



MANIPAL
ACADEMY of HIGHER EDUCATION
(Institution of Eminence Deemed to be University)

MAHE Research Bulletin

Oct-Dec 2020



Manipal Academy of Higher Education (MAHE) has been rated as the number one private University in India by the Education World 2020 and has been conferred in recent years with the “Institution of Eminence” status by the Ministry of Human Resource Development (now the Ministry of Education), Government of India. MAHE—Manipal remains congruous with the idea of world-class infrastructure and excellence in higher education, with about 65 different nationalities contributing to its capacious alumni corpus, and a burgeoning consortium of campuses stretching over off-shore establishments such as in Malaysia and Dubai.

The MAHE upholds its academic integrity to “promote research activities of global standards”. Thereof, in view of being a reputed transnational research hub, with active partnerships listed with more than 220 leading universities around the globe, the MAHE endeavours to provide its faculties and students with pivotal access to first-class resources and facilities.

The MAHE steadfastly propagates the work ethic of “global leadership in human development, and excellence in education and healthcare”. The preceding sixty years alone have seen institutes at Manipal taking erstwhile steps towards strengthening its base of intellectual apprenticeship and achieving scholastic distinction in multifarious disciplines.

The MAHE has engendered some of the country’s best Institutes and Centers of Excellence across diverse streams such as medicine, dentistry, nursing, engineering, pharmacy, hotel management, allied health, architecture and design, the creative humanities, digital media, and communication. Each institute at Manipal is designed to match up to the very challenging standards that create inventive professionals and shape socially-sensitive citizens, thereupon inspiring its scholars to endeavour beyond what is deemed ordinary.

Directorate of Research – MAHE, Manipal

Multi-disciplinary research ventures and academic tie-ups are the bedrock of MAHE's eclectic vision of global development. Thereof, the Directorate of Research (DoR) promulgates the univocal ethic of MAHE to nurture and promote research activities at par with international standards through collaborative projects and seed-funding endeavours. In perspective, exploring fertile areas in ground-breaking research has always been of paramount significance to MAHE. In this direction, the university has witnessed a dynamic gush of publications, with doctoral degrees being awarded and grants being presented by notable funding agencies amidst other accomplishments. Presently, the DoR is operating under the leadership of the Vice Chancellor Lt Gen (Dr) M D Venkatesh and aims to expand its strategic framework by providing an invigorating eco-system for concerted effort across multidisciplinary streams. The robust panel works in association with the Heads of the Institutes of different constituent units of MAHE. In lieu, the faculty, research scholars, and students of MAHE have co-opted MAHE's research culture, and are furthermore encouraged to publicize their research work in scientific publications, present papers in conferences, obtain patents, and apply for research grants. In this bulletin, we present an outline of the research activities at MAHE for the period October to December 2020.

Vision:

To nurture and promote research activities of global standards.

Mission:

"To facilitate and contribute to research in all disciplines, thereby improving yield in term of grants, research innovation, intellectual property, and publications."

Objectives:

- To identify research priorities and initiate programs
- To seek research grants and promote focused research of national importance
- To foster new collaborations and strengthen existing ones
- To disseminate research findings in high impact publications
- To provide logistics for researchers to implement ideas
- To support IP related activities and Technology Transfer

"No research without action, no action without research" – Kurt Lewin

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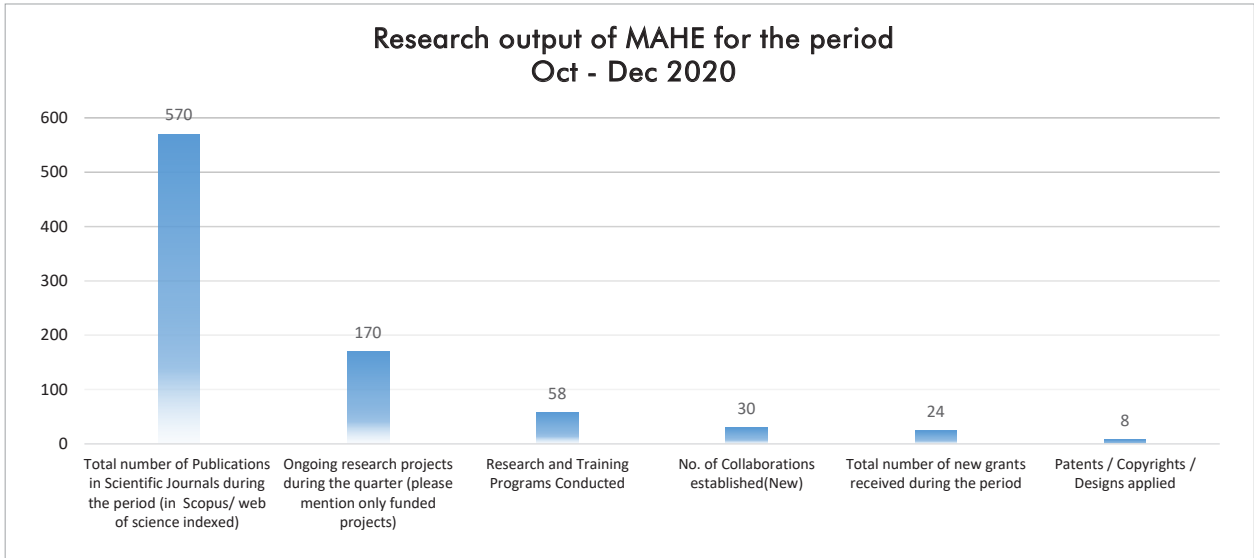
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Part I

