



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

MAHE Research Bulletin

April – June 2021



Manipal Academy of Higher Education (MAHE) is among the second top-ranked private university in India according to the Quacquarelli Symonds World University Ranking 2022. In the 18th edition of the rankings, MAHE figures in the 751-800 band, among 1,673 analysed universities and 1,300 institutions ranked from 93 countries. MAHE's performance was noted among the top 58 per cent in the rankings this time.

For the Quacquarelli Symonds (QS), World University Ranking, universities are evaluated on six performance indicators: academic reputation, employer reputation, student-to-faculty ratio, citations per faculty, international faculty ratio, and international student ratio. Four of the indicators are based on hard data, and the remaining two are based on major global surveys – one of the academics and another of employers – each the largest of their kind and for the 2022 Rankings, QS has analysed over 96 million citations from more than 14.7 million recorded publications, before evaluating 1,300 Universities.

Directorate of Research – MAHE, Manipal



Multidisciplinary/interdisciplinary research ventures and academic tie-ups are the bedrock of MAHE's eclectic vision of global development. Thereof, the Directorate of Research (DoR) disseminates 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 cutting-edge research of global standards has been always of paramount significance to MAHE.

Vision:

To nurture and promote research activities of global standards.

Mission:

"To facilitate and contribute to research in all disciplines, thereby improving yield in terms 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 support IP related activities and Technology Transfer.
- To provide logistics for researchers to implement ideas.
- To disseminate research findings in high-impact publications.

"Research is seeing what everybody else has seen and thinking what nobody else has thought."

– Albert Szent-Györgyi

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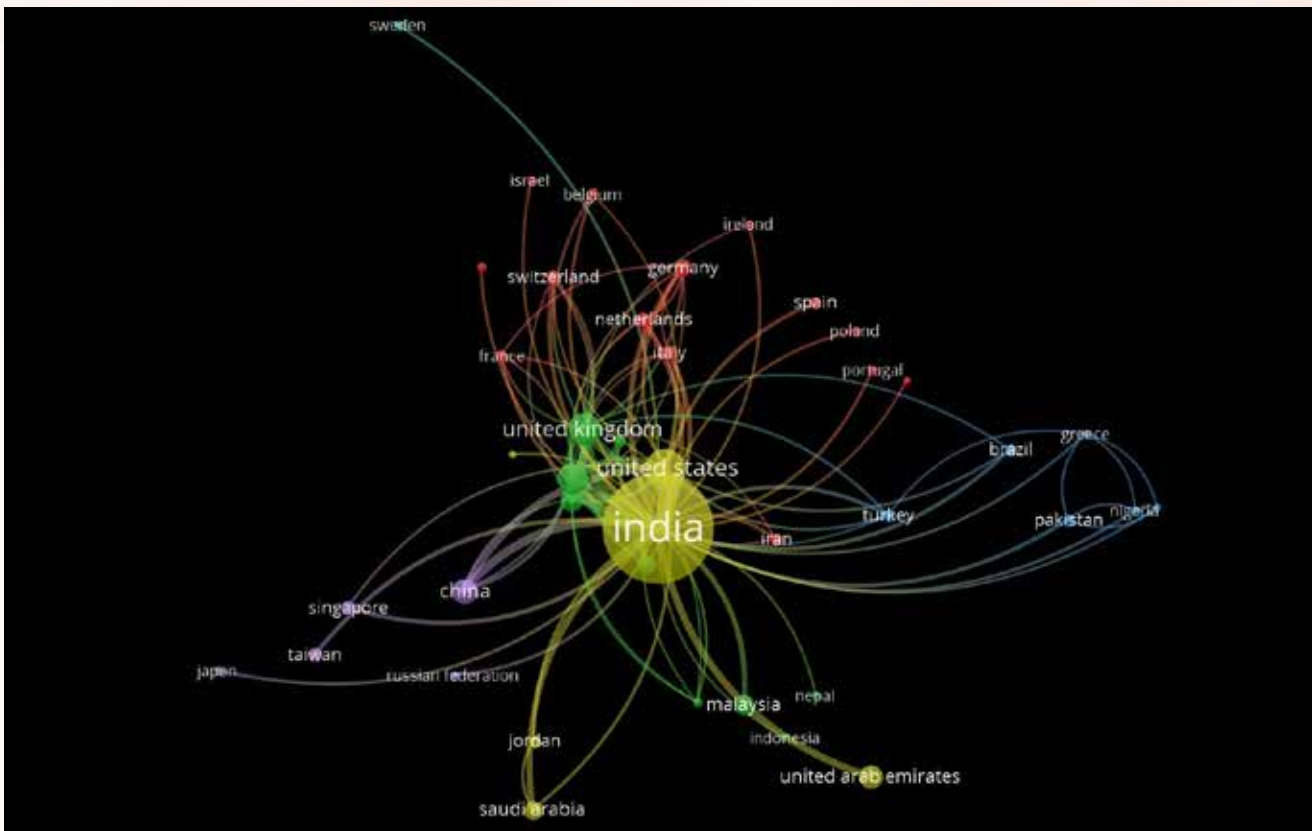
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Part I

