



MANIPAL

ACADEMY of HIGHER EDUCATION

(Deemed to be University under Section 3 of the UGC Act, 1956)

MAHE Research Bulletin

Jan-Mar 2019



Content

Part I

- A. Details of research activities **during the period Jan - Mar 2019**
 - a. Total number of publications in Scientific Journals (in Scopus/Web of Science indexed and/or impact factor journals)
 - b. Ongoing research projects
 - c. Research and training programs conducted
 - d. Number of collaborations established
 - e. Total number of grants received
 - f. Patents applied
- B. Faculty and Institution Achievements
- C. Achievements by research scholars and students
- D. Awards and accolades

Part II

- a. Featured Researcher of MAHE
- b. Top publications for the period Jan - Mar 2019

Part III

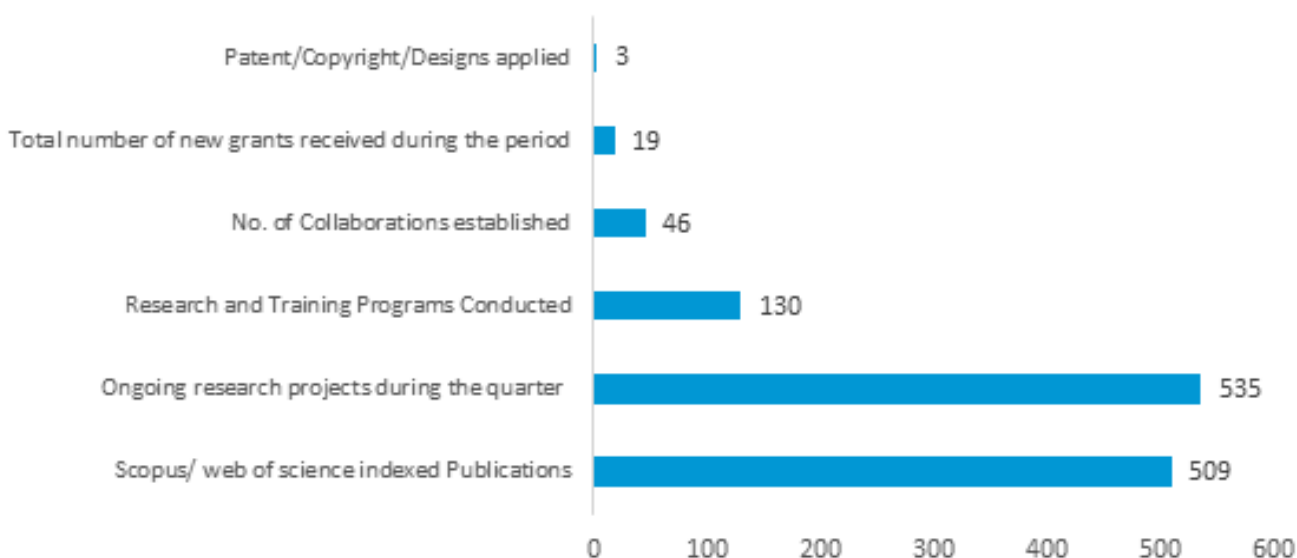
Activities of MAHE Students' Research Forum (MAHE-SRF)

Part I

Manipal Academy of Higher Education (MAHE) is one of the premier universities in India. MAHE considers both academics and research equally important for the betterment of an institution. The faculty members and the research scholars at MAHE have embraced the research culture. They publicize their research work in scientific publications, through presentations in various conferences and obtaining patents, research grants etc. In this report, we present to you **an overview of the research activities** of MAHE during the period **Jan - Mar 2019**.

A. Details of research activities of MAHE for the period Jan - Mar 2019

Research activities of MAHE during Jan - Mar 2019



B. Faculty and institution achievements

1. Shruthi Acharya, Associate Professor, Manipal College of Dental Sciences, received a stipend for the Project titled "System and Method for Accurate Intraoral Periapical Radiographs" in the BRIC – Idea Exposition held during March 16–17, 2019 at NITK Surathkal, as Part of the IKP-BIRAC Regional Innovation Centre program.
2. Dr Anoop Kishore, Associate Professor, Department of Pharmacology, Manipal College of Pharmaceutical Sciences was appointed as the Coordinator for Centre for Digital Learning, MAHE. The Centre is funded by Vision Group of Science and Technology, Government of Karnataka
3. Dr Sonal Sekhar M, Assistant Professor-Selection Grade, Department of Pharmacy Practice, MCOPS received Manipal McGill Centre for Infectious Diseases (MAC ID) Seed grant for the research proposal titled "Vitamin D Supplements in Diabetic Foot Infection: A Prospective Observational Study in