A. Info-graph of Research Activities during the period October-December 2020



B. Faculty and Institution Achievements

1. Manipal Institute of Virology (MIV) received KPME accreditation in October 2020 under the Karnataka Private Medical Establishment Act 2018 for providing medical services as a medical diagnostic laboratory from the Department of Health and Family Welfare Services, Government of Karnataka.
2. Manipal Institute of Virology (MIV) received NABL accreditation in December 2020 in accordance with ISO 15189:2012 in the field of medical testing for the disciplines of Microbiology and Infectious Disease Serology and molecular testing.
3. Department of Emergency Medicine, KMC, Manipal, MAHE received the “plaque of appreciation for service and contribution during the COVID-19 pandemic” in November 2020.
4. Department of Cardiology and the Department of Critical Care, KMC, Manipal, MAHE was honoured for the contribution of COVID-19 warriors by Kasturba Hospital on 30 November 2020.



5. Dr Vimal Krishnan, Associate Professor, Emergency Medicine, KMC, Manipal, MAHE–American College of Emergency Physicians, has announced the ACEP20 Global Leadership Award for Global EM Leaders, at ‘ACEP 20 AWARDS’, held on 10 October 2020.
6. Dr PSVN Sharma, Professor of Psychiatry, KMC, Manipal, MAHE won the Eminent Psychiatrist Award, at KANCIPS 2020, Bengaluru, held between 4 to 10 October 2020.
7. Dr Sheetal Ullal won the third prize in oral presentation for the paper titled “Knowledge and attitude of dental students towards healthcare ethics” at the 7th National Conference of the Forum of Ethics Review Committees of India, between 27th and 29th November 2020, organized by PGIMER, Chandigarh.
8. Dr Preethi J Shenoy won the second prize for the poster titled “Readiness for self-directed learning: A challenge for the implementation of CBME” presented at the National Online Conference on Challenges in implementation of competency-based medical education, conducted by SRM University of Science and Technology, Kattankulathur, between November 6-7, 2020.
9. Dr Jagadish Rao P P, Associate Professor, Department of Forensic Medicine and Toxicology, secured second place in the staff poster category at KAMLSCON 2020, the 28th Annual state conference (virtual) of the Karnataka Medico-Legal Society, organized by the Department of Forensic Medicine and Toxicology, Yenepoya Medical College, Yenepoya (Deemed to be University), Mangalore.
10. Dr Mohammed Sha Alam, Senior Resident Department of Medicine, successfully completed Fellowship in General Infectious Diseases at the Department of Infectious Diseases, Christian Medical College, Vellore, TN, in November 2020.
11. Dr Prakash Harischandra, Associate Professor, Department of Medicine, successfully completed a 10-day module in managing post-covid complications and anaemia, accredited by Med-talks Academy, 14th to 23rd December 2020.
12. Dr Archith Bloor, Associate Professor, Department of Medicine, won the award of excellence in book production from “The Federation of Indian Publishers” in November 2020 and the award of excellence (during Physician’s day 2020) by the Association of Physicians of India-DK Chapter.



