CD010009\
	3. Undergraduate Medical Students' Perceptions Of Effective Medical Teachers In A Malaysian Medical School - The Internet Journal of Medical Education. 2013 Volume 3 Number 1.
	4. Learning preferences of clinical students: A study in a Malaysian medical college. Int J Med Public Health 2013;3:60-3.
	5. Fatal occupational injuries among non-governmental employees in Malaysia. American Journal of Industrial Medicine 2013;56(1):65-76.
	6. A case of frontotemporal dementia. IJCRI 2013 www.ijcasereportsandimages.com
	7. Fatal occupational injuries among non-governmental employees in Malaysia. American Journal of Industrial Medicine 2013;56(1):65-76.
	8. Undergraduate Medical Students' Perceptions Of Effective Medical Teachers In A Malaysian Medical School - The Internet Journal of Medical Education. 2013 Volume 3 Number 1.
	9. Maternal and foetal outcomes following natural vaginal versus

	caesarean section (c-section) delivery in carriers and women with bleeding disorders. The Cochrane Library Published Online: 9 APR 2014.
	10. Vitamin D supplementation for sickle cell disease. The Cochrane Library Published Online 29 Nov 2013.
Kye Mon Min Swe	1. The Prevalence of Needle Sticks Injury among Medical Students in Melaka, Malaysia, A Cross Sectional Study European Journal of Scientific Research ISSN 1450-216X Vol.71 No.2 (2012), pp. 214-220
	2. Study of Incidence and Treatment of Radial Nerve Palsy in Fracture Shaft of Humerus. International Journal of Collaborative Research on Internal Medicine & Public Health 2012;4(5): 796-804.
	3. Knowledge and Practice of First Year Medical Students About Smoking. International Journal of Collaborative Research on Internal Medicine & Public Health 2012;4(5): 785-795.
	4. Perception of youth on smoking among first year medical students in Myanmar. International Journal of Collaborative Research on Internal Medicine & Public Health 2012;4(11):1828-1840.
	5. Treatment for osteoporosis in people with β -thalassaemia. The Cochrane Library Published Online: 28 MAR 2013.
Soe Moe	1. Assessment of Community Participation in Safe Motherhood Health Education Program in Shan State, Myanmar. European Journal of Scientific Research 2012.
	2. Health Seeking Behaviour of Elderly in Myanmar. International Journal of Collaborative Research on Internal Medicine & Public Health 2012;4(8):1538-1543.
	3. Determinants of Abdominal Obesity and its Predictability of Morbidity: A Cross Sectional Study in Malaysia. International Journal of Medicine and Medical Sciences, ISSN: 2051-5731, Vol.46, Issue.2
	4. Determinants of contraceptive usage among Myanmar migrant women in Phang-Nga Province, Thailand. Journal of Medicine and Medical Sciences. 2012 Nov; 3(11):721-728.
Nan Nitra	1. Comparison of clinical outcomes between HIV-infected patients with and without HCV co-infection in a resource-limited setting. Southeast Asian J Trop Med Public Health. Vol 43 No. 3 May 2012

	<p>2. Determinants of Abdominal Obesity and its Predictability of Morbidity: A Cross Sectional Study in Malaysia. International Journal of Medicine and Medical Sciences, ISSN: 2051-5731, Vol.46, Issue.2</p> <p>3. Determinants of contraceptive usage among Myanmar migrant women in Phang-Nga Province, Thailand. Journal of Medicine and Medical Sciences. 2012 Nov; 3(11):721-728.</p> <p>4. "High Risk Behavior, Knowledge and Attitude of HIV/AIDS among Workers in Factories Manufacturing Alcohol in Mandalay, Myanmar. World Journal of AIDS Vol. 3 No. 2 (2013) , Article ID: 32762 , 7 pages "</p>
Htoo Htoo Kyaw Soe	<p>1. Assessment of Community Participation in Safe Motherhood Health Education Program in Shan State, Myanmar. European Journal of Scientific Research 2012.</p> <p>2. Determinants of Abnormal Liver Function Tests in Diabetes Patients in Myanmar. International Journal of Diabetes Research p-ISSN: 2163-1638 e-ISSN: 2163-1646 2012; 1(3): 36-41</p> <p>3. Determinants of Abdominal Obesity and its Predictability of Morbidity: A Cross Sectional Study in Malaysia. International Journal of Medicine and Medical Sciences, ISSN: 2051-5731, Vol.46, Issue.2</p> <p>4. Vitamin D supplementation for sickle cell disease. The Cochrane Library Published Online 29 Nov 2013.</p> <p>5. Qualities of an effective teacher: what do medical teachers think? BMC Medical Education 2013; 13:128.</p>
Dr Ruchita Dixit	<p>1. Injury to ulnar collateral ligament of thumb. Orthopedic Surgery 2014;6(1):1-7.</p> <p>2. Folate supplementation in patients with sickle cell disease. The Cochrane Library Published Online: 25 MAY 2014.</p>

12. Placement record of the past students and the contribution of the department

Students are placed in government hospital as house officers (junior medical officers) for a two year period soon after graduation.

13. Plan of action of the Department for the next five years

The Department is planning to strengthen further the teaching methodologies within the Department by ensuring that faculty undergoes constant training and supervision with regards to medical education and their respective fields (public health and family medicine). Apart from teaching, the Department hopes to continue research activities which pertain to research on teaching activities and on public health / family medicine.