A. MAHE Research Data Visualization Grid: Top Collaborating Countries with MAHE

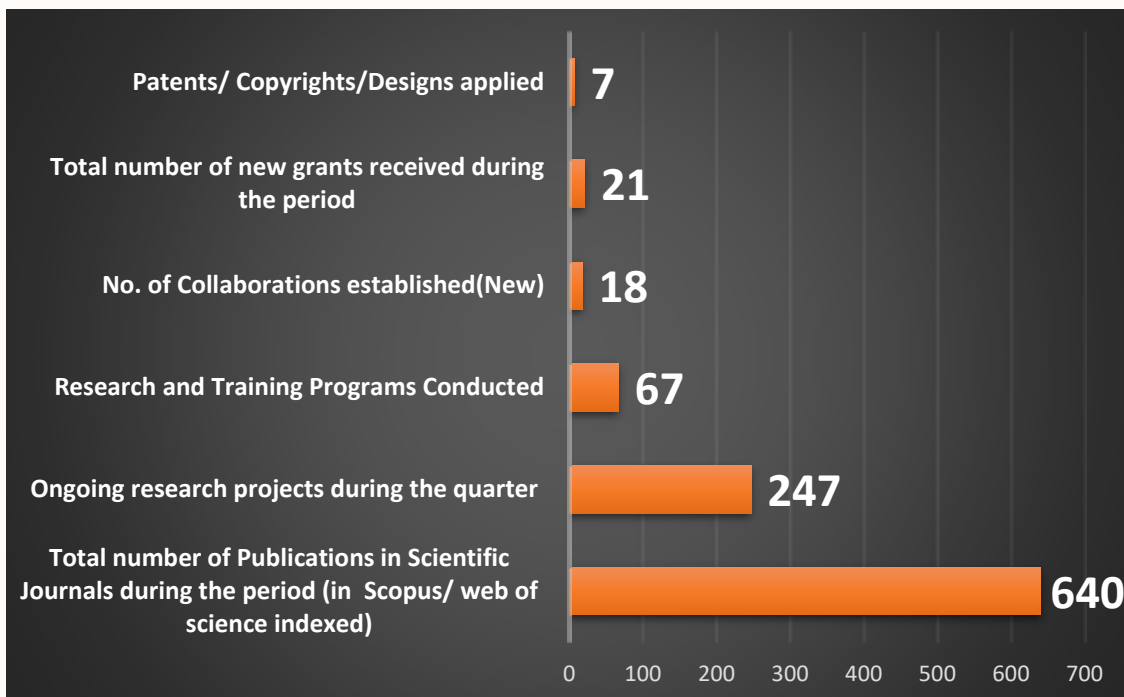


Countries collaborating with MAHE: Current data shows the scientific collaboration network of the top 20 countries with MAHE (India) and its collaboration with different universities in various countries. In the above analysis, the publication from Scopus for the period from April 2021 to June 2021 is considered. The coloured lines show the research collaboration between different countries (colours indicate the cluster to which a node has been assigned) and their size shows the strength of cooperation between two connected countries in terms of publications.

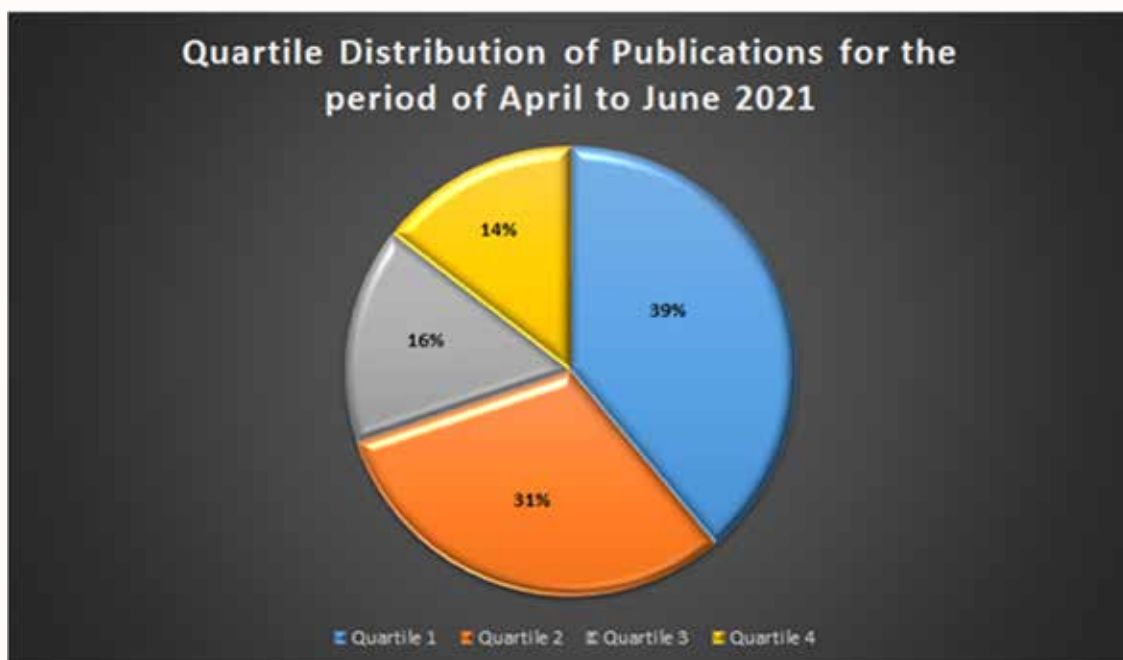
Institutions from the United States cover an almost higher percentage of contribution in international collaboration. United Kingdom, Australia, China, and United Arab Emirates are among the highly collaborating countries with MAHE. This is a distance-based network visualization wherein the distance between two nodes approximately indicates the relatedness of the nodes. MAHE has 34 per cent international collaborations with world-class universities which are ranked as the top 100 universities in the QS World University ranking. A few universities in this category are the University of New South Wales, Johns Hopkins University, Harvard University, Mayo Clinic Rochester MN, University of Sydney, Karolinska Institutet, and the University of Toronto amongst others.