13. Dr Sevitha Bhat, Associate Professor, Department of Microbiology, KMC, Mangalore, has been awarded “MAC ID Best Publication Award” for the year 2019-2020 for the paper “Changing antibiotic susceptibility pattern in uropathogenic Escherichia Coli over a period of five years in a tertiary care centre.”
14. Dr Bhumika T V (Coordinator, Public Health Evidence South Asia, Prasanna School of Public Health, MAHE), in collaboration with Dr Eti Rajwar, Dr Shradha S Parsekar and Dr Prachi Pundir (Research Officers, PHEA, PSPH, MAHE), were selected for online training of trainers course on “Teaching Research Synthesis Methods and Indigenising Knowledge in Systematic Reviews”. The course was organized by the Social Research Institute, University College London, UK. The course was conducted between October to December 2020, for 10 weeks.
15. Dr Krishnananda Nayak, Associate Professor, and Head, Department of Cardiovascular Technology, MCHP, MAHE, Manipal, was awarded the best national speaker of the session titled “Pushing All Limits” in the ICVT 2020—First Virtual Live Conference held on the 19th and 20th December 2020, at the Society of Paramedics Cardiac Interventional Technologists Association.
16. Ms Sandhya Kumari MV, Senior Grade Lecturer, Clinical Embryology, KMC, Manipal, MAHE won the Dr K D Nayar Best Embryology paper award at the 16th Annual Conference Ferti-vision at the first virtual global congress organized by the Indian Fertility Society, between 2-4 December 2020.



C. Achievements by Research Scholars and Students

1. Dr Venkat Vinay Atluri, PG from Orthopaedics, KMC, Manipal, MAHE, won the gold medal for the best paper presentation at OASISCON 2020, Hyderabad on 27 November 2020.
2. Mr Rajath Shenoy, PhD Scholar, Department of Speech and Hearing, received the “Academy of Aphasia Young Investigator Travel Fellowship” to attend the 58th Annual Academy of Aphasia Meeting held from 18th to 20th October 2020.
3. Ms Harini Vasudevan (currently pursuing her PhD under the supervision of Dr Hari Prakash Palaniswamy and Dr B Rajashekhar) received the INSPIRE Fellowship from the DST sanction order dated December 30, 2020.
4. Dr Talha Ahmed, Junior Resident, Department of Surgery won the best paper award for presentation in his category for the paper titled “Association of Serum Beta HCG Levels in Women with palpable malignant Breast Lesions” at the KSCASI mid-CON 2020 held on 17, 18, 19 October 2020.



5. Dr Sadhan Gopal, Junior Resident, Department of Surgery, won the best paper award for presentation in his category for the paper titled "Comparing the Accuracy of MRI and TRUS of Perianal Fistula with Operative findings" at the KSCASI mid-CON 2020 held on 17, 18, 19 October 2020.



6. Dr Jeny Emmanuel, final Year PG Student, Department of Orthodontics and Dentofacial Orthopaedics, Manipal College of Dental Sciences, MCOADS, Mangalore, MAHE, Manipal, won second best paper for her paper titled "A Remotely Controlled Mandibular Repositioner with integrated Continuous Positive Airway Pressure Titrator for Sleep Apnoea" in the Orthodontic Innovation Conclave 2020, held by the Indian Orthodontic Society on 20 October 2020.



7. Dr R Vignesh, Postgraduate, Department of Orthodontics and Dentofacial Orthopaedics, Manipal College of Dental Sciences, Mangalore MAHE, Manipal, won the best paper for his paper titled "Active and Passive modifications of pre-surgical nasoalveolar moulding appliance" in the clinical category at the first-ever virtual National orthodontic conference – "Ortho byte 2020", organized by the Indian Orthodontic Society from 3rd to 6th December 2020.



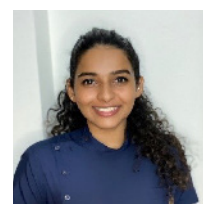
8. Dr Arshia Ummat, Postgraduate, Department of Orthodontics and Dentofacial Orthopaedics, Manipal College of Dental Sciences, Mangalore MAHE, Manipal, won the best paper for her table clinic presentation titled "Force Vector Control in Bone Anchored Maxillary Protraction using 3D printed models", at the first-ever virtual National orthodontic conference - "Orthobyte 2020", organized by the Indian Orthodontic Society from 3rd to 6th December 2020.



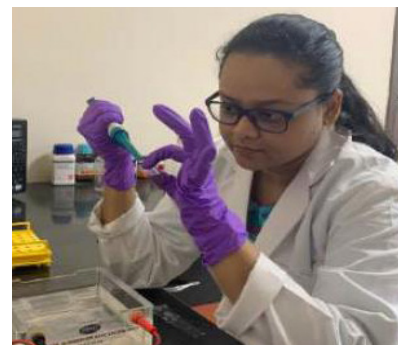
9. Dr Kushan Kishore Dhawan and Dr Ann Sales, Postgraduates from the Department of Prosthodontics, and Crown & Bridge, Manipal College of Dental Sciences, Mangalore, MAHE, Manipal, won the best paper in their session of IPS (Indian Prosthodontists Society) at the 48th annual virtual conference, Nagpur, between 3-6 December 2020.



