



Content

Part I

- A. Details of research activities **during the period Apr-Jun 2017**
- Total number of publications in scientific journals (in Scopus/Web of Science indexed and/or impact factor journals)
 - Total number of PhD degrees awarded
 - Ongoing research projects
 - Research and training programs conducted
 - Number of collaborations established
 - Total number of grants received
 - Total number of papers presented in conferences
 - Conferences/seminars/workshops conducted
 - Patents applied
- B. Faculty and institution achievements
- C. Achievements by research scholars
- D. Awards and accolades

Part II

- Featured Scientist of Manipal University
- Top publications for the period Apr-Jun 2017

Part III

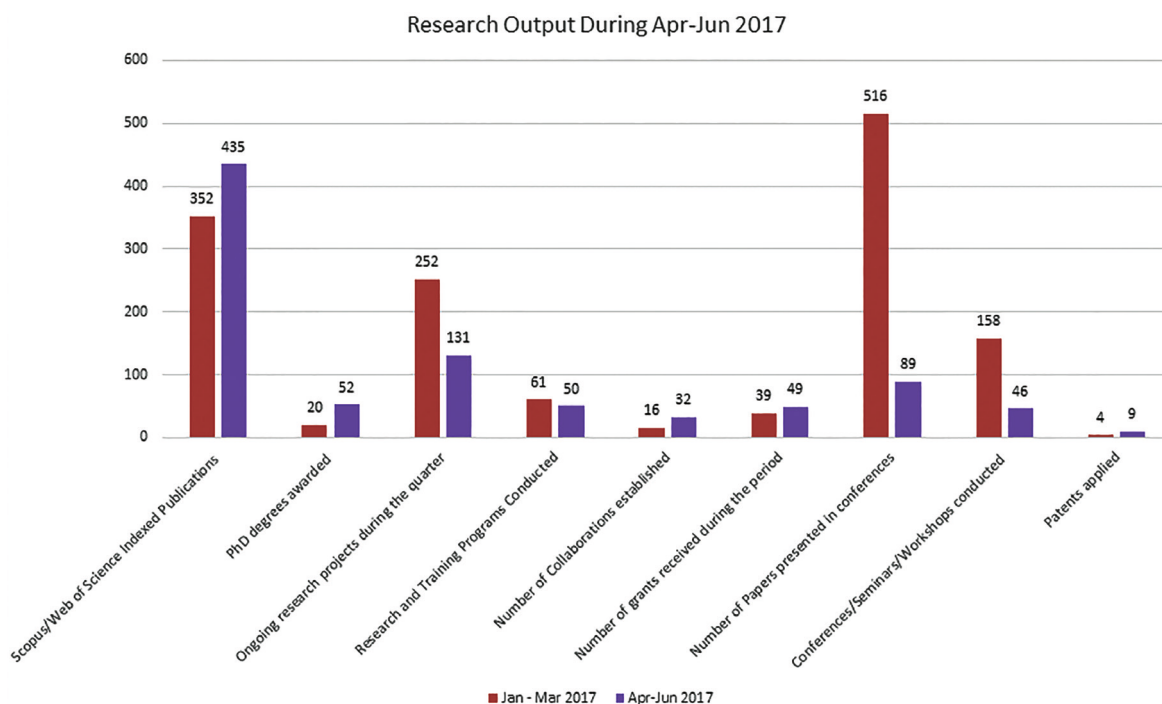
Activities of Manipal University Students' Research Forum (MUSRF)

Part I



Manipal University (MU) is one of the premier universities in India. MU considers both academics and research, equally important for the betterment of the institution. The faculty members and the research scholars at MU have embraced the research culture. They publicize their research work in scientific publications, through presentations in various conferences, by obtaining patents and research grants, etc. In this report, we present to you **an overview of the research activities** by Manipal University, during the period **Apr-Jun 2017**.