Research Output of MAHE for the period: April - June 2021

B. Info-graph of Research Activities during the period April-June 2021



C. Quartile Distribution of Publication for the period of April-June 2021



D. Top publications for the period April - June 2021

Serial No	Title of the Publication	Authors	Institution	Name of the Journal (Publishers)	Month and Year of Publication	Journal Quartile - Q1 (Top 10 percentile)
1	Optical Technologies for the detection of viruses like COVID-19: Progress and prospects	- Jijo Lukose - Santhosh Chidangil - Sajan Daniel George	Department of Atomic and Molecular Physics, Manipal	Biosensors and Bioelectronics (Elsevier)	April 2021	98%
2	Recent progress in dye-sensitized solar cell materials and photo-supercapacitors: A review	- Selva Kumar M - Dheeraj - Prakasha Shetty	Department of Chemistry, Manipal Institute of Technology, Manipal	Journal of Power Sources (Elsevier)	April 2021	97%
3	Attitude towards drone food delivery services— Role of Innovativeness, Perceived Risk, and Green Image	- Asish Oommen Mathew - Abhishek Nath Jha - Anasuya K Lingappa - Pranshu Sinha	Department of Humanities and Management, Manipal Institute of Technology, Manipal	Journal of Open Innovation: Technology, Market, and Complexity (MDPI)	May 2021	96%
4	Coinage Metal N-Heterocyclic Carbene Complexes: Recent Synthetic Strategies and Medicinal Applications	- Swarnagowri Nayak - Santosh Laxman Gaonkar	Department of Chemistry, Manipal Institute of Technology, Manipal	ChemMedChem (Wiley Blackwell)	May 2021	96%
5	Vernonia cinerea regenerates tubular epithelial cells in cisplatin induced nephrotoxicity in cancer-bearing mice without affecting antitumor activity	- Arul Amuthan L - Vasudha Devi - Shreedhara C S - J Venkata Rao - Shiny Jasphin - Nitesh Kumar	Department of Pharmacology, Department of Pharmacognosy, Department of Pharmaceutical Biotechnology, Manipal College of Pharmaceutical Sciences, Manipal	Journal of Traditional and Complementary Medicine (Elsevier)	May 2021	95%
6	The potency of heterocyclic curcumin analogues: An evidence-based review	- Fiona Concy Rodrigues - Anil Kumar N V - Goutam Thakur	Department of Biomedical Engineering, Department of Chemistry, Manipal Institute of Technology, Manipal	Pharmacological Research (Elsevier)	April 2021	95%

Serial No	Title of the Publication	Authors	Institution	Name of the Journal (Publishers)	Month and Year of Publication	Journal Quartile - Q1 (Top 10 percentile)
7	A review on recent developments in solar photo-reactors for carbon dioxide conversion to fuels	- Shanmuga Priya S - Angel Francis - Harish Kumar S	Department of Chemical Engineering, Manipal Institute of Technology, Manipal	Journal of CO2 Utilization (Elsevier)	May 2021	94%
8	Effects of particle size of cerium oxide nanoparticles on the combustion behaviour and exhaust emissions of a diesel engine powered by biodiesel/diesel blend	- P Dinesha - Shiva Kumar	Department of Mechanical and Manufacturing Engineering, Manipal Institute of Technology, Manipal	Biofuel Research Journal (Elsevier)	June 2021	94%