ANNEXURE 1

MBBS Phase II Stage I Examination - March, 2012					
Summary of student performance (Batch 22)					
RESULT	Appeared	Pass	Suppl	Fail	Pass %
TOTAL	149	114	24	11	76.5
Regular	135	105	20	10	77.8
Stragglers	14	9	4	1	64.3
Supplementary					
RESULT	Appeared	Pass		Fail	Pass %
TOTAL	24	22		2	100.0
GRAND TOTAL	149	136		13	91.3
MBBS Phase II Stage I Examination - September, 2012					
Summary of student performance (Batch 23)					
RESULT	Appeared	Pass	Suppl	Fail	Pass %
TOTAL	134	118	11	5	88.1
Regular	120	106	10	4	88.3
Stragglers	14	12	1	1	85.7
Supplementary					
RESULT	Appeared	Pass		Fail	Pass %
TOTAL	11	11		0	100.0
GRAND TOTAL	134	129		5	96.3
MBBS Phase II Stage I Examination - March, 2013					
Summary of student performance (Batch 24)					
RESULT	Appeared	Pass	Suppl	Fail	Pass %
TOTAL	109	91	13	5	83.5
Regular	105	89	13	3	84.8
Stragglers	4	2	0	2	50.0
Supplementary					
RESULT	Appeared	Pass		Fail	Pass %
TOTAL	13	13		0	100.0
GRAND TOTAL	109	104		5	95.4

Final MBBS Phase II Stage II Examination - Feb & March, 2012				
Summary of student performance (Batch 20)				
	Appeared	Passed	Failed	Pass%
Regular Batch (Batch 20)	128	126	2	98.4%
Repeaters (Attempt 2)	4	4	0	100.0%
Repeaters (Attempt 3)	3	1	2	33.3%

Total	135	131	4	97.0%
Final MBBS Phase II Stage II Examination - August, 2012				
Summary of student performance (Batch 21)				
	Appeared	Passed	Failed	Pass%
Regular Batch (Batch 21)	121	118	3	97.5%
Repeaters (Attempt 2)	2	2	0	100.0%
Repeaters (Attempt 3)	1	0	1	0.0%
Total	124	120	4	96.8%
Final MBBS Phase II Stage II Examination - February - March, 2013				
Summary of student performance (Batch 22)				
	Appeared	Passed	Failed	Pass%
Regular Batch (Batch 22)	134	127	7	94.8%
Repeaters (Attempt 2)	2	2	0	100.0%
Repeaters (Attempt 3)	3	1	2	33.3%
Total	139	130	9	93.5%

ANNEXURE 2

CONFERENCES ATTENDED

1. Name of Conference: Portfolio Development Workshop (Guest lecturer: Prof AlamSher Malik)

Date of Conference: 26th January 2012.

Venue: Melaka Manipal Medical College

Objective of the Conference:

To introduce research to portfolio development

2. Name of Event: FAIMER (Medical Education)

Date of Event: 4th to 9th February 2012

Venue: Ludhiana, India (Christian Medical College)

Objective of the Event:

To help participants in the:

- Understanding the concept of medical education
- Preparing a project in medical education

Presented 1 poster presentation on:

Structured Interactive Approach In Lectures

3. **Name of Workshop: MYOHUN (Malaysia One Health University Network) – Emerging Pandemic Threat Program**

Date of Conference: 23rd – 24th May 2012.

Venue: Pullman Putrajaya Lakeside, Putrajaya

Participants: Specialists and Public Health Officers, Ministry of Health & local Universities

Objective of the Conference:

To help participants in the:

- Understanding the concept of emerging and reemerging diseases
- Ways of tackling emerging and reemerging diseases

4. **Name of Workshop: Modified Essay Question Workshop (Guest Lecturer: Prof Nabishah)**

Date of Conference: 14th June 2012.

Venue: Auditorium, Sports Complex

Participants: Faculty of MMMC

Objective of the Conference:

To help participants in the:

- Understanding the concept of assessment in medical education
- Concepts of Modified Essay Question and Key Feature Questions

5. **Name of Workshop: Medical Education Workshop (Guest Lecturer: Prof J Hurley Myers, Southern Illinois University)**

Date of Conference: 16th June 2012.

Venue: Auditorium, Sports Complex

Participants: Faculty of MMMC

Objective of the Conference:

To help participants in the:

- Understanding the concept of e-Learning, Small group teaching and PBL in medical education
- Concepts of Virtual patients, simulators and standardized patients

6. **Name of Workshop: Fire Prevention Awareness (As part of Safety Health Committee Activities – Company's Name: Fire Prevention Centre)**

Date of Conference: 21st June 2012.

Venue: Level 2, Academic Block II

Participants: Staff, Faculty of MMMC

Objective of the Conference:

To help participants in the:

- Understanding the fire hazards at home and at the workplace

- Concepts of prevention and strategies in reducing risk of fire at home and workplace

7. Name of Workshop: Course For Accreditation Of Medical Institutions

Date of Workshop: 23rd June 2012.

Venue: Institut Kesihatan Umum, Kuala Lumpur

Objective of the Workshop:

To expose participants to issues pertaining to:

- basic standards and requirements for an accreditation visit
- guidelines in writing an accreditation report

8. Name of Workshop: Basic Medical Education Workshop (Facilitators – Prof Ramnarayan and Prof Ciraj)

Date of Conference: 9th July 2012.