A. Details of research activities of Manipal University for the period Apr-Jun 2017



B. Faculty and institution achievements

1. Dr Ramya Shenoy, Associate Professor, Dept of Public Health Dentistry, Manipal College of Dental Sciences, Mangaluru, pursued Certificate course of Geriatric and special needs dentistry at College of Dentistry, University Iowa, USA.
2. Mr Abraham Samuel Babu, Faculty, School of Allied Health Sciences, Manipal received the Tom Lantos Innovation award in Community Services from the Pulmonary Hypertension Association, USA, for the second time. The research grant of USD 5000 will help further development and expansion of patient education material for patients with pulmonary hypertension at Kasturba Hospital, Manipal. The previous award in 2012 resulted in the development of the Pulmonary Hypertension Manual (PuHMan), which is provided to patients with pulmonary hypertension attending the rehabilitation program. This award builds on the existing work and aims to reach out to more patients with pulmonary hypertension.



3. Dr Chithra A was granted Alliance of Civilizations Media Fund (AOCMF) fellowship-AOCMF Fellowship at University clinic for Cranio-Maxillofacial and Oral Surgery, Innsbruck, Austria for a period of 6 weeks from 03-04-2017 to 12-05-2017. She worked under the guidance of Prof Michael Rasse, who is one of the most renowned Oral and Maxillofacial Surgeons in Europe.
4. Researchers from School of Life Sciences and Kasturba Medical College, Manipal University, have performed DNA analysis by targeted exome sequencing in long standing ulcerative colitis subjects at risk of progressing into colorectal cancer and identified cancer causing mutations in new as well as previously identified oncogenes and tumour suppressor genes. Mutations identified in the present study can be used as marker for early diagnosis of ulcerative colitis associated colorectal cancer. The finding of the study is published in Nature Publishing Group journal British Journal of Cancer entitled "Targeted sequencing based analyses of candidate gene variants in ulcerative colitis-associated colorectal neoplasia," which was also supported by Department of Biotechnology, Government of India.



5. Researchers at the Department of Biophysics, School of Life Sciences, Manipal University, Manipal, India and Institute of Biophotonics, National Yang-Ming University, Taipei, Taiwan have developed a Stokes polarimeter based on nonlinear optical microscopy (second harmonic generation (SHG)) to investigate starch gelatinization. The findings are published in Nature Publishing Group (NPG) Journal "Scientific Reports" entitled "Investigating starch gelatinization through Stokes vector resolved second harmonic generation microscopy." "The slowly-digestible or resistant starch derived from uncooked food, whole grains, legumes, tubers and vegetables thus can be measured as an appropriate source of carbohydrates to provide as personalized nutrition to reduce risk of various conditions/diseases including cardiovascular diseases," said Dr Nirmal Mazumder, the first author of the manuscript. This work was undertaken in collaboration with

the imaging specialist, Dr Jianjun Qiu from Key Laboratory of Biomedical Photonics, Huazhong University of Science and Technology, Wuhan, China.

6. Dr K Balakrishna, Professor at the department of Civil Engineering, Manipal Institute of Technology, Manipal University, Manipal is chosen as one among 60 scientists from India to participate in the 37th Indian Scientific Expedition to Antarctica (ISEA). The expedition will be flagged off from Goa in December 2017. Dr Balakrishna would stay in Antarctica for three months to determine the minute amounts of organic contaminants that includes pharmaceuticals and personal care products, in the oceans surrounding Antarctica. He would also investigate the quantum of these contaminants released from the treatment plants of Indian, Chinese and Russian research stations. With this, Manipal University would for the first time, join the ranks of leading research institutions of the country doing polar research.