E. Patent filed in April – June 2021

- Dr Balaji Seetharaman, Associate Professor, Department of Biotechnology, Manipal Institute of Technology, Manipal, along with Prapti Behera have filed for a patent titled “Process of preparing an Enzyme Composition or reducing stickiness in Honeydew-Contaminated Cotton”.
- Mr Prashanth Barla, Doctoral Student, Dr Vinod Kumar Joshi, Associate Professor, Department of Electronics and Communication Engineering and Dr Somasekhara Bhat Joint Director, Professor, Department of Electronics and Communication Engineering, Manipal Institute of Technology, Manipal have jointly filed for a patent titled “A Self Terminating and Monitoring Write Circuit”.
- Ms Mahima Mishra, Dr Arun Shanbhag, Chief Innovation Officer, Manipal Institute of Technology, Manipal, Ms Madhavi Shenoy, Mr P K Sudharshan have filed for a patent titled “Dental Aerosol Evacuator”.
- Dr Nirmal Mazumder, Assistant Professor, Department of Biophysics, Manipal School of Life Sciences, Manipal, Ms Spandana K Umesh, Dr Krishna Kishore Mahato, Professor, Biophysics, Manipal School of Life Sciences, Manipal, Ms Sharada Rao, Dr K Satyamoorthy, Professor, Manipal School of Life Sciences, Manipal, Dr T G Vasudevan, Associate Professor, Department of Biotechnology, Manipal School of Life Sciences, Manipal, have filed for a patent titled “Method and Imaging System for analysing Tissue Specimen”.
- Dr Pramod Balwantrao Salunkhe, Associate Professor, Department of Aeronautical and Automobile Engineering, Manipal Institute of Technology, Manipal has filed for a patent titled “Active Flow Control of Axial Flow Compressors using Synthetic Jet Actuators”.
- Dr Adarsh Kudva, Associate Professor, Department of Oral and Maxillofacial Surgery, Manipal College of Dental Sciences, Manipal, Dr Arun Shanbhag, Chief Innovation Officer, Manipal Institute of Technology, Anahat Chugh, Mr Nakul Shetty K, Assistant Professor, Department of Electronics and Communication Engineering, Manipal Institute of Technology, Manipal, Ms Ranjani Aithal, Vinson M Pinto have filed for a patent titled “Device to evaluate and determine the extent of Neurological Dysfunction”.
- Dr G Arun Maiya, Professor, Manipal College of Health Professions, Manipal, Dr H Manjunath Hande, Mr Harishchandra Hebbar, Mr Karthik Mohan have filed for a patent titled “System method and device for treatment and management of Diabetic Peripheral Neuropathy”.

F. Grants Office, Directorate of Research (DoR), MAHE, Manipal

With an objective of making the process of identifying, applying and managing the external research grants easier without undue administrative delays, the administration of Manipal Academy of higher Education (MAHE) has set up the Grants Office (GO) centrally at the Directorate of Research. The Grants Office aims to nurture and promote research activities of global standards with following objectives

To support MAHE faculty and researchers to

- Identify, apply and secure external grants
- Improve the quantum & quality of the grant proposal
- Support and educate the researchers with a good knowledge on grant proposal writing and funding trends
- Assist the applicant with necessary approvals, consultations, policies & documents
- Foster new collaborations and strengthen existing ones.
- Disseminate research findings in high impact publications.
- Provide logistics for researchers to implement ideas.
- Nurture interdisciplinary collaborations within the institutions of MAHE

Part II

A. Featured Researcher: April - June 2021



Dr Chiranjay Mukhopadhyay

MBBS, MD, PDCC (Infectious Diseases), PhD

Professor of Microbiology and Associate Dean, Kasturba Medical College, Manipal

Director, Manipal Institute of Virology, MAHE

Coordinator, Center for Emerging and Tropical Diseases, MAHE

Executive Director, Biobreath Health Solutions Pvt Ltd, MGok Bioincubator, Manipal.

Dr Chiranjay Mukhopadhyay is a Clinical Microbiologist, Physician Scientist and Infectious Diseases Specialist researching tropical bacterial infections with a special interest in Melioidosis and global infection including Antimicrobial Resistance (AMR) and Diagnostic Stewardship over 22 years. He is the leader and pioneer in research for the neglected tropical disease “Melioidosis” in India and Executive Committee Founder Member of the International Melioidosis Network (IMN). His intensive work extended from setting the basic algorithm for diagnosing the disease to whole genome sequencing of the soil-dwelling bacterium *Burkholderia pseudomallei*, from creating awareness among the treating clinicians for suspecting the disease in the patients to holding workshops for the microbiologists for detecting the organism at the laboratory settings as well as performing soil surveillance for detecting the microbe burden, from creating a network among Indian scientists and researchers among 12 states to increase detection, awareness, and publication.