10. Dr Ishita Singh, Dr Shradha Bhutoria and Dr Rashmita Rathnakar, postgraduates from the Department of Prosthodontics, and Crown & Bridge, Manipal College of Dental Sciences, Mangalore MAHE, Manipal, won the best poster in their session at the 48th IPS virtual conference which was held in Nagpur from 3-6 December 2020



11. Ms Supriti Ghosh, PhD Scholar, Manipal School of Life Sciences, Manipal, was one of the 27 DST-INSPIRE fellows to be selected as recipients for the prestigious Newton-Bhabha PhD Placement Fellowships 2018-2019. This fellowship is jointly funded by the Department of Science and Technology (DST)/the Department of Biotechnology (DBT), the Government of India, and the British Council, to candidates who meet their exacting criteria from the field of STEM. Ms Supriti Ghosh has been working under the supervision of Dr K Satyamoorthy (Professor and Director, Manipal School of Life Sciences, MAHE, Manipal) and Dr



Ranjitha S Shetty (Associate Professor, Department of Community Medicine and Coordinator, Centre for Indigenous Population, KMC, Manipal) in the field of viral screening for prevention of cervical cancer among the women of Udupi district. Given this, she opted for the University of Aberdeen, Scotland, UK, where Professor Margaret Cruickshank and her group has been working on the management of women with lower genital tract intra-epithelial neoplasia and the impact of human papillomavirus (HPV) vaccination on HPV-related diseases.

12. Dr Rajat R Choudhari, Junior Resident, Dept of Surgery, won the Best E-Poster Award for presentation in his category for the paper titled "Peculiar Case of Mesenteric Fibromatosis Masquerading as an Appendicular Abscess" at the KSCASI mid-CON 2020 held on 17, 18, 19 October 2020.



13. Dr Sharath M Manya, third-year postgraduate pursuing M D Paediatrics, Department of Paediatrics, Kasturba Medical College, Mangalore, MAHE, Manipal, received the second prize for his oral paper presentation titled "Smartphone Usage and Development of Sexuality among late Adolescent Boys in Health Sciences Colleges Of Mangalore, Karnataka" at E-ADOLESCON 2020 – the 20th National Conference of Adolescent Health Academy, Indian Academy of Paediatrics; a virtual conference jointly organized by AHA Nagpur and AOP Nagpur on 7th and 8th November 2020.



14. Dr Srikanth Reddy Thathireddy, final year postgraduate pursuing M D Paediatrics, Department of Paediatrics, Kasturba Medical College, Mangalore, MAHE, Manipal, received the third prize for a poster presentation titled "A rare case of Neonatal Cerebral Venous Sinus Thrombosis associated with MTHFR C677T Mutation and Hyperhomocysteinemia" at Karpedicon 2020 – the 39th Annual Karnataka State Conference (Indian Academy Of Paediatrics), Bengaluru; a virtual conference organized by IAP Karnataka State Chapter held from 14th to 18th December 2020.



15. Dr Sudarshan K, Department of Medicine, won the third prize for a presentation titled "Kikuchi fujimoto disease: A study of 67 cases in coastal South India" at KAPICON 2020 organized by API Udipi-Manipal Chapter held on 17th October 2020.



16. Dr E K Vanishree, Department of Medicine, won Second prize for her presentation titled "Virological Failure among people living with HIV on First Line ART in Southern India" at KAPICON 2020 organized by API Udupi-Manipal Chapter, held on 17th October 2020.



17. Dr Akula Sri Sushma, Department of Medicine, won the third prize for the presentation titled "Clinical outcomes of Isoniazid preventive therapy in PLHIV visiting a tertiary care centre" at KAPICON 2020 organized by API Udupi-Manipal Chapter held on 17th October 2020.



18. Dr Raghav Anand, Department of Medicine, won the second prize in the E-Poster presentation titled "Simple decision tree analysis for identifying Hemophagocytic lymphohistiocytosis in patients with dengue fever" organized by CIDSCON 2020, held on 29th November 2020.



19. Dr G G Akshay Prabhu, Department of Medicine, won the third prize for the poster presentation titled "Hyde's syndrome: A clinical Curiosity or rarity" organized by E-CON API-DK 2020 held on 13th December 2020.



20. Dr Soma Srinivas Vejendla, Department of Medicine, won the first prize for the paper presentation titled "Pattern of Drug-resistant tuberculosis among patients with HIV TB co-infection in comparison with TB alone attending a tertiary care hospital" in Mangalore, held on 13th December 2020.