C. Achievement by research scholars and students

1. Mr Kiran S, Research Scholar Dept of Speech and Hearing, School of Allied Health Sciences, Manipal received International Travel Grant from the Science and Engineering Research Board of Government of India to participate in Rehab Week 2017 held in July 2017 at London, UK.
2. Mr Kiran S, Research Scholar Dept of Speech and Hearing, School of Allied Health Sciences, Manipal received International Bursary Award from the World Federation of Neurology to present his research work at the XXIII World Congress of Neurology to be held in Kyoto, Japan in September 2017.
3. Mr Shubhankar Das, structured PhD Scholar, Dept. of Radiation Biology and Toxicology, School of Life Science, Manipal University, Manipal received the Young Investigator Award for his poster entitled "Mitochondrial Biogenesis, Autophagy and Mitochondrial UPR Co-operate in Modulating Ionizing Radiation Induced Cellular Damage" at OCC/SFRR-EUROPE 2017, Annual Conference on Metabolic Stress and Redox Regulation held at Berlin, Germany (June 21 to 23, 2017). The Young Investigator Award consists of a travel grant of 500 € to attend the next SFRR International meeting which will be held in Lisbon, Portugal (June 4 to 7, 2018). Also, he was the recipient of travel grant to attend this meeting in Berlin from ITS-SERB, New Delhi, Govt of India.



D. Awards and accolades

1. Dr Apoorva Reddy, Student of Kasturba Medical College, Manipal received second prize in poster presentation for her poster entitled "Transoral microendoscopic KTP – 532 Laser assisted excision of Stage I-III glottis cancer" at workshop on Head and Neck Onco surgery and Hands on cadaver Laser dissection course held on January 6 to 8, 2017 at KMC, Manipal.
2. Ms Smrithi, Department of Medical Genetics, Kasturba Medical College, Manipal was awarded travel grant to attend European Human Genetics Conference during May 27 to 30, 2017 organized by European Society of Human Genetics, at Copenhagen, Denmark.

3. Dr Pavithra P, Associate Professor of Pathology, Melaka Manipal Medical College (MMMC) was awarded first prize for poster presentation titled "Bilateral ovarian carcinosarcoma: A rare entity" in the first midterm CME on mysteries of the female genital tract held in Pune on April 30, 2017.
4. A research paper titled "Implementation of various edge detection filters using different thread distributions" by Pooja S, Department of Information and Communication Technology, Manipal Institute of Technology, Manipal University, Manipal has been awarded the Best Paper Award at International Conference on Innovative Research in Engineering and Science, Thailand, in June 16 to 17, 2017.
5. A research paper titled "Cloud Enabled Standard Electronic Health Record Architecture for Indian Healthcare Sector" by Raghavendra Ganiga, Radhika M Pai, Manohara Pai M M and Rajesh Kumar Sinha, Department of Information and Communication Technology, Manipal Institute of Technology, Manipal University, Manipal has been awarded the Second prize (Bursary) for Oral Presentation during SYMHEALTH 2017 held during May 5 to 7, 2017, in Pune, India.
6. Dr Ashok Rao, Professor, Dept of Physics, Manipal Institute of Technology, Manipal University, Manipal received research funding from Council of Scientific and Industrial Research (CSIR), Government of India for his project titled "Synthesis of novel thermoelectric materials for low and high temperature applications."
7. Pavan Hiremath, Assistant Professor, Dept of Mechanical and Manufacturing Engineering, MIT, Manipal had won Best Paper Award for his paper titled "Investigation on Effect of Nano-Fillers on Mechanical Properties of Epoxy based Composites using ANOVA" in the International Conference on Advanced Materials and Building Materials (ICAMBM2017), held at Kuala Lumpur, Malaysia in April 2017. This paper was co-authored by Prof Manjunath Shettar, Dr Achutha Kini, and Dr Sathyashankara Sharma.
8. Mr Rajiv Mishra, Assistant Professor-Selection Grade, Department of F&B Management has received a "commendation letter" by Director (Tourism), Ministry of Tourism, Government of India, for his research paper titled "A Critical Review on the Recommendations and Proposals of the Ministry of Tourism for Twelfth Five Year Plan: Imperatives for Paradigm Shift in Human Resource Development and Capacity Building Initiatives in Hospitality and Tourism Sectors." The same paper is accepted for publication in the reputed "International Journal of Applied Business and Economic Research," which is abstracted and indexed in SCOPUS.
9. Dr Smitha Nayak, Associate Professor, School of Management, Manipal University received Academic Achievement Award in recognition for her outstanding contribution to Academia at International Conference on Business and Social Science organized by Global Academy for Training and Research at Malaysia during May 4 to 5, 2017.
10. Ar Sonali Walimbe, Associate Professor, Faculty of Architecture, Manipal Institute of Technology, Manipal was the session chair in technical presentation and received appreciation for research contributions at 13th International Conference on Engineering, Science and Technology (ICEST'2017) in Pattaya (Thailand) during June 6 to 8, 2017.