Venue: Dato Pathmanaban Hall

Participants: Faculty members MMMC

Objective of the Conference:

To help participants in the:

- Understanding the concept of medical education with regards to Large Group Teaching and Small Group Teaching
- Ways of using Microteaching to improve oneself

9. Name of Workshop: 16th Malaysian Family Medicine Scientific Conference

Date of Workshop: 14th July 2012.

Venue: Avillion Legacy Hotel, Melaka

Objective of the Workshop:

To expose participants to issues pertaining to:

- To ensure the roles of the multidisciplinary team members in health care planning
- To improve health outcomes and satisfaction for clients

Acted as judge for the Conference for both poster and oral presentations.

10. Name of Workshop: Cochrane: Data Extraction Workshop (Dr Jacqueline Ho)

Date of Conference: 3rd to 6th September 2012.

Venue: Melaka Manipal Medical College

Objective of the Conference:

To help participants in the:

- Understanding the concept of systematic review and meta analysis
- Cochrane collaboration in research
- Data extraction in Cochrane

11. Name of Workshop: Developing Outcome Based Education For Lecturers

Date of Conference: 21st to 23rd September 2012.

Venue: UiTM Shah Alam

Objective of the Conference:

To help participants in the:

- Understanding the concept of outcome based education
- Concepts in Quality assurance and Malaysian Qualification Framework & Malaysian Qualification Agency
- Concepts in Programme Educational Objectives, Programme Outcomes, Course Outcomes

12. Name of Workshop: 8th Science Technology Innovation for Researchers In OIC Countries

Date of Conference: 1st to 5th October 2012.

Venue: Corus Hotel Kuala Lumpur

Objective of the Conference:

To help participants in the:

- Understanding the concept of research and innovation in the field of science and technology
- Explore ways of acquiring resources in conducting research
- Increasing self-motivation in conducting research

13. Name of Workshop: ASEAN plus Three Forum on Quality Assurance in Higher Education

Date of Conference: 10th October 2012.

Venue: Sunway Putra Hotel Kuala Lumpur

Objective of the Conference:

To help participants in the:

- Understanding the concept of Quality Assurance in Higher Education
- Explore ways of harmonizing regional higher education

14. Name of Workshop: Faculty Development Workshop (Facilitators – Prof AlamSher Malik and AP DrRukhshana Malik)

Date of Conference: 18th October 2012.

Venue: DatoPathmanaban Hall

Participants: Faculty members MMMC

Objective of the Conference:

To help participants in the:

- Understanding the concept of medical education with regards to Ethics, Professionalism and Self Directed Learning

- Ways of formulating Study Guide

15. Name of Workshop: International Symposium on Evidence Based Public Health Interventions in Low and Middle Income Countries & Workshop on Systematic Reviews of Public Health Interventions

Date of Conference: 7th to 8th November 2012.

Venue: Manipal University, Manipal

Acted as an International Advisory.

Objective of the Conference:

To help participants in the:

- Understanding the concept of systematic review and meta analysis
- Cochrane collaboration in research
- Public Health Interventions in Cochrane systematic reviews

Presented 1 paper on:

- Review of Cochrane Public Health Systematic Reviews

16. Name of Workshop: Public Forum: Review of Health System in Malaysia

Date of Forum: 16th December 2012.

Venue: MITC, Melaka

Organizers: Ministry of Health, Malaysia – Deputy DG of Health (Research & Technical Support) DatoDrMaimunah A Hamid

Acted as Chief Moderator.

Objective of the Forum:

To help participants in the:

- Review of Health System, Ministry of Health Malaysia
- Looking into strengths and weaknesses of the current health system in Malaysia
- Strategies in strengthening further the Health System in Malaysia

DEPARTMENT OF OPHTHALMOLOGY

1. Faculty Profile, Competency & Adequacy

Three Faculty Members full time & 5 Hospital consultants part time are adequately cope with the provision of teaching activities - lectures and clinical

Sl. No.	Name	Educational Qualifications:	Designation	Total Clinical/ Teaching Experience
1	Dr. Soumendra Sahoo	MBBS ,MS	Professor & Head	23 / 19
2	Dr . V. Prabhu,	MBBS , MS	Professor	30 / 11
3	Dr. Kay Thi Mint	MBBS , MS	Assoc. Prof.	20 / 10

Part Time: Hospital Consultants

- A. Dr. Anusiah :Clinical Professor
- B. Dr. Raza Norluza: Clinical Assoc. Prof.
- C. Dr. Fadzilla: Clinical Lecturer
- D. Dr. Thevi: Clinical Lecturer
- E. Dr. Alice: Clinical Lecturer

2. Student Profile according to programmes of study, gender, religion etc

The students are those in the Phase II of the M.B.B.S. program. As the college is recognized by the Malaysian Medical Council the students almost entirely (99%) consists of Malaysian citizens. They do come from all the states of east and west Malaysia. The students comprise of various racial backgrounds viz. Malay, Chinese and Indian. They are of both genders with a slight predominance of females.

3. Changes made in the courses &programmes during the last five years &contribution of faculty to those

- Adopted Outcome based Education strategy
- Introduction of MMMC Moodle
- Transforming Log Book to Portfolio

4 Trends in success rate & dropout rate of students in last five years

No drop out

Success rate during EPT Ophthalmology has been improved significantly for past three years or so.