21. Dr Smithnath, Department of Medicine, won the first prize for the paper presentation titled "Clinical profile and outcomes of infection with Carbapenem-resistant gram-negative bacteria – A study of forty-five cases in a hospital in southern India" organized by E-CON API-DK 2020 held on 12th December 2020.



22. Ms Rachita Gururaj attended the conference "Embedding Rehabilitative Approach in Oncology Care E-Conference 2020" held at Srinivas College of Physiotherapy, Srinivas University, on 26th and 27th December 2020, and won first place for her poster titled "Effectiveness of Therapeutic Massage and Relaxation Therapy on Sleep in Patients with Advanced Cancer - A Systematic Review".



23. Ms Aditi Bajpai, PharmD Intern, has been presented with the Best Oral Presentation Award under the category of "Health Economics and Outcomes Research" for the topic entitled "Potentially inappropriate medication use in geriatrics according to American geriatrics society-updated beers criteria 2019- prevalence and associated factors" in the First International Virtual Conference on Advances in Health Economics and Outcomes Research jointly organized by ISPOR Nitte Student Chapter and Department of Pharmacy Practice, NGSM Institute of Pharmaceutical Sciences, Mangalore, between November 27 and 28, 2020.



24. Ms Prerana Durgakumar Navti won first prize in e-poster competition during the World AIDS Day held on 1st December 2020 on the theme "Global solidarity and shared responsibility", organized by the Department of Nursing, Manipal College of Nursing, Manipal, in collaboration with Manipal Centre for Infectious Diseases (MAC ID) and Prasanna School of Public Health, MAHE, Manipal.

25. Ms Navya Ajitkumar Bhaskaran, research scholar, Department of Pharmaceutics, won first prize for the e-ORAL presentation titled "A Novel Formulation to enhance the Lamotrigine Bioavailability and Drug Concentration in the Brain" at DRAVYAKA 2020, the 11th National Level Virtual Conference held between December 11 and 12, 2020 on "Global Burden of the Disease and Pharmacist's Role", organized by Teja Educational society sponsoring Geethanjali College of Pharmacy, in association with APTI Telangana State Branch.

26. Dr Rupanjan Roy, first-year, Postgraduate, Department of Periodontology, MCOADS, Manipal, won first prize in the poster presentation category for his poster on "Nanotechnology in Periodontics", organized by Kalinga Institute of Dental Sciences, on 20 November 2020.

D Patents filed during the period October-December 2020

1. Dr Jyothsna M (Assistant Professor, Department of Pharmaceutics, Manipal College of Pharmaceutical Sciences, Manipal), and Dr Srinivas Mutalik (Professor, Department of Pharmaceutics, Manipal College of Pharmaceutical Sciences, Manipal), have filed for a patent titled "Lipidated Peptide Dendrimer for Dermal and /or Transdermal delivery of Active Agents" on 13th October 2020.

2. Dr Gautham P Jeppu (Associate Professor, Department of Chemical Engineering, Manipal Institute of Technology, Manipal) has filed for a patent titled "Apparatus for Generation Of Biogas" on 12th October 2020.
3. Mr Koushik Sau (Assistant Professor, Department of Occupational Therapy, Manipal College of Health Professions, Manipal), Mr Nitesh Naik, (Assistant Professor, Mechanical and Manufacturing Engineering, Manipal Institute of Technology, Manipal), Mr Sreerag Mahadevan, and Mr Pranav Prabhu have filed for a patent titled "A multifunctional Cane" on 20th October 2020.
4. Dr Shivarudra Swamy R, (Associate Professor, Electrical and Electronics Engineering, Manipal Institute of Technology, Manipal), and Ms Deekshitha Nayak have filed for a patent titled "Brushless Direct Current Motor Based Grinding and Mixing Appliance" on 22nd October 2020.
5. Mr Vinod Raj H G, (Assistant Professor, Aeronautical and Automobile Engineering, Manipal Institute of Technology, Manipal), Mr Himanshu M, Mr Bharath Reddy, Mr Sriharsha, have filed for a patent titled "Improved Magneto-Rheological Damper", on 11th November 2020.
6. Dr Swathi Pai, (Associate Professor, Department of Conservative Dentistry and Endodontics, Manipal College of Dental Sciences, Manipal), has filed for a patent titled "Improved Device for Maintenance of Oral Hygiene in Patients with Reduced Mouth Opening" on 28th December 2020.
7. Dr Manikandan N, (Associate Professor, Department of Physiotherapy, Manipal College of Health Professions, Manipal), has filed for a patent titled "A Novel Feedback Device to Detect and Improve Joint Range of motion", on 28th December 2020.
8. Dr Santhosh K V, (Associate Professor, Department of Instrumentation and Control Engineering, Manipal Institute of Technology, Manipal), and Dr Bharti Chogtu Magazine, (Associate Professor, Department of Pharmacology, Kasturba Medical College, Manipal), have filed for a patent titled "A Device for Reducing Human-Animal Conflicts in Agricultural Fields", on 28th December 2020.