Part II



A. Featured scientist of Manipal University

Dr B Unnikrishnan

Associate Dean and Professor, Dept of Community Medicine
Kasturba Medical College, Mangalore, Manipal University.



Dr B Unnikrishnan obtained his MBBS Degree from Pt J N M Medical College, Raipur in 1996 and MD (Community Medicine) from Kasturba Medical College, Manipal in 2000. Dr Unnikrishnan commenced his teaching career at Kasturba Medical College, Mangalore as Assistant Professor in 2000 and became Professor in 2010 and later Head of the Department during 2011 to 2015. He became the Associate Dean of Kasturba Medical College, Mangalore in 2015. He has received fellowships from the Sparkman Centre for Global Health, the University of Alabama at Birmingham School of Public Health, USA, and the Department for International Development (DFID), UK, Fellowship at South Asian Cochrane Centre, CMC, Vellore, India.

He has published 128 research papers in Scopus indexed national and international journals of good repute and have contributed a chapter titled “Mortality Statistics” in Encyclopaedia of Forensic and Legal Medicine (Second Edition), 2016 published by Elsevier Ltd., Oxford, UK. Dr Unnikrishnan is in the advisory Board of the Jawahar Institute of Post Graduate Medical Education and Research (JIPMER) Research Leadership Mentoring Program at Puducherry and also mentoring the faculties of JIPMER, Puducherry, AIIMS, Jodhpur and IIPH Gandhinagar for research and publications.

He is presently the Member of the Standing Expert Peer Committee (SEPC) for Public Health Research Initiative (PHRI) Research grant, under the Dept of Science and Technology, Govt of India and Public Health Foundation of India (PHFI), Member of Board of Studies at Central University of Kerala and a member of the Cochrane Infectious disease, HIV/AIDS and Public Health group.

Dr Unnikrishnan is an external expert for ICMR Extramural Research Project in the field of Health Systems Research, Social and Behavioural Research, Chronic disease, Mental Health, HIV, and Public health. He is also the expert for Science and Engineering Research Board, Govt of India in the domain of life sciences and sub domain of health sciences.

He was the Internal Mentor and Supervisor for the ASCEND Research network (Asian Collaboration for Excellence in Non-Communicable Disease) a US NIH Millennium Promise Award to support the development of an Asian Non-Communicable disease (NCD) Research Network over five years (2010–2015). Dr Unnikrishnan is presently the Principal Investigator for two projects; a corporate social responsibility (CSR) grant from Technip Relief and Development Fund, Italy on “Building Capacity for Prevention and Control of Vector Borne Diseases in Rural Community of Mangalore” and Hospital Based Cancer Registry of National Centre for Disease Informatics and Research, National Cancer Registry Program (Indian Council of Medical Research), India. He is guiding two PhD students and is a co-guide for two PhD students. He has completed eight funded research projects as Principal Investigator and five funded research projects as co-PI, which were funded by ICMR, MOHFW, Govt of Karnataka, University of Alabama, University of Arizona, and NIH, USA. Dr Unnikrishnan’s area of expertise is in the domain of Infectious Disease epidemiology, Health Systems Research and Systematic reviews.

Talking about his experience, Dr Unnikrishnan said “When I started my career, I had no clue about research and publications and research was not in the top priority. During the first three years of my career I did not do any research, but was actively involved in teaching and community activities. Then I started collaborating

with other researchers from clinical specialities especially in the field of infectious diseases. Initially there were few hindrances that I had to face, but somehow, I managed them. We then initiated a research mentorship program in the department for undergraduate medical students and were successful in incorporating research into undergraduate medical education curriculum. This has led to tremendous increase in undergraduate conference presentations and publications in journals of repute. From the beginning, I had a strong belief in collaborative research work and working together with people as a team, whether it was interdepartmental or interinstitutional.”