5. Learning resources of the department like library, computers, laboratories & other resources

- More books ,e-books &journals pertaining to Ophthalmology
- Use of computer Lab during e-PBL & other e-Learning
- More Manikins for Ophthalmoscopy practice
- Resourceful MMMC-Moodle (Ophthalmology section)

6. Modern teaching methods in practice other than the lecture method

Problem Based learning [PBL]

This is held twice a week in the afternoon, each session is from 2.30 to 5 PM. Mainly a clinically oriented activity. Selected case scenarios are given prior to the discussion. The students are given the trigger and they brainstorm during 1st session, then they assign portfolio & acquire the information from various sources which are shared during second session. The basic aim is to get the students to recollect the relevant anatomy ,physiology, clinically correlate with the findings .depending on the history possible diagnoses are discussed .after that some more findings and investigations are reveals and the discussion continues to come to a reasonable diagnose finally about the management of the condition in various stages and sequelae are discussed. We use Maastricht 7 steps approach during PBL sessions. This exercise also helps the students to express their views, interact, clarify doubts and helps to build up confidence and tolerance. There is ample scope to enhance team or collaborative learning.

e-PBL:

A new dimension to PBL has been incorporated since February this year where the group completes the 1st session on virtual whiteboard activity using Google Drive application.

Self-Directed Learning [SDL]

This is scheduled once a week (3Hours). The students are oriented on the day one of clinical posting on it's importance & choose topics of their choice. The Faculty member identifies the learning outcomes & resources. The SDL assessment in form of MCQ takes place each week and the average score of 3 SDL assessments contribute 5% of the total End of Posting score.

e-Learning:

E-Learning in Department of Ophthalmology is mainly through the activities in MMMC Moodle, which has CME topics, various text & video resources.

Proposal Wizard:

Apart from the above e-learning activities the students used to work in small group & do web based research on certain theme like Cataract prevention , Diabetic retinopathy prevention etc. The –e learning activities are assessed and contribute to 5% of End of Posting score

Role-Play:

There used to be one session on Role-Play to exercise communication skill training. This used to be mainly student centred. A specific theme is given to the students during orientation day. Students are also provided with Calgary-Cambridge checklist for Role-Play session. During the Role-Play session there used to be formative assessment by Tutor as well as peers.

Simulated Learning:

By using Manikins the students practice Ophthalmoscopy & practice diagnosing common retinal disease like diabetic retinopathy; which would help them in referring early cases during their General Practice. Various other procedural skills like visual field testing also practiced by them during this session.

Portfolio (Learning & assessing):

The students maintain a portfolio during their 4 weeks posting in Ophthalmology. Among the contents of portfolio, much stress is given to write REFLECTION. Before the end of posting the students challenge their portfolio & portfolio contributes to 10% of end of posting marks.

7. Participation of teachers in academic & personal counselling of students

All the three faculty members are involved with MENTORING students for both academic & personal issues of the students. They are assigned particular group of students whom they meet every 3-4 months interval & minutes recorded.

8. Details of Faculty Development programmes & teachers who benefited out of the programmes

A. Prof Soumendra Sahoo successfully completed his FAIMER Fellowship program & graduated in February 2014. Thereafter he was selected as one of the International Faculty member of CMCL-FAIMER to conduct sessions at FAIMER Fellowship program. Till date he has conducted TWO FAIMER Fellowship training program sessions of 3-4 days duration. currently pursuing his 2nd FAIMER (Foundation in Advanced International Medical Education & Research) Fellowship programme. Apart from that he has already conducted 3 6 Faculty Development workshops within MMMC & presented seven eight papers at various International Medical Education conferences. He is one of the members of Medical Education Unit of MMMC. He has participated in more than 20 FDPs

B. Dr Kay Thi has been participated in 10 FDPs during last five years

C. Dr Prabhu Venkatesan has been participated in 5 FDPs

9. Participation of teachers in academic activities other than teaching & research

1. Prof Soumendra Sahoo: Member of Medical Education Unit, Research & Ethics Committee, E-Learning committee, Spark Committee of Skills Lab of MMMC. He is also one of the members for Vetting Committee for MCQs.

2. B. Dr Kay Thi Myint: Member of Portfolio committee, SDL committee & MEQ committee of MMMC
3. C. Dr Prabhu Venkatesan: Member of MCQ committee, Learning outcome Committee & Library Committee of MMMC; SDL Committee; Library Committee of MMMC

10. Collaboration with other departments & institutions in national & international level & their outcome during last five years

Prof Soumendra Sahoo

1. Co researcher on " Studies on polymer solvent interactions during the pH triggered sol-gel transitions and the mechanism of prolonged drug release from one in situ ophthalmic gel. Grant No.: 600-RMI/ERGS/5/3/(56/2011), Ministry of Higher education, Govt of Malaysia.[Project Head], Exploratory Research Grant".(Collaboration with Department of Pharmacy UiTMPunca Alam)
Outcome: Study in progress
2. Cognitive disorder among POAG patients-Proposal submitted for Clinical research society clearance. Approved by National Institute of Health Malaysia, Research id: NMRR-12-995-12562 (Collaboration with Department Ophthalmology Hospital Melaka)
Outcome: Interim report sent for presentation at World Ophthalmology Congress at Tokyo 2014
3. NMMR Research ID: 16719 Research Title: Posterior Capsule Rupture And Zonulardiagnosis In Patients With Pseudoexfoliation In Hospital MELAKA (Collaboration with Department Ophthalmology Hospital Melaka)
Outcome: Study in progress

11. Priority areas for Research and details of the on-going projects, important and noteworthy publications of the faculty during the past two years.