He was awarded “Dr TMA Pai Endowment Chair” and “Centre for Emerging and Tropical Diseases” by the MAHE. He has to his credit the “Best Publication Award” by DST, Government of Karnataka in 2010, and the “Hari Om Ashram Alembic Research Award” for 2017 for “Scientific Contribution in Basic Research” by the Medical Council of India for his research on Melioidosis. The cross-cutting research over years was acknowledged by the Government of India while the first-ever “Communicable Disease Alert” (CD Alert) on Melioidosis was released under his leadership from NCDC, New Delhi; it has reached the healthcare givers at every corner of the country. Till today, he has diagnosed more than 400 cases all over India and formed the Indian Melioidosis Research Forum in the Centre for Emerging and Tropical Diseases, which is now serving as a Reference Centre. He has secured prestigious grants from Universities like Alabama, Cambridge; from CDC Atlanta, Academy Medical Centre, Amsterdam, Netherlands; and from National agencies like ICMR and DRDE. His collaboration with Menzies School of Health Research (Darwin, Australia), Mahidol University (Bangkok, Thailand), Medical University (Graz, Austria), InBios International (Seattle, USA), Central Soil Salinity Research Institute, Haryana and National Research Center for Equines, Hisar helped him pursue in-depth research in the epidemiology and the molecular biology of Melioidosis as well as evolve better diagnostic techniques for rapid detection.

He has 180 publications and six book chapters, with 3,413 Citations and h-index of 27 (by Google Scholar), 1,517 Citations and h-index of 19 (by Scopus), co-editorship for the book “COVID-19

– a multidimensional perspective”, 196 research presentations in National Conferences, and 27 presentations in International Conferences. He has been involved in 56 National and International projects and in 16 projects as Principal Investigator. He is the principal investigator of various prestigious national and international projects regarding AMR surveillance and AMSP initiation in the hospital and in the community.

B. Faculty and Institution Achievements

Kasturba Medical College (KMC), Mangalore

Dr Soundarya M, Associate Professor of Paediatrics has completed DPAA - Diploma in Paediatric Allergy and Asthma from Sir Gangaram Institute of Postgraduate Medical Education and Research, in collaboration with the University of Colorado, Denver, USA. The course is also recognized by the American Academy of Allergy, Asthma, and Immunology. Dr Soundarya has been awarded the “Best Outgoing Dr S C Arya Gold Medal” award for the same. The course spanned over one and half years and had three personal sessions as well as all year-long online classes with faculty from all over the world.



Dr Sheetal Raj, Associate Professor, Department of General Medicine, KMC Mangalore Selected as “Master Trainer for National level Training of Trainers Session on Elderly and Palliative care”, organised by National Health Systems Resource Centre (NHSRC), National Health Mission, Ministry of Health and Family Welfare, Govt. of India as an advisor, in content creation team for creating curriculum for BVoc (Bachelor of Vocation) in patient care management including Geriatrics and Palliative Care, by Tata Institute of Social Sciences), Mumbai, a UGC recognised course.



Dr Prateek Rastogi, Professor and Head, Department of Forensic Medicine has published books on Amazon-Kindle

- Verma V, Pillay V V, Kochar S R, Rastogi P Novichok: Toxic Riddle for toxic detectives. Available online at: <https://www.amazon.in/Novichok-Detective-Toxicology-Initiative-Detectives-ebook/dp/B08K1V1BWN>
- Verma V, Pillay V V, Kochar S R, Rastogi P, Pawar V. Poison Damsels: Toxic riddles for toxic detectives. Available online at: <https://www.amazon.in/Poison-Damsels-Toxic-Riddles-Detective-ebook/dp/B08L41TW1D>
- Verma V, Pillay V V, Kochar S R, Rastogi P, Patel S. ARUM family of Araceae: Toxic riddles for toxic detectives. <https://www.amazon.in/Arum-family-Araceae-Toxicology-Initiative-ebook/dp/B08N496RWD>
- Verma V, Pillay V V, Kochar S R, Rastogi P. Death Camas: Toxic riddles for toxic detectives. Available online at: <https://www.amazon.in/Death-Camas-Toxicology-Initiative-Detectives-ebook/dp/B08JS9PHKB>
- Verma V, Pillay V V, Kochar S R, Rastogi P, Patel S. Methyl Isocyanate MIC: Toxic riddles for toxic detectives. <https://www.amazon.in/Methyl-Isocyanate-MIC-Toxicology-Initiative-ebook/dp/B08M5N7HZM>



Manipal College of Dental Sciences, Mangalore

Dr Srikant N, Professor and Head, Department of Oral Pathology and Microbiology and Dr Junaid Ahmed, Professor and Associate Dean, Department of Oral Medicine and Radiology, Manipal College of Dental Sciences, Mangalore, MAHE, Manipal won the “Best Paper Award” for the presentation titled “2D Geomorphometric shape analysis of maxillary first premolar: an indicator of sexual dimorphism” presented at the 5th International e-Conference on Forensic Odontology, organized by International Association of Scientists and Researchers (IASR) and Association Forensic Odontology for Human Rights (AFOHR) on 29 and 30 May 2021.