a Tertiary Healthcare Facility” for the year 2019-20. Co-investigator of the project is Dr Gabriel Sunil Rodrigues, Professor and Unit Head, Department of Surgery, Kasturba Medical College and Hospital, Manipal. MAC ID was launched in the year 2016 with an aim of fostering research and training collaborations in the field of infectious and tropical diseases between MAHE, India and McGill University, Montreal, Canada.



4. Dr Pooja Rao, Assistant Professor was awarded the “Best performer” title at the 3rd National level workshop on “Hospital Infection control”, JIPMER, Puducherry. The award was in recognition for the knowledge gained after the workshop.
5. Mrs Aradhana Marathe, Research Scholar and tutor from the Department of Biochemistry at Centre for Basic Sciences, KMC, Mangalore was awarded the “Best Activity Performer” at the 6th National workshop on Research Methodology (sponsored by CSIR, New Delhi) held during 20–23 March 2019, at Trichy SRM Medical College and Research Centre, Irungalur, Trichy, Tamil Nadu.
6. Dr Animesh Jain, Professor and Head, Community Medicine, KMC Mangalore, was awarded the “Best presenter for innovative teaching practice in Community Medicine” by the Indian Association of Preventive and Social Medicine (IAPSM). He received a certificate and a cash prize. Dr Jain’s educational project was shortlisted among top three for innovative teaching practices in Community Medicine.
7. Dr D V Kamath, faculty member, MIT established a collaboration with Dr Costas Psychalinos, IEEE Senior Member, Area Editor of the International Journal of Electronics and Communications (AEU), Associate Editor of the Circuits, Systems, and Signal Processing Journal, University of Patras, Greece. Dr Kamath was selected as a “Distinguished Faculty in Engineering” during the Venus International Faculty Awards-VIFA 2019.
8. Dr Manjunath K N, Faculty, CS&E, MIT, Manipal visited the Bernoulli Institute for Mathematics, Computer Science and Artificial Intelligence at the University of Groningen Netherlands during 11-15 March 2019 in a faculty exchange program. The visit was funded by the European Commission’s International Credit Mobility Scheme.



9. iDiDe 2019 (Intercultural Dialogue through Design) - International Design Studio was conducted with Deakin University, Australia with a cohort of 40 students at Manipal School of Architecture and Planning, MAHE, Manipal, India. The iDiDe 2019 studio successfully achieved the Design Outcomes for an Anganwadi at Shirthady, Dakshina Kannada held during January 9-26, 2019.






IDiDe Studio 2019 is a design-based platform with interactions between Manipal School of Architecture and Planning, MAHE, Manipal and School of Architecture and Built Environment, Deakin University.

Achievements by research scholars and students

1. Ms Sanna Gulati, PhD Research Scholar, MCNS, MAHE, Manipal received the Best Paper award for her work titled "First detection of intra-night optical variability in misaligned active galaxies" at 20th National Space Science Symposium held in Pune during January 29–31, 2019. She also bagged the Best Poster award for the project titled "Short-term optical variability in misaligned active galaxies" from Indian Academy of Sciences at the XXXVII Meeting of Astronomical Society of India held in Bengaluru during February 18-22, 2019.
2. Ms Indira G, Research Scholar is pursuing her PhD project (DBT funded) under the guidance of Dr Nirmal Mazumder in the Department of Biophysics, Manipal School of Life Sciences, MAHE. She participated in the Preparatory School and Winter College at ICTP, Trieste Italy on application of optics and photonics in food science held between 4-8 February, 2019. Indira not only participated in the Winter School, but also received 2019 LAMP Poster Award (3rd Place) for the work on "Structural and Chemical Characterization of Starch Granules using Microscopy and Spectroscopy Techniques" during Winter College in Application of Optics and Photonics in Food Science held at ICTP, Trieste Italy, 11-22 February 2019. A cash award was sponsored by SPIE, USA.