- Three collaborative research projects out of which one having Exploratory Research Grant(MOHE)
- Two Cochrane Projects.; One Full systematic review published & another in Publication stage of Full systematic review.
- Total 20 Indexed Journal Publications in last 5 years
- Book Chapter Publication in International Ophthalmology book with high readership impact

On-going projects & projects completed

1. Cochrane review Principal / Contact Author for "Topical NSAIDs for Diabetic CMO"-

PROTOCL has been published. Currently review writing in progress.

<http://summaries.cochrane.org/title/topical-non-steroidal-anti-inflammatory-agents-for-diabetic-cystoid-macular-oedema>

2. Cochrane Title Registration done: Laser therapy for sickle retinopathy (Publication stage of Full review)
Authors: Kay Thi Myint, Soumendra Sahoo, Soe Moe, Han Ni
3. To analyze the Learning style preference among 7th & 8th semester students using VARK questionnaires: a collaborative project with CMCL-FAIMER Fellow's project. 2013.
Prof Soumendra Sahoo, Dr Prabhu Venkatesan, Dr Kay Thi Myint & Dr Ruchita Dixit
4. Video recording of student's clinical skill for improving self-assessment among medical undergraduate students-Pilot project under process.
5. Risk factor of diabetic retinopathy among the multi ethnic diabetic patients attending community clinic at Peringgit Melaka-Project Prof Soumendra Sahoo, Dr Kay Thi Myint, Dr Prabhu Venkatesan, Dr Htoo Htoo
6. Cognitive disorder among POAG patients-Proposal submitted for Clinical research society clearance. Approved by National Institute of Health Malaysia, Research id: NMRR-12-995-12562
Prof Soumendra Sahoo, Dr Thevi, Dr Anusiah, Dr HtooHtoo
7. To analyze the effectiveness of skeletal lecture hand-outs. Prof Soumendra Sahoo, Dr Venkatesan Prabhu & Dr Htoo Htoo
8. NMMR Research ID: 16719 Research Title: Posterior Capsule Rupture And Zonulardiagnosis In Patients With Pseudoexfoliation In Hospital Melaka
Prof Soumendra Sahoo, Dr Thevi, Dr Htoo Htoo

Publication

1. Sahoo S . HIV and AIDS related Ocular manifestations in Tanzanian patients. Mal J Med Sci .2010;17(1):12-16 (Available in PUB Med Central)
<http://www.ncbi.nlm.nih.gov/pubmed?term=Soumendra%20Sahoo> Citation: 7
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<http://www.mjms.usm.my/> <http://ernd.usm.my/journal/journal/03-1710A2hiv1.pdf>
Featured as an additional content in Encyclopedia Britannica eb.com:
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http://www.eurojournals.com/ejsr_46_3_09.pdf Impact Factor=0.7
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8. Sahoo S, Barua A, Myint KT, Haq A, Abas ABL, Nair NS. Topical non-steroidal anti-inflammatory agents for diabetic cystoid macular oedema (Protocol). Cochrane Database of Systematic Reviews 2012, Issue 8. Art. No.: CD010009. DOI: 10.1002/14651858.CD010009.
<http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD010009/abstract> Impact Factor:5.9
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10. Soumendra sahuo, Rashmirekha sahuo ,Eman el mehendi,Musaabuajilaahmad. Reactive dicarbonyls in removed cataractous lens nuclei, aqueous humor and plasma of senile cataract patients. J Pharm Biomed Sci. 23 (09).
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11. Soumendra sahuo, Padmalochan Nayak. Synthesis and Characterization of Gelatin-Chitosan Blended with Cloisite 30B Nanocomposite for Controlled Release of the Ophthalmic Drug Ketorolac.J Pharm Biomed Sci. 2013, April; 29(29): 859-865
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15. Myint KT, Sahoo S, Moe S, Ni H. Laser therapy for retinopathy in sickle cell disease (Protocol). Cochrane Database of Systematic Reviews 2013, Issue 10. Art. No.: CD010790. DOI: 10.1002/14651858.CD010790.

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12. Placement record of past students & the contribution of the department to the student placements

N/A

13. Plan of Action of the department for next five years

- Further reduction in Theory Lectures
- Making most of the Theory Lectures into integrated teaching approach by collaborating with other Departments of the Institution
- More interactive Lecture sessions
- Enhance Use of MMMC Moodle
- Enhancing simulation training programme
- MSF(Multi Source Feedback) for assessing Professionalism
- More involvement of UG students in research activities
- More publication of Educational research activities
- Bringing innovating teaching learning of Medical Ethics in Ophthalmology