Part II

A. Featured Researcher of MAHE



Dr Mahadev Rao - M Pharm, PhD

Mahadev Rao is Professor and Head of Department of Pharmacy Practice, Manipal College of Pharmaceutical Sciences, and the Coordinator of Centre for Translational Research, MAHE. After receiving his PhD from Manipal College of Pharmaceutical Sciences in 2000, he had worked in Government research labs in the USA. His primary areas of research interest include translational research, precision medicine, and the repurposing of drugs in cancer and lung diseases. Establishing clinical pharmacy services for patients in hospital settings, as well as drug utilization review research, are among his other passions.

Dr Rao received the Dr TMA Pai Endowment Chair, which was an excellent thrust for initiating translational research activities in MAHE, Manipal. He has published several papers and book chapters and delivered numerous national and international talks over the years. He is also a recipient of several grants from agencies such as NIH, ICMR, DST, and pharmaceutical industries. He is also renowned for having initiated the TB Portal Program in Manipal and represents India in the program's steering committee. The TB Portal Program is a web-based, open-access repository of socioeconomic/geographic, clinical, laboratory, radiographic, and genomic data from TB patient cases, with the objective of using big data and artificial intelligence to execute precision therapy for TB patients. Currently, the TB Portals Consortium includes 21 partnering countries.

Dr Rao has also started the Indo-American cancer consortium, which is the first collaborative initiative involving multiple tertiary cancer centres across countries. The consortium aims to build infrastructure, expand capacity, and strengthen global cancer research leadership and healthcare. Furthermore, the consortium plans to expand to many other premier cancer care institutions in India as well as abroad.

In perspective, Dr Rao's message to budding researchers is to remain self-motivated, hardworking, and passion-driven, with an elevated sense of scientific integrity to be able to embrace multidisciplinary prospects.

B. Top publications for the period July-September 2020

Title of Publication	Name of the Author	Institution	Name of the Journal	Month and Year of Publication	Cite Score Percentile Value	Quartile Values
Patient-derived iPSC modelling of rare neurodevelopmental disorders: Molecular pathophysiology and prospective therapies	Sabitha K Rajesh, Dr Dinesh Upadhyaya	KMC, Manipal	Neuroscience and Biobehavioral Reviews	December 2020	99%	Q1 (Top 1)
Comparison of plaster-of-Paris casts and Woodcast splints for immobilization of the limb during serial manipulation and casting for idiopathic clubfoot in infants	Dr Kumar Amerendra Singh, Dr Hitesh Hasmukhalal Shah	Manipal TATA Medical College, Jamshedpur, KMC, Manipal	Bone and Joint Journal	October 2020	97%	Q1 (Top 2-9)
Wear estimation of trapezoidal and circular shaped hip implants along with varying taper trunnion radiuses using finite element method	Mr Chethan K N, Dr Satish Shenoy B, Dr Shyamasunder Bhat N, Dr Mohammad Zuber	MIT Manipal, KMC, Manipal	Computer Methods and Programs in Biomedicine	November 2020	95%	Q1 (Top 2-9)
Computational approaches in efflux pump inhibitors: current status and prospects	Ms Ekta, Dr Suvarna G Kini, Mr Avinash Kumar	Manipal College of Pharma Science	Drug Discovery Today	October 2020	97%	Q1 (Top 2-9)
Comparison of Pharyngoesophageal Segment Biomechanics Between Persons with Total Laryngectomy With and Without Dysphagia Using sEMG: A Multicentric Swallow Study	Mr HarshaRaj, Dr Venkataraja Aithal U, Dr Vasudeva Guddattu	School of Allied Health Science, Prasanna School of Public Health, Manipal	Dysphagia	October 2020	95%	Q1 (Top 2-9)
Evaluating the Psychometric Properties of the Kannada Version of EAT 10	Mr Rahul K, Dr Radish Kumar B	KMC, Mangalore	Dysphagia	December 2020	95%	Q1 (Top 2-9)
Factors affecting the morphology of some organic and inorganic nanostructures for drug delivery: characterization, modifications, and toxicological perspectives	Ruchira, Dr Srinivas Mutalik, Dr Abhijeet Pandey, Ms Aswathi R Hegde, Dr Shaik Mohammad Abdul Fayaz	Manipal College of Pharma Science, Manipal Institute of Technology	Expert Opinion on Drug Delivery	October 2020	96%	Q1 (Top 2-9)
Investigations on the dependence of the stability threshold on different operating procedures in a single phase rectangular natural circulation loop	Mr Elton Dylan Nazareth, Dr Arunachala U Chandavar	Manipal Institute of Technology, MAHE	International Journal of Heat and Mass Transfer	November 2020	96%	Q1 (Top 2-9)