Kasturba Medical College (KMC), Manipal

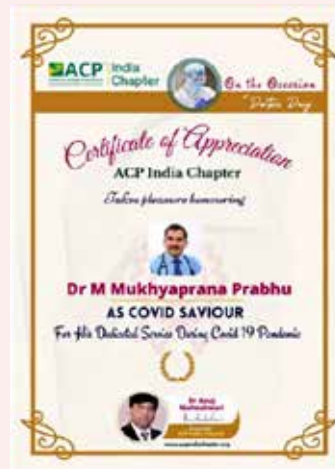
Dr Abdul Razak, Department of Cardiology, KMC, Manipal – received a degree – “FELLOW of the American College of Cardiology (FACC)” on 1 May 2021.



Dr Kirtana R Nayak, Department of Physiology, KMC, Manipal – received Scholarship for “FAIMER CMCL Fellowship”, held from 19 to 25 May 2021.



Dr M Mukhyaprana Prabhu, Department of Medicine, KMC, Manipal – being felicitated by American College of Physicians, India Chapter on the occasion of Doctor’s Day Celebration on 1 July 2021 as “Corona Saviour”.



Manipal College of Health Professions (MCHP), Manipal

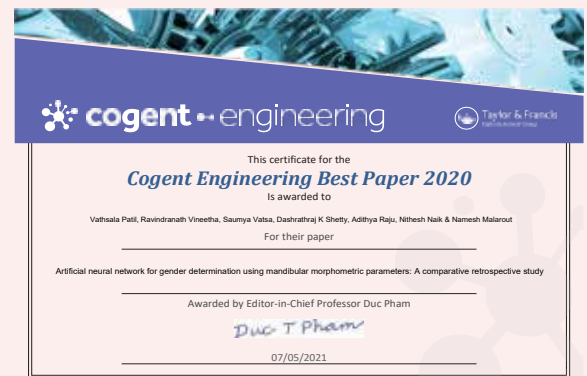
Dr Abraham Samuel Babu, Associate Professor in the Department of Physiotherapy, MCHP, Manipal was awarded the “Elite Reviewer” status from the Archives of Physical Medicine and Rehabilitation (APMR) - a premier journal in Physical Medicine and Rehabilitation with an Impact factor of 3.966 and a journal ranked #4 (i.e., Q1, 97 percentile) in the Rehabilitation category in Scopus. The designation of Elite Reviewer reflects the number, adherence to timelines, and quality of reviews contributed to the Archives by Dr Babu, as judged by the editors of APMR.



Manipal College of Dental Sciences (MCOADS), Manipal

Dr Vathsala Patil, Assistant Professor, Dr Vineetha R, Professor and Head, Department of Oral Medicine and Radiology, MCOADS, Manipal, got “Best Published Paper Award” published in Cogent Engineering - Taylor and Francis in 2020 for the article titled “Artificial neural network for gender determination using mandibular morphometric parameters: A comparative retrospective study” Cogent Engineering. 2020 Jan 1;7(1):1723783 on 7 May 2021.

Dr Komal Smriti, Reader, Department of Oral Medicine and Radiology, MCOADS, Manipal became “Winner of Manipal



Ideation Competition” (Dental Trimming Enclosure: A convenient, chair-side enclosure to perform fine trimming Team) conducted by the Innovation Centre, MAHE on 26 June 2021.

Dr Komal Smriti, Reader and Dr Mathangi Kumar, Assistant Professor, Department of Oral Medicine and Radiology, MCOADS, Manipal, were selected for the “Special Mention and Consideration for the Idea - VAC Shield: Voice amplification and clear face shield” in Manipal Ideation Competition conducted by the Innovation Centre, MAHE on 26 June 2021.

Manipal Institute of Technology (MIT), Manipal

Dr Naresh Kumar Mani, Associate Professor, Department of Biotechnology, MIT, MAHE, Manipal research work “Knitting thread devices: Detecting *Candida albicans* using napkins and tampons” has been highlighted by the American Chemical Society and Nature Asia. This work has received an Altmetric score of 140 and is covered by the Daily Telegraph (UK), New Scientist Magazine (US), Verywellhealth.com (US).

Dr Manjunath Mulimani and his student Ritika Nandi received ISCA (International Speech Communication Association) grant for presenting the paper “Acoustic Scene Classification using Kervolution Based SubspctralNet” at INTERSPEECH-2021 in Brno, Czechia, Assistant Professor, Computer Science and Engineering, MIT, MAHE.

Manipal College of Pharmaceutical Sciences

Dr Vasudev R Pai, Assistant Professor, Senior Scale, Department of Pharmacognosy, Manipal College of Pharmaceutical Sciences, MAHE, Manipal clinched the “Best Professional e-Poster Presentation Award” for the project titled “In-silico and In-vitro acetylcholinesterase inhibitor: An approach towards Alzheimer’s disease” in RAKCOPS International e-Conference on Drug Development 2021 during 23 and 24 May 2021. The theme of the conference was “Quality Medicine from Bench to Bed Side” organized by RAK Medical and Health Sciences University, Ras Al Khaimah, UAE. The work was co-authored by Dr M Manjunath Setty and Dr Chandrashekar K S, Department of Pharmacognosy.