His message to young and budding researchers stresses on inculcating the best practices in research and also should look at innovations. Further these researchers should concentrate their research work relevant to local, regional and national needs, and also focus on translational research where they should apply the findings from basic science to enhance human health and well-being-bench to bedside.

Dr Unnikrishnan’s future plan includes collaboration with international and national institutes of repute and to apply for joint funding with the process initiated. He wishes to mentor young and budding researchers.

Talking about MU research bulletin he said, “MU Research bulletin is an excellent platform for giving visibility to the research and the researchers of Manipal University and also to showcase the research that is happening in the University for fruitful collaborations and sharing of knowledge.” He is planning to initiate courses on Systematic reviews and Meta-Analysis, and Advanced Epidemiology.

B. Top publications for the period Apr-Jun 2017

Title of The Publication	Author Name (Manipal University Affiliated)	Institution	Department	Journal	Month and Year of Publication	1-Yr Impact Factor
Epigenetics in cancer: Fundamentals and Beyond	C Mallikarjuna Rao, Subhankar Biswas	MCOPS	Pharmacology	Pharmacology and Therapeutics	Apr 2017	11.00
Targeted sequencing-based analyses of candidate gene variants in ulcerative colitis associated colorectal neoplasia	Sanjiban Chakrabarty, Pranoy Sahu, Satyamoorthy Kapaettu, Vinay Koshy Varghese, Pradyumna Jayaram, Ganesh Pai C, Shiv Kumar B M	School of Life Sciences; KMC, Manipal; Mazumdar Shaw Cancer Centre, Bangalore,	Cell and Molecular Biology; Gastroenterology; Mazumdar Shaw Cancer Centre, Bangalore	British Journal of Cancer	Jun 2017	6.17
Tunnelling in Dante’s Inferno	Furuuchi Kazuyuki, Marcus Sperling	Manipal Centre for Natural Sciences	Fakultät für Physik, Universität Wien, Austria Institut für Theoretische Physik, Leibniz Universität Hannover, Germany	Journal of Cosmology and Astroparticle Physics	May 2017	5.634



Title of The Publication	Author Name (Manipal University Affiliated)	Institution	Department	Journal	Month and Year of Publication	1-Yr Impact Factor
Investigating starch gelatinization through Stokes vector resolved second harmonic generation microscopy	Nirmal Mazumder, Jianjun Qiu, Fu Jen Kao, Lu Yun Xiang	School of Life Sciences; Huazhong University of Science and Technology, Wuhan; National Yang-Ming University, Taipei	Biophysics; Key Laboratory of Biomedical Photonics, Institute of Biophotonics	Scientific Reports	Apr 2017	5.228
Significance of Microbiota in Obesity and Metabolic Diseases and the Modulatory Potential by Medicinal Plant and Food Ingredients	Anil Kumar N V, Hoda M Eid, Michelle L Wright, N V Anil Kumar, Abdel Qawasmeh, Sherif T S Hassan, Andrei Moca, Seyed M Nabavi, Luca Rastrelli, Atanas G Atanasov, Pierre S Haddad	MIT Manipal; Université de Montréal; Emory University; Faculty of Pharmacy, University of Veterinary and Pharmaceutical Sciences Brno, Iuliu; Hatieganu University of Medicine and Pharmacy; Baqiyatallah University of Medical Sciences; University of Salerno, Polish Academy of Sciences; Centre for Physiology and Pharmacology	Chemistry, Department of Pharmacology and Physiology, Nell Hodgson Woodruff School of Nursing, Hebron University, Department of Natural Drugs, Department of Pharmaceutical Botany, Applied Biotechnology Research Centre, Dipartimento di Farmacia, Institute of Genetics and Animal Breeding, Department of Vascular Biology and Thrombosis Research	Frontiers in Pharmacology	Jun 2017	4.4
Inclusion Complexation of Etodolac with Hydroxypropyl-beta-cyclodextrin and Auxiliary Agents: Formulation Characterization and Molecular Modelling Studies	Usha Yogendra Nayak, Atul P Sherje, Vaidehi Kulkarni, Manikanta Murahari, Pritesh Bhat, Vasanti Suvarna, Bhushan Dravyakar	MCOPS, Manipal; SVKM's Bhanuben Nanavati College of Pharmacy; M S Ramaiah University of Applied Sciences; Schrodinger, Bengaluru	Pharmaceutics, Department of Quality Assurance, Department of Pharmaceutical Chemistry	Molecular Pharmaceutics	Apr 2017	4.342
Carbohydrate biopolymer for corrosion control of 6061 Al-alloy and 6061Aluminum-15%(v) SiC(P) composite—Green approach Charitha B P, Padmalatha Rao*	Padmalatha, Charitha B P	MIT, Manipal	Chemistry	Carbohydrate Polymers	Jun 2017	4.219