Title of Publication	Name of the Author	Institution	Name of the Journal	Month and Year of Publication	Cite Score Percentile Value	Quartile Values
Knowledge and attitudes toward transgender community among speech-language pathologists in India: A questionnaire-based exploration	Dr Dhanshree Rajesh Gunjawate, Dr Radish Kumar B, Dr Rohit Ravi, Ms Lakshmi S Kunnath	KMC, Mangalore	International Journal of Transgenderism	October 2020	97%	Q1 (Top 2-9)
ROS-dependent DNA damage and repair during germination of NaCl primed seed	Mr Kiran K R, Dr Muthusamy A, Ms Deepika V BHAT, Ms Swathy PS, Mr Keshava Prasad, Dr Shama K Prasada, Dr Murali T S, Dr Satyamoorthy Kapaettu	School of Life Sciences, MAHE	Journal of Photochemistry and Photobiology B: Biology	December 2020	97%	Q1 (Top 2-9)
Effectiveness of novel herbal dentifrice in control of plaque, gingivitis, and halitosis e Randomized controlled trial	Dr P Kalyana Chakravarthy, Dr Meena Anand K, Dr Hanan Siddiq	MCOODS, Manipal	Journal of Traditional and Complementary Medicine	October 2020	95%	Q1 (Top 2-9)
Exploring young pharmacists' and pharmaceutical scientists' needs and expectations within an international pharmacy organization: Findings from FIP's needs assessment survey	Dr Jyothsna M	Manipal College of Pharma Science	Research in Social and Administrative Pharmacy	December 2020	95%	Q1 (Top 2-9)
Markov frameworks and stock market decision making	Dr Kavitha Koppula, Dr Babushri Srinivas Kedukodi, Dr Syam Prasad Kuncham	MIT Manipal	Soft Computing	November 2020	97%	Q1 (Top 2-9)

C. Grants Office, Directorate of Research, MAHE, Manipal

At DoR, MAHE, the complete grant management lifecycle starting from pre-award planning to the final reporting stage, presents itself as a tenacious but rewarding process lined up to provide the best of results. Particularly, when one is starting to initiate the process for the first time it can be quite challenging. However, with timely and proactive management, the right tools at hand, and a genial workflow process in place, one can run any daunting program in solidarity. As such, the grant management process is constantly developing and actualizes various lifecycle tasks through its unique award phases.

As an ethical research community, we understand how annoying the lifecycle of a grant can be at times (with its limited-time duration for application), given the additional issue of ever-changing grant regulations and requirements. We understand the time limits set up in meeting deadlines, as also are conversant with the precise details expected in delivery alongside the financial transparency which is essentially maintained to accomplish a collaborative mission.

Thereof, to make the process of pre-award planning to the final reporting (i.e. identifying, apply, and managing the external research grants without undue administrative delays), the administration of the MAHE has set up the Grants Office (GO) centrally at the DoR. At the Grants Office, we aim to improve the research outcome of MAHE and facilitate faculty and research scholars in enhancing the quantum and quality of research funding. In tandem with the objective, we are committed to creating an enabling environment to facilitate our researchers with the following support:

- We are committed to facilitating faculty and research scholars in assisting resource identification, enhancing the quantum and quality of research funding.
- MAHE has set up a dedicated Grants Office managed by a Grants Coordinator. The Grants Office is located in the DoR, MAHE.
- Information regarding Grants and funding calls can be accessed through Research Management System (RMS) to help faculty and researchers in identifying new open calls, meet deadlines and make the application process easy by providing all required documents at one click and any project related help as well as guidance from the Mentor Board.
- Further, the Grants Coordinator will be the one-point contact to assist the grant applicant with necessary approvals, consultations, policy documents, and also to facilitate necessary meetings with Finance, legal, HR, and Mentor Board.
- Entering Project details in RMS is mandatory while applying for a new grant to generate a UTN number for proposal submission. Updating the project status (funded /rejected) in the RMS portal is the responsibility of the Principal Investigator as per the sanction/rejection letter from the concerned funding agency.