Prasanna School of Public Health (PSPH), Manipal

Cochrane affiliate centre: Manipal Academy of Higher Education (MAHE), Manipal, has been selected as Cochrane affiliate centre under Cochrane India network along with eight other eminent institutions of India. The Director of the centre is Professor Dr H Vinod Bhat, Executive Vice President, MAHE, Manipal. The centre is currently placed at Prasanna School of Public Health (PSPH), MAHE, and the activities of the centre will be coordinated by Public Health Evidence South Asia (PHESA), PSPH, MAHE.

C. Achievements by Research Scholars and Students

- Dr Melisa Jovita Andrade, PhD Scholar at the Manipal School of Life Sciences, Manipal had completed her PhD Degree as MAHE’s first Joint-Doctoral program (Joint PhD) between Manipal Academy of Higher Education (MAHE), Manipal, India, and Queensland University of Technology (QUT), Brisbane, Australia according to the memorandum of understanding (MOU) signed between these universities. An interdisciplinary team consisting of Professor K Satyamoorthy, Director, Manipal School of Life Sciences, MAHE, India, Dr Derek Van Lonkhuyzen (QUT, Australia), Professor Zee Upton (UON, Australia), and Dr Tony Parker (QUT, Australia) supervised the thesis work entitled “Characterisation of Insulin-like Growth Factor-I (IGF-I) Signalling in Cellular Responses to Ultraviolet Radiation (UVR)” submitted by Dr Melisa Jovita Andrade as part of her PhD degree. The research was focused on establishing 3-dimensional (3D) human skin reconstructs and investigating the signalling mechanisms through which IGF-I rescues skin cells from UVR, with implications in the development of therapeutics for sunburns and photodamage. She also published an article entitled RPA facilitates the rescue of keratinocytes from UVB radiation damage through insulin-like growth factor-I signalling in the highly reputed Journal of Cell Science.
- Mr Soumyabrata Banik, student of second-year MSc by Research in Life Sciences program, Manipal School of Life Sciences, MAHE, Manipal, participated in the Edinburgh Super-Resolution Imaging Consortium (ESRIC)

Virtual Summer School 2021 organized by ESRIC in association with Heriot-Watt University, Scotland from 8 to 16 June 2021. The summer school conducted several courses, tutorial talks, and workshops that brought together the experts and world-renowned scientists working in the field of super-resolution microscopy.

- Ms Aditi Sengupta, third-year BSc Biotechnology student, Manipal School of Life Sciences, MAHE, Manipal received the “Best Poster Award” on the topic “Physicochemical characterization of native starch from different starch varieties” in National Conference on Emerging Trends in Physics-2021 (NCTEP-2021) held on 16 June 2021 organized by the Department of Physics, Tezpur University, Assam, India.
- Dr Deeksha Karkada, third-year Master of Dental Surgery (MDS), Postgraduate Student, Batch 2018, Department of Public Health Dentistry, Manipal College of Dental Sciences (MCOADS), MAHE, Manipal, received “Third Prize for Poster Presentation in E-poster Competition” organized by the Department of Public Health Dentistry, Sudha Rustagi College of Dental Sciences and Research, on the occasion of National Public Health Dentistry Day which was held on 19 June 2021.
- Mr Adithya Nayak and Mr Vivek Nayak, from KMC, Manipal - have been awarded a “Metropolis MedEngage Scholarship” of 75,000 INR each, on 13 February 2021.
- Dr Sindhoor Department of Pathology, KMC Mangalore, was awarded “Second Place” for participating in the Oral Presentation competition for the paper titled “PAS Staining - A counterpart of the Immunoreactivity seen by Direct Immunofluorescence in Bullous Pemphigoid” guided by Dr Sharada Rai, Dr Deepa Adiga, and Dr Gatha M Upadhya at 39th Annual CME (online) in Pathology, Department of Pathology, Jawaharlal Nehru Medical College (JNMC), Belagavi held from 24 to 26 June 2021.
- Dr Akash Kishore Golani, Department of General Medicine, KMC Mangalore, won “Second Prize” for the Oral Research paper presentation titled “Study the effect of dental occlusion on mastication habits affecting postprandial glycemic levels in type 2 diabetes mellitus patients”: Co-author Dr Arun S at 11th world congress of Diabetes India 2021 held from 11 to 13 June 2021.
- Dr Mahima Gupta, MBBS Intern, Department of General Medicine, KMC Mangalore, won “Third Prize” in “The White Army Epignosis Archimedics National Level Online General Medicine Quiz” held on 02 May 2021.
- Ms Apoorva Shankaranarayana, PhD scholar, Department of Physiotherapy has secured the 2021 “Travel Grant of ESO” - European Stroke Organisation “Department to Department Visit Programme”. This travel grant is offered to up to ten young physicians and researchers to support a visit to a European department or laboratory.
- Ms Tanaya Ranadive, student of Masters in Physiotherapy (MPT), Department of Physiotherapy secured the “Student Scholarship” to attend the 75th Annual Meeting of the American Academy for Cerebral Palsy and Developmental Medicine (AACPDMD). She will also present a review paper during this virtual meeting.