Manipal University Students' Research Forum (MUSRF)

The fourth edition of research poster competition (RPC-2017) was organized through MUSRF, under the aegis of Directorate of Research (DoR), Manipal University (MU), Manipal on April 6, 2017 during the Manipal Research Colloquium (MRC-2017). The event was jointly organized by the DoR and the Deputy Registrar (Academics), Manipal University, Manipal. Hundred and eighty-nine students from the campus of the both Manipal and Mangalore Universities, constituent institutions, university teaching departments and research centres participated in the RPC 2017. Research abstracts for presentation received included 87 from the Health Sciences, 35 from the Technical Sciences, 48 from the Basic Sciences, and 19 from the Management Sciences. Hundred and eleven full papers of the related abstracts have been submitted by the students; 59 from the Health Sciences, 21 from the Technical Sciences, 20 from the Basic Sciences, and 11 from the Management Sciences. The competition included 150 posters and 39 oral presentations in total. During valedictory of the MRC-2017, best oral and poster presentations of RPC-2017 (first prize, second prize, and consolation prizes) were awarded to the awardees by the Dr Poornima Baliga, Pro-Vice Chancellor (Health Sciences), MU, Manipal, and Dr G K Prabhu, Pro-Vice Chancellor (Technical Sciences), MU, Manipal. The winners of Health and Basic Sciences were announced by the MUSRF Health Science Mentor, Dr B S Satish Rao and the winners of Technical and Management Sciences were announced by the MUSRF Technical Science mentor, Dr Raviraja Adhikari. The list of winners for both oral and poster presentation sessions of RPC-2017 is listed below:

Oral presentation sessions

Health Sciences

1. First Prize: Chaitra, Manipal College of Pharmaceutical Sciences, Manipal
Title: Predictive Model for Identification of Suitable Penetration Enhancers for a Transdermal Formulation (Original research)
Author(s): Usha Y Nayak, Pritesh Bhat, and Reema Narayan
2. Second Prize: Joyce Pinto, Manipal Institute of Technology, Manipal
Title: Biodegradable Sustained Drug Delivery System via Intraocular Lens for Post Cataract Treatment (Original Research)
Author(s): Bharath Raja Guru and Krishna Rao Addoor

Technical Sciences

1. First Prize: Vasundhara Acharya, Manipal Institute of Technology, Manipal
Title: Identification and Automated counting of Red Blood Cells from Blood Smear Images using Computer Aided System
Author(s): Preetham Kumar
2. Second Prize: Aditya Ganesh, Manipal Institute of Technology, Manipal
Title: Aerodynamic Analysis and Optimization of Exterior Design for Passenger Solar Electric Vehicles (Technical Report)
Author(s): Umananda K V, Srinivas Ramesh, and Avaneesh Upadhyaya

Basic Sciences

1. First Prize: Ramya Gupta, School of Life Sciences, Manipal
Title: Production of HeLa-derived Rho zero Cell Line and its Characterization, Applications and Future Uses (Original Research)
Author(s): Raviprasad K V and Chakrabarty S
2. Second Prize: Arpita Dash, Manipal Institute of Technology, Manipal
Title: Role of Stromatolites in shaping the Evolution of Earth's Oxygen – A review
Author(s): Lino Yovan, Balakrishna K, and Udaya Shankara H N