Awards and accolades

1. Dr Sudarshan S, Associate Professor, Department of Anatomy, Melaka Manipal Medical College (MMMC) was awarded the Best Paper Presenter, for the paper titled "A rare case of entrapment of superficial branch of radial nerve within the split tendon of brachioradialis muscle (Wartenbergs syndrome)" at 2019 International Conference on Research in Life Sciences and Healthcare (ICRLSH), held in Dubai during 27 – 28 February, 2019. 
2. Dr Anjali Vijay S, Assistant Professor, Department of Pathology, MMMC bagged the first prize for poster presentation titled "Giant pronormoblasts with inclusions –tell-tale sign of parvovirus B19 infection" at International Conference on Dermato-pathology and Soft Tissue Pathology held in Bangalore during 8–9 March 2019. 
3. Dr Abhinav Kanwal, Assistant Professor, MCOPS, received the 2019 "S C Tyagi Young faculty finalist award" and a cash prize at IACS 2019, International Conference on Translational Research in Cardiovascular Sciences held during February 15-17, 2019 at NIMHANS, Bangalore. Dr Kanwal's presentation described the role of Sirtuins in controlling diabetes-induced cardiac failure. 
4. Dr Vijendra Prabhu, Assistant Professor-Senior Scale, Department of Biotechnology, MIT received Dr TMA Pai Gold Medal for Outstanding Research Publication- 2018 for excellence in research titled "Probing endogenous collagen by laser induced auto-fluorescence in burn wound biopsies: A pilot study". 
5. Dr K Balakrishna and Dr H N Udayashankar, faculty members, Manipal Institute of Technology (MIT) were awarded a network research project on estimating the amount of groundwater discharge from coastal zones into the Arabian Sea and Bay of Bengal from the National Centre for Earth Science Studies, Trivandrum-Ministry of Earth Sciences. MIT, MAHE is one among the seven organizations chosen to work on this project.



6. Dr K V Sriram received the Best Paper award for the work titled, "Does E-marketing Mix Influence Brand Loyalty and Popularity of e-commerce websites?" in the AU International conference in Business Economics held in MSME Business School, Assumption University, Samut Prakan, Thailand during March 13–15, 2019.



Part II



A. Featured researcher of MAHE

Dr Kavitha Saravu, MD, DNB, DTM&H (London)

Professor of Medicine and Unit Chief

Kasturba Medical College, Manipal

Coordinator, Manipal Centre for Infectious Diseases (MAC ID)



Dr Kavitha Saravu, Professor of Medicine and Unit Chief, KMC Manipal obtained her MBBS degree from Kasturba Medical College, Mangalore in 1994. She obtained MD Medicine from Seth G S Medical College and KEM Hospital, Mumbai in 1998. Dr Saravu holds a Diploma in Tropical Medicine and Hygiene from the London School of Hygiene and Tropical Medicine, UK (2013). She pursued training in translational research in infectious diseases from Yale School of Medicine, USA in 2013.

Dr Saravu is the recipient of Pfizer award for an outstanding performance in MBBS examination at Mangalore University and Pfizer medallion in medicine for post-graduation. She also bagged Dr Vinaya Kumar Palekar Gold medal for standing first in the M D Medicine in Seth G S Medical College and King Edward Memorial (K E M) Hospital, Mumbai. Dr Saravu was conferred with Dr TMA Pai Gold Medal for the best outgoing student in KMC as well as by Mangalore University. She was one of the ten Indian doctors selected by the Ministry of Health and Family Welfare, Government of India to represent India in the First Indo-China Joint Medical Mission in Beijing in 2008 and participated in workshops on public health prospects, presented guest lectures and provided free medical consultation in poor areas of China in January 2008

To her credit, she owns the “John Williams” Prize from London School of Hygiene and Tropical Medicine for an excellent performance in Diploma examination in Tropical Medicine and Hygiene. She received the ICMR International Fellowship for Young Biomedical Scientists in 2013 to get trained in translational Research in Infectious Diseases at Yale University, USA.