FACULTY OF DENTISTRY

1. Faculty profile – adequacy and competency of faculty

SL No	Name	Educational Qualifications	Designation	Total Clinical / Teaching Experience
Dept: Community Dentistry				
1	Abdul Rashid Bin Ismail	BDS ,MSc(UK), DDPHRS	Professor & Dean (FOD)	30 / 27
2	Noorliza Mastura Binti Ismail	BDS, MSc(UK) ,DDPHRS	Professor & Head	30 / 27
Dept: Oral Diagnosis, Oral Medicine & Oral Pathology				
4	Sumanth Kumbargere Nagraj	BDS, MDS	Professor, Head & DD FOD	18/ 15
5	Jose Joy Idiculla	BDS, MDS	Professor	17/ 14
6	Renjith George	BDS, MDS	Asst. Prof.	8/ 5
7	Preethy Mary Donald	BDS, MDS	Asst. Prof.	7 / 3
Dept: Conservative Dentistry				
8	Kaup Vikram Shetty	BDS, MDS	Assoc. Prof. & Head	18 / 10
9	Alok Misra	BDS, MDS	Assoc. Prof.	23 / 19
10	Kapil Jhajaria	BDS, MDS	Asst. Prof.	8 / 3
Dept: Periodontics				
11	Sunil Kumar Nettemu	BDS, MDS	Assoc. Prof.	11 / 7
12	Sowmya Nettem	BDS, MDS	Asst. Prof.	9 / 6
13	Abhishek Apratim	BDS, MDS	Asst. Prof.	11/ 6
Dept: Oral Maxillofacial Surgery & Oral Radiology				
14	Venkatachalapathi Suram	BDS, MDS	Asst. Prof.	11 / 8
15	Cherian Koshy	BDS, MDS	Assoc. Prof.	18/ 12
Dept: Pedodontics				
16	Eby Varghese	BDS, MDS	Asst. Prof.	9 / 3
17	Eswara Uma	BDS, MDS	Assoc. Prof.	22 / 14

Dept: Prothodontics				
18	Prashanti Eachempati	BDS, MDS	Assoc. Prof.	15 / 9
19	Kiran Kumar Krishnappa Salian	BDS, MDS	Asst. Prof.	10 / 5
20	Vijendra Pal Singh	BDS, MDS	Asst. Prof.	9 / 5
Dept: Orthodontics				
21	Prithviraj Jeyaraman	BDS, MDS	Professor	24 / 18
22	Priti Mulimani	BDS, MDS	Asst. Prof.	12 / 7
Dept: Conservative Dentistry/Pedodontics				
23	Saptarshi Bhowal	BDS, PG Cert Adv Oral Im	Tutor	12 / 6
Dept: Human Disease				
24	Dr. Uduman Ali Mohamed Yousuf	MBBS ,MD,DM (NEUROLOGY)	Professor & Head	29 / 13
25	Dr. Pranab Kumar Sen	MBBS, MS , FRCS	Professor	35 / 14
26	Dr. Senthil Kumar Palaniappan	MBBS ,MD	Assoc. Prof.	

2. Student profile – entry level competencies, socio economic status, language proficiency etc.,

Table below illustrated the 1st year intake for 2014/2015 academic session. The Deputy Registrar responsible for Admissions retains the full profiles including the socioeconomic status and language proficiency.

Qualifications	Number of students	Percentage
Diploma	-	-
Bachelor Degree	-	-
Masters	-	-
Doctorate	-	-
Matriculation	1	1.32
Higher School of Education	-	-
International Baccalaureate	21	27.63
Foundation Programme	41	53.95

A-Level	7	9.21
South Australian Matriculation	2	2.63
Western Australia Curriculum Council	1	1.32
Other (specify)- 1. Canadian Pre-Univ.	1	1.32
2. Monash University Foundation Year	2	2.63

3. Changes made in the courses or programmes during the past two years and the contribution of the faculty to those changes

No changes in the contents of the curriculum have been made in the past two years. Teaching-learning approaches are constantly monitored and discussed in the Curriculum Committee as part of continuous improvement.

4. Trends in the success and dropout rates of students during the past two years

Phase II: Percentage of passes and failure

Year	Pro III			Pro IV			Pro V		
	<i>Number examined</i>	<i>% passes</i>	<i>% failures</i>	<i>Number examined</i>	<i>% passes</i>	<i>% failures</i>	<i>Number examined</i>	<i>% passes</i>	<i>% failures</i>
2011/12	21	100	0	-	-	-	-	-	-
2012/13	49	100	0	21	100	0	-	-	-
2013/14	75	98.7	1.33	49	100	0	21	100	0

5. Learning resources of the departments -library, computers, laboratories and other resources

Library provides adequate textbooks and reference books for the lecturers and students of MMMC. The book collections cover all departments of medicine and dentistry either in electronic format or print format. In addition, the library also subscribes to online databases, provides audio visual materials (CD-Roms, DVDs) and numerous journals (print and online format) to support learning-and-teaching process in MMMC. Academic departments utilizes Lecture theatres, Class rooms & Computer lab of the college which are equipped with Overhead LCD projectors, adequate number of desktop and laptop computers with free campus-wide Wi-Fi & cabled Internet connectivity which are used as tools to promote teaching – learning process.

6. Modern teaching methods practiced and use of ICT in teaching-learning

E-learning platform is used for interactions with students to prepare assessment assignments. These include Case Based Learning (CBLs), Seminar Preparations, e-path (Oral Pathology Slide with interactive questions), uploading of lecture notes and other interactive sessions.

7. Participation of teachers in academic and personal counseling of students

At the FOD, MMMC, all lecturers are involved in the 'Mentor-Mentee' system, the main objective being is to monitor students' wellbeing, promote their self-esteem as well as inculcate maturity in addition to producing a competent dental practitioner. Students are assigned to their own mentors who also act as Academic Advisors (1 lecturer to 5-6 students) who act as facilitators and mediators throughout their undergraduate years.