- Dr Mohammad Khalid, KMC, Manipal –won “First Prize” for the paper in the student category for AIM 2021 conference organized by KMC and hospital Manipal.



- Ms Riddhi Pandya, PhD scholar (Clinical Embryology), KMC, Manipal – awarded “Congress Registration Grant” by @etw2021 to attend the virtual edition of the 21st European Testis Workshop held from 30 May to 03 June 2021.



- Ms Rencita Maria Colaco, MTECH (CSIS) first-year, Computer Science and Engineering, Manipal Institute of Technology, MAHE, Manipal, received the “Best Paper Award” in the Third International Conference on “Advances in Computing and Information Technology” IACIT 2021, which was held during 17 and 18 of May 2021 at Reva University Bangalore.

D. Research Activities

A certificate course in Biology and Therapy of Cancer is organized under the IACC

Academy of Higher Education (MAHE) is now a participant in the Indo-American Cancer Consortium (IACC), the first collaborative initiative involving multiple tertiary cancer centres across both countries. Dr Mahadev Rao, Professor and Head of Department of Pharmacy Practice of Manipal College of Pharmaceutical Sciences, who is coordinating IACC, said the goal of this consortium is to foster cooperation between cancer centre faculties. Over 30 faculty members with active research programs in basic science, clinical and translational research, and public health sciences relevant to cancer are included. A certificate course in Biology and Therapy of Cancer is organized under the IACC from April to May 2021. The classes were offered in two tracks: Basic Cancer Biology and Translational Oncology and Epidemiology. The course included key areas of cancer development such as genetic and epigenetic factors, cell cycle controls, the role of apoptosis/autophagy, chromosomal instability, signal transduction defects, the role of viruses in causing cancer, etc. The latter part of the curriculum addressed various clinical aspects for the treatment of cancer. There were 209 participants.

AICTE Training and Learning (ATAL) Academy sponsored Faculty Development Program

AICTE Training And Learning (ATAL) Academy sponsored Faculty Development Program (FDP) on “Artificial Intelligence in Pharmaceutical Product Development” organized by the Department of Pharmaceutics, Manipal College of Pharmaceutical Sciences (MCOPS), held from 26 to 30 July 2021 was virtually inaugurated on 26 July 2021 by Lt Gen (Dr) M D Venkatesh, Vice Chancellor, MAHE, Manipal.

Dr C Mallikarjuna Rao, Principal, MCOPS welcomed the gathering and gave an overview of the FDP. The Chief Guest, Dr Venkatesh in his inaugural address said, “Artificial Intelligence is revolutionizing the world, where many companies are adopting Artificial Intelligence technologies, with pharmaceutical industry being no exception”.

The inaugural was witnessed Dr Srinivas Mutalik, Professor and Head, Department of Pharmaceutics, Dr Usha Y Nayak, Coordinator, ATAL-FDP; Associate Professor, Department of Pharmaceutics and Dr Raghu R, Vice President, Schrodinger, Bengaluru, India, delegates, faculty members, resource persons, research scholars, and students. Mr Chetan Mehta, Research Scholar, Department of Pharmaceutics coordinated the inaugural program. Around 200 delegates registered for this program from various colleges across the country. Eminent resource persons from various industries and academics shared their expertise with the delegates.



Part III

MAHE Students' Research Forum (MAHE-SRF)



Team MAHE-SRF along with research coordinators, faculty mentors, and advisors met every week and planned the MAHE Research Colloquium (MRC). Teams were formed who reported their weekly progress to the Directorate of Research. Unfortunately, due to the ongoing pandemic situation, MAHE Research Colloquium was shelved. However, immediately the Summer Training Program was picked up and was decided to be held virtually for the benefit of all during the pandemic. The Summer Training Program was renamed as Online Training Program 2021. Dr Madhu Bangera, Vice President MAHE-SRF, was made the team lead and convener for the Online Training Program. Different groups were formed to work towards the success of the event. Along with the Directorate of Research, the team is mentored by respective research coordinators and faculty advisors from each constituent Institution. Weekly virtual team meetings were held to report and discuss the progress of the planning.

Editorial Team

1. Dr Satish Rao B S, Director - Research, MAHE, Manipal.
2. Dr Bharti Chogtu Magazine, Deputy Director Research (Health Sciences), MAHE, Manipal.
3. Dr Santhosh K V, Deputy Director Research (Technical Sciences), MAHE, Manipal.
4. Dr Manthan D Janodia, Professor and Head, Department of Pharmacy Management, Manipal College of Pharmaceutical Sciences, MAHE, Manipal.
5. Ms Sheeba Pakkan, Bibliometrician, Directorate of Research Office, MAHE, Manipal.
6. Ms Anupa Lewis, Assistant Professor – Senior Scale, Department of Media Studies, Manipal Institute of Communication, MAHE, Manipal.
7. Ms Ramya S, Associate Professor, Electronics and Communication Engineering, MIT – MAHE, Manipal.