Dr Saravu has clinical and research expertise in infectious diseases, particularly tropical infections like malaria, melioidosis, TB and HIV. She runs the Infectious Diseases Clinic and HIV clinic at Kasturba Hospital, Manipal, India. For the last 20 years, she has supervised over 25 student projects, mentored 23 students in MD thesis, guided one PhD student and is currently guiding three doctoral candidates. She has mentored six students from Canada and Germany and is currently supervising two students for her projects. Dr Saravu has funded projects on malaria, scrub typhus and TB. Her research team has explored clinically relevant and insistent dimensions in malaria viz. disease severity and outcomes, host immune competence anti-malarial drugs’ efficacy and recurrences. Their work has established the sensitivity of chloroquine in patients with Plasmodium vivax malaria in Udupi district, in the wake of emergence of drug resistance in some parts of the world. This has resulted in change in the practice of treating physicians to prescribe chloroquine and preserve artemisinin for future use.

Dr Saravu has authored chapters on Melioidosis in the 9th and 10th edition of API text book of medicine

(Association of Physicians of India) and on Malaria in the 11th edition, chapter on TB diagnosis best practices in Tuberculosis monograph. She has over 85 peer reviewed indexed publications including publications in, Lancet Infectious Diseases. She is a reviewer for 12 international journals some of which are PLOS NTD, PLOS ONE, BMC infectious Diseases, and BMC Medicine. Currently, she is the Joint Coordinator of McGill Manipal Centre for Infectious Diseases (MACID). She was invited as an expert committee member on melioidosis by National Centre for Disease Control (NCDC), New Delhi in 2019 and contributed to Communicable Diseases alert (CD alert) on melioidosis. She is a member of “Indian Rickettsial Infection Study Network” (IRIS Network), for research on Scrub typhus. She is an executive life member of Clinical Infectious Diseases Society of India (CIDS), an honour in recognition of one’s dedicated efforts in the field of Infectious Diseases.

Her message to budding researchers is that there is no short cut to success. It is worthwhile to undertake systematic training in research early in one’s career; if possible, have an international exposure. Thereafter, pursue the research area of interest with unwavering focus and dogged perseverance. Working with a good mentor, and collaborating would be invaluable. Ultimately, research should lead to innovative solutions to the problems that community face locally and globally. One should strive to be part of that movement and solution to improve the lives of people.

In future, her team aims to determine the best treatment regimen to decrease the recurrences of malaria, the Achilles’ heel in malaria elimination; to establish the best regimen to treat severe scrub typhus patients to improve their outcomes in endemic regions. In the era of emerging and re-emerging infectious diseases she aims for training and preparing the health care system for such outbreaks. She believes Kasturba Medical College, Manipal Academy of Higher Education, Manipal is well equipped to develop an Infectious Diseases specialization program, to meet the huge requirement of trained Infectious Disease specialists and clinician scientists in India.

B. Top publications for the period Jan-Mar 2019

Title of the publication	Name of the author	Department/ Institution	Name of the Journal	Month and Year of Publication	1-Yr Impact factor
NAD(P)HX dehydratase (NAXD) deficiency: a novel neurodegenerative disorder exacerbated by febrile illnesses	Dr Girisha K M; Dr Anju Shukla; Dr Leslie Edward S Lewis	KMC, Manipal	Brain	January 2019	10.84
Genomic and phenotypic delineation of congenital microcephaly	Dr Girisha K M	KMC, Manipal	Genetics in Medicine	March 2019	9.937

Title of the publication	Name of the author	Department/ Institution	Name of the Journal	Month and Year of Publication	1-Yr Impact factor
Human induced pluripotent stem cell-derived MGE cell grafting after status epilepticus attenuates chronic epilepsy and comorbidities via synaptic integration	Dr Dinesh Upadhya	KMC, Manipal	Proceedings of the National Academy of Sciences of the United States of America	January 2019	9.504
Hypomorphic Mutations in TONSL Cause SPONASTRIME Dysplasia	Dr Girisha K M; Dr Anju Shukla; Dr Sri Lakshmi Bhavani Gandham; Neethukrishna K	KMC, Manipal	American Journal of Human Genetics	March 2019	8.855
Visitors' Place Attachment and Destination Loyalty: Examining the Roles of Emotional Solidarity and Perceived Safety	Dr Vidya Patwardhan; Mr Valsaraj P; Ms Jyothi Mallya	Welcomgroup Graduate School of Hotel Administration	Journal of Travel Research	February 2019	5.169
Application of multiresolution analysis for automated detection of brain abnormality using MR images: A comparative study	Dr Anjan Gudigar; Dr Raghavendra U	MIT Manipal	Future Generation Computer Systems	January 2019	4.639



Part III

A. MAHE Students' Research Forum (MAHE-SRF)

Members of MAHE-SRF for the year 2019-20 were inducted.