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Part III

MAHE Student's Research Forum (MAHE-SRF)

SRF Activities Report – October to December 2020

Considering it is convergence technology that has fostered a spike in connectivity as well as led to the surge in misinformation, the scientific community has faced several drawbacks over time. As such, it is pertinent now, more than ever, for the research community at MAHE to view how society has turned its AI-induced lens to Internet of Things and blockchain models of delivery and connectivity. Thereby, for securing reliable data, be it in the arena of news or social interaction, DoR is additionally opening up to possibilities in observing alternative platforms like Twitter, Facebook, and Instagram closely to gather data. So, to raise the general level of consciousness as to the value of scientific research as well as to connect with fellow researchers and students, the MAHE Student Research Forum (MAHE-SRF) is instituted, coming together in each quarter to celebrate a wide range of research activities.

The MAHE Student Research Forum (MAHE-SRF) is a pulsating group of research enthusiasts established and run by student representatives from various constituent institutions of MAHE. The forum functions under the aegis of the DoR, MAHE, to nurture a strong research culture among students, mentored by a pro-active faculty advisory group. The MAHE-SRF is a student-centric body that facilitates the active involvement of undergraduates, postgraduates, and research scholars of the constituent institutions of MAHE. It provides various opportunities and platforms for scientific interactions and networking in multidisciplinary areas across institutions. It additionally caters to opportunities for interdisciplinary collaborative work amidst eminent researchers by organizing summer school activities, webinars, and conferences.

Objectives of MAHE-SRF

- To foster research interest in undergraduate and postgraduate students, and to inspire them to take up research as a career.
- To create a network of students among constituent institutions of MAHE to promote and facilitate interdisciplinary research.
- To promote entrepreneurship and innovation among MAHE students.
- To organize research activities.
- To sensitize all the students about MAHE incentive policies for research.

ICHTR - October 2020

ICHTR-2020, a two-day virtual conference, was inaugurated under the auspices of Lt Gen (Dr) M D Venkatesh, Vice Chancellor, MAHE, Manipal, on 30th and 31st October 2020. During this event, the Vice Chancellor discussed how universities are progressively growing international in perspective, calling for a deeper emphasis on student research output, in the form of collaborative publications and presentations on domestic and international platforms. Furthermore, he deliberated over the hospitable research ecosystem being provided for students so they may reach out to newer milestones.

In the interim, the Chief Guest of the event Dr Shally Awasthi, Professor and Head, Paediatrics, King George's Medical University, Lucknow, presented a keynote address on the topic "Journey of Discovery, Invention, Research, and Innovation." Successively, four plenary sessions were held over the two days of the conference. The sessions covered the following areas:

- "Editorial expectation" by Dr Madhu Veeraraghavan, Director, T A Pai Management Institute.
- "How to fit into an Organization" by Dr Animesh Bahadur, Professor, T A Pai Management Institute.
- "Grant Writing Skills" by Dr B Unnikrishnan, Associate Dean, KMC, Mangalore.
- "Awareness on International Fellowships" by Dr Neeta Inamdar, Professor, and Head of the Department, Manipal Centre for European Studies.

Notwithstanding the perennial commotion and the restrictions during the pandemic, the SRF 2020 activities were conducted efficiently thanks to the erstwhile support of Dr Udupa N, Dr B S Satish Rao, Dr Satish Shenoy, Dr Bharti Chogtu, Dr Santosh K V from the DoR, MAHE, and Dr Shymala Hande, from the Centre for Doctoral Studies, MAHE. The online training program that was steered at MAHE brought together a wide array of participants who actively engaged in the workshops, while they were successfully inducted about the basics of research ethics in technical and medical fields and other areas such as the humanities and the social sciences. Moreover, the plenary sessions provided a detailed outline of the research undertaken at MAHE and also informed the participants (especially the SRF members) of the procedure to work on research grants and publications. It set the vibe and atmosphere for a fully functional research community emerging from a fledgling modality of operation, advising students on the means to contact faculty before or during their research process to streamline the workflow. The year 2020 witnessed 507 participants from varied spheres of interest, with constructive feedback from 222 participants. Among other feedback, the general impression of the conference scaled up to the criteria of "exceptional" and "very good" considering 56 per cent and 41 per cent of participants respectively. Finally, on a note of closure, the scope of MAHE SRF activities was edified for the future.

Editorial Team

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