Objectives

The objectives of the academic advisory system include the following:-

To assist students in adapting to life in the University

To assist students in their personal, academic and professional development

To promote student/staff interaction

MMMC takes advantage of the availability psychiatrists in the Department of Psychiatry, Faculty of Medicine, who act as Counsellors to students when the need arises. Counselling services include any personal or social problems that students may wish to discuss with the counselors.

8. Details of faculty development programmes and teachers who have been benefited during the past two years

9. Participation /contribution of teachers to the academic activities including teaching, consultancy and research

a. Teaching activities

1. Bachelor of Dental Surgery: From third year to final year
2. Fellowship in Oral Implantology: 1 year Dental Postgraduate programme
3. Oral Biology: Semester III of Foundation in Science programme
4. Invitation as conference guest speaker

b. Consultancy

Table below illustrate the income generate from clinical consultancy from January to November 2014

2014					
DATE	STUDENTS		SPECIALIST / DENTAL OFFICER		TOTAL
	Income	Outsourced / expenses	Income	Outsourced / Expenses	
January	7557.00	(1)	25882.00	1720.00	31719.00
February	2746.50		38543.00	4443.50	36846.00
March	9714.00		62407.50	3466.50	68655.00
April	10806.00		64427.00	1000.00	74233.00
May	8331.00		71355.00	1500.00	78186.00
June	8654.00		46515.00	10058.25	45110.75
July	4179.00		62448.00	1669.75	64957.25
August	303.00		85303.00	16886.00	68720.00
September	1860.00		75712.00	15858.50	61713.50
October	6090.50		64371.25	6565.00	63896.75
November	7466.00		51573.00	10775.00	48264.00
December	18,038.00		74003.00	11761.75	80279.25
Total Income less Total Outsourced Expenses- TODATE (2014)	85745.00		722539.75	85704.25	722580.50

NOTE: (1) Student Clinics do not outsource any item but sent to the in-house Prosthetic lab. Outsourced expenses are mainly incurred by the Specialists' clinics

c. Research and publication

Table 4: Publications in FOD, MMMC (2012-2014)

YEAR	ISI Impact Factor Journal	SCOPUS Indexed Journal	Peer Review Journal	Book	Chapter in Book	Cochrane Protocol
2012	4	3	8	1	1	0
2013	5	4	11	3	2	0
2014	5	9	21	1	1	6

Dr. Alok Misra

1. Dental prosthetic status and prosthetic need of the institutionalized elderly living in geriatric homes in mangalore:a pilot study,hindawi publication corporation ISRN dentistry ,vol 2013,article id:535480
2. Evaluation of manual and rotary niti retreatment systems in removing gutta-percha obturated with with two root canal sealers, hindawi publication corporation ISRN dentistry ,vol 2013,article id:694027

Dr Vikram Shetty Kaup

1. An In Vitro Evaluation Of The Effect Of Dentin Deproteinization On Coronal Microleakage In Endodontically Treated Teeth. Journal of International Society of Preventive and Community Dentistry. Vol.4/ Supplement 3/December 2014.

Dr Vivekananda Pai

1. AR Vivekananda Pai, V Mohan Babu, Kundabala M. The role of hemisection in the prosthetic management of a distal extension ridge – A case report. Dent Update, July/August 2014; 41: 514–516.
2. Vivekananda Pai AR, Shrikrishna SB, Shah N. Surgical management of overfilled gutta-percha and root capping with mineral trioxide aggregate in a young patient. J Interdiscip Dentistry 2014; 4: 148-151.

Dr Kapil Jhalaria

1. Multidrug resistance 1 gene polymorphism in amlodipine-induced gingival enlargement, Journal of Indian Society of Periodontology,2015 Mar-Apr;19(2):239-41 (pubmed indexed)
2. An in vitro evaluation of the effect of dentine deproteinization on coronal microleakage in endodontically treated teeth, J Int Soc Prevent Communit Dent 2014;4, Suppl S3:187-92(Year : 2014 | Volume : 4 | Issue: 6 | Page : 187-192) (pubmed indexed)
3. Biofilm in endodontics: A review, Journal of International Society of Preventive and Community Dentistry ,December 2014, Vol. 4, Supplement 3 S144-s155(pubmed indexed)
4. Stem Cells and their Potential Role in Making a Biotooth: A Review, Indian Journal of Contemporary Dentistry, Vol 2, No 1 (2014), Pagination: 1-6
5. Indian Journal of Contemporary Dentistry, Vol 2, No 1 (2014), Pagination: 1-6, Indian Journal of Contemporary Dentistry,Year : 2014, Volume : 2, Issue : 2,First page : (36) Last page : (40)
6. 6. Keratocystic Odontogenic Tumor Associated with an Ectopic Tooth in the Maxillary Sinus: A Rare Entity, Oral Health Dent Manag 13: 7 40(pubmed indexed) (impact factor-1.23)

7. In Vitro Evaluation of the Compressive Strength of Microhybrid and Nanocomposites, Oral Health Dent Manag 13: 751(pubmed indexed) (impact factor-1.23)

d. Academic Assessors

1. Two lecturers were appointed in the Panel of Assessor for Malaysian Qualifications Agency for the BDS programme.
2. Two Lecturers had been appointed as Peer Review Assessors to the promotion panel.
3. Three lecturers has been appointed as External Examiners of other Institutions in Malaysia
4. Assessor for peer review journals
5. External assessor for research grant application at national level.