	Governing Council	Name	Institution	Contact
1	President	Dr Niyati Saroha	MCODS, Manipal	saroha0300@gmail.com
2	Vice President	Ravi Kumar T N	KMC, Manipal	ravishashi23@gmail.com
3	Vice President	Mr Elton Dylan Nazareth	MIT	nazareth.elton@gmail.com
4	Vice President	Ms Ankita Shetty	SOM	ankitashetty67@gmail.com
5	Vice President	Yadukrishnan P T	Manipal Centre for Humanities	yadu19@gmail.com
6	General Secretary	Ms Suvedha Suresh Naik	Physics group, MCNS	suvedha.snaik@gmail.com
7	General Secretary	Ms Keerthi Priya	MCOPS	kp.pharmac@gmail.com
8	Joint Secretary	Ms Keerthi K	DAMP	keerthiedattummal@gmail.com
9	Joint Secretary	Mr Raghu Shaker CR	SOLS	raghuram.manipal@gmail.com
10	Web Master	Ms Rashmi R	SOIS	rashmiponnamma93@gmail.com
11	Financial Coordinator	Sheethal Lisha Renjal	Department of Commerce	sheethal21697@gmail.com
12	PRO	Ms Samriddhi Nandi		samriddhinandi@yahoo.com
13	PRO	Ms Sushmita Roy	Manipal Centre of European Studies	sushmita.asha.roy@gmail.com
14	Executive Committee Member	Ms Sanjukta Sardesai	SOAHS	sardesai.sanjukta@yahoo.com
15	Executive Committee Member	Mr Sudheesh	Department of Virus Research	sudheesh.n@manipal.edu
16	Executive Committee Member	Ms Anupama DS	MCON	anuds2007@rediffmail.com
17	Executive Committee Member	Ms Athira Rajgopalan	WGHTSA	athi.athiranair@gmail.com

	Governing Council	Name	Institution	Contact
18	Executive Committee Member	Dr Vandana Daga	MCODS, Mangalore	vandana0894@gmail.com
19	Executive Committee Member	Ms Sheethal	MMMC	sheetal.ch9@gmail.com
20	Executive Committee Member	Ms Khyati Bhardwaj	KMC, Mangalore	khyati606@gmail.com
21	Executive Committee Member	Mr Krishna Mohan	MCNS	krishnamohana.mon@gmail.com
22	Executive Committee Member	Mr Panchanil Sarmah	DAMP	panchanilsarma@gmail.com
23	Executive Committee Member	Ms Kripa Sriram	FOA	kripas1999@gmail.com
24	Executive Committee Member	Ms Tessia Zachariah	FOA	tessiaz@yahoo.com
25	Mentor, Technical	Dr Harish K S	MIT, Manipal	hareesh.ks@manipal.edu
26	Mentor, Technical	Dr Prema K V	MIT, Manipal	prema.kv@manipal.edu
27	Mentor, Health Sciences	Manikandan	SOAHS, Manipal	mani.kandan@manipal.edu
28	Mentor, Health Sciences	Usha Y Nayak	MCOPS, Manipal	usha.nayak@manipal.edu
29	Mentor, Health Sciences	P Kalyan Chakravarthy	MCODS, Manipal	kalyan.cp@manipal.edu



Editorial Team

1. Dr N Udupa, Director Research (Health Sciences)
MAHE, Manipal
2. Dr Satish Shenoy B, Director Research (Technical Sciences)
MAHE, Manipal
3. Dr Bharti Chogtu Magazine, Deputy Director Research
(Health Sciences)
MAHE, Manipal
4. Dr Santhosh K V, Deputy Director Research (Technical Sciences)
MAHE, Manipal
5. Dr Rekha R Shenoy, Associate Professor
Department of Pharmacology, Manipal College of Pharmaceutical
Sciences, MAHE, Manipal
6. Dr Manthan D Janodia, Professor and Head
Department of Pharmacy Management, Manipal College of
Pharmaceutical Sciences, MAHE, Manipal