10. Collaboration with other departments / institutions, at the State, National and International levels, and their outcome during the past two years

The collaborative partnership and affiliation with international dental organizations is the gallant effort of the faculties to support the aspiration of the country to be an international educational hub and fulfill our commitment to produce competent professionals. Building on the partnership strengths and experienced clinicians coupled with excellent clinical facilities, FOD is proud to have five of its faculties conferred the Diplomate, Master and Fellowship in Implantology by the International Congress of Oral Implantology (ICOI). Three of them were also appointed with ICOI Advanced Credentialing Commission in Malaysia. The Dean has been appointed as the ICOI's only ambassador in Malaysia. The ICOI is not only the world's largest dental implant organization, but also the world's largest provider of continuing dental education in the field of Implantology.

The FOD is also making its presence felt in the International Academy of Laser Dentistry (ALD) as two of its faculty have recently passed the standard proficiency examination in Laser Dentistry and conferred the fellowship award; this has added value to our approach to advanced clinical dentistry. The use of lasers is fast gaining attention in the current era of health awareness, whose properties can be harnessed to bring about improved rates of healing and less tissue destruction, producing good results in a shorter time, and making dental treatment painless.

11. Priority areas for Research and details of the ongoing projects, important and noteworthy publications of the faculty, during past two years

Research direction and establishment of research clusters need to start right from Day One of the establishment of the dental school. Development in niche areas provides

good direction for educators to work on and synergistically contribute to the ascending research pyramid. The FOD, MMMC has identified Craniofacial Sciences, Biomaterials and Dental Imaging as the core for research activities. The challenge lies in keeping abreast with vigorous advancements in science. We cannot afford to lag behind or be complacent with current achievements but must in fact triple our efforts to succeed in our endeavours to be competitive, productive and innovative. Despite limitations of resources, faculty were able to substantially publish the works in 2012, 2013 and 2014 as illustrated above in Table 4.

A sensible way of nurturing and cultivating research culture among students is through sharing of experience to develop a sound foundation towards innovative thinking. Thus educators must play significant roles as mentors in teaching and guiding students much more than just imparting knowledge. Mentors are required to lead, coach, share and jointly create an environment that would inspire the young undergraduates into probing the reality. As such a smart partnership in the form Elective Research Module was implemented to nurture the young aspiring dental surgeons to think beyond current norms. Integrating various subjects essential in research culture is the way forward in dental education. Biostatistics and research methodology in the Community Dentistry and Dental Public Health are the core elements in understanding research that is put into practice.

12. Placement record of the past students and the contribution of the department to aid student placements

First batch of 21 MMMC Dental Surgeon graduates have all been absorbed by the Ministry of Health, Malaysia. Malaysian dental graduates are required to complete a one-year compulsory service with the Government. They had graduated in July 2014.

13. Plan of action of the department for the next five years

A. Academic

At present there are 13 institutions of Higher Education Provider (HEP) offering dental undergraduate programme with two more in the pipe line. The moratorium for the opening of new dental schools in Malaysia is still being imposed. With many Malaysians going overseas to pursue dentistry, MMMC will look to the possibility of dentistry postgraduate training in all disciplines.

The plan is to offer full time postgraduate specialty programmes such as the Doctor of Clinical Dentistry (D.Clin.Dent) programmes, a 4-year course under the current guidelines by the Malaysian Ministry of Education (MoE) and National Specialist Register (NSR) so that it may be recognised as a speciality

programme. This would help potential candidates to obtain registration as Specialists with the Malaysian Dental Council MDC.

MMMC has initiated correspondence with the Royal Colleges of England, Scotland and Ireland for the possibility of running their dental postgraduate programmes in Malaysia.

B. Services

Dentistry services have been marketed to the local (Malacca) community; and currently our clinic is on the dentists panel of Malaysia's national electricity provider, TEN. Approval by the local authority for an on-site dental clinic of Sunpower AUO, a large American-Taiwan owned manufacturer of Solar panels is currently awaited. Yet another a French-owned MNC, ST Microelectronic, is expected to appoint MMMC's dental clinic in the next few months. Promotion of the services are mainly by word of mouth as strict advertising and promotion restrictions prevail in Malaysia.

The total number of patients registered as of 3 July 2015 with the MMMC dental clinic is 9916.

C. Research

The introduction of an Elective Research programme and the proposed postgraduate programme would enhance current research activity. It is expected that every academic will produce two publications in a year. FOD is ready to accept any postgraduate students willing to take up Master programmes through research mode. We will join forces with local research universities to utilise their research facilities that are currently not available in our institution.

D) Short Courses

The module-based programme aims to target busy practitioners and dentists serving in the private and government sectors and academicians aspiring to upgrade themselves with current advances. The training course is arranged such that these professionals can take time off their hectic schedule to learn the skills of new Dental advances in various disciplines. Participants of the course will have the opportunity to do hands-on under the able guidance of our specialists to meet increasing patient demands.

An Implantology program had been successfully launched in 2014 with a pioneer batch of 10 students completing the one-year program. The second cohort will should complete their program of study in November / December 2015.

A Laser Dentistry program is also in the works.

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