Management Sciences

1. First Prize: Shanta Pragyan Dash, Faculty of architecture, Manipal (Author)
Title: A Pragmatic Approach towards Development of River Island followed by the Fundamental Principles
2. Second Prize: Shrey Vijaykumar Dave
Title: Understanding the Customer's Attitude towards Adoption and Usage of Online Banking Services using UTAUT Model
Author(s): Yadvendra Singh Chouhan, Dattathreya Ullas Shanbhag, Karthik R, Ambigai Rajendran, and Sandeep S Shenoy

Poster Presentation Sessions

Health Sciences

- First Prize: Akanshu Jain, Swapnil Dhaka, Namit Bansal, Sahana Ojha, and Srinidhi Govindarajan
Institution: Kasturba Medical College, Mangalore
Title: Efficacy of Hand Sanitizer in reducing Hand Bacterial Count as compared to Liquid Soap among Sanitation Workers in Mangaluru: A Randomized Controlled Trial (Original Research)
Author(s): Prasanna Mithra and Vishwas Saralaya
- Second Prize: Razila P
Institution: Kasturba Medical College, Mangalore
Title: Three headed Biceps Brachii – an Anatomical Case Report
Author(s): Hanumantha S, B V Murlimanju, and Mangala M Pai
- Consolation Prize: Anjana Sundarrajan and Zahra Bandali
Institution: Manipal College of Pharmaceutical Sciences, Manipal
Title: "Dirty" Money – It is more than Exchange of Currency Notes (Original Research)
Author(s): Abbas Dossa and Jesil Mathew A
- Consolation Prize: Srinidhi Govindarajan
Institution: Kasturba Medical College, Mangalore
Title: Effect of Classical Music on certain Cardio-respiratory and Cognitive Function Parameters in Young Adults - a Randomized Controlled Trial (Original Research)
Author(s): Anupama N

Technical Sciences

First Prize: K Vidya Vivaswanth and K V Bhargav Siddhartha (Authors)

Institution: Manipal Institute of Technology, Manipal

Title: Study of Differences in Key Sizes of RSA and Elliptic Curve Cryptography (Technical Report)

Second Prize: Manoj Bhat, Abhinav Bhargava, and Aman Patel

Institution: Manipal Institute of Technology, Manipal

Title: Analysis on Stabilization of a Six Axes Gimbal System with Dynamic Unbalance (Original Research)

Author(s): Gowrava Shenoy

Second Prize: Nadiya Naaz, Sonali Mittal, and Sony Acharya

Institution: Manipal Institute of Technology, Manipal

Title: Standard KLELine Payment Server

Author(s): Prema K V

Consolation Prize: Smitha S Padiyar

Institution: Manipal Institute of Technology, Manipal

Title: Word Based Thematic Game on Indian Mythology

Author(s): Sanjay Singh

Consolation Prize: Debjeet Choudhury and Manoj Bhat

Institution: Manipal Institute of Technology, Manipal

Title: Analysis of Dual Motor Configuration (Technical Report)

Author(s): Umananda K V

Basic Sciences

First Prize: Vignesh U N

Institution: Manipal Institute of Technology, Manipal

Title: Synthesis and Characterisation of Isoniazid Derivatives (Original Research)

Author(s): Santosh L Gaonkar

Second Prize: Aina Aggarwal

Institution: Kasturba Medical College, Manipal

Title: Anthropometric and Histologic Study of Liver and Kidney of Foetuses and Their Correlation with Gestational Age (Observational Study)

Author(s): Chandni Gupta

Consolation Prize: Suchithra M Shetty

Institution: Manipal Institute of Technology, Manipal

Title: Synthesis and Characterisation of Pyrazole Coumarin Hybrid

Author(s): N V Anil Kumar

Consolation Prize: Sanna Gulati

Institution: Manipal Centre for Natural Sciences, Manipal

Title: A Variability Study of Misaligned Active Galaxies

Author(s): Debbijoy Bhattacharya

Management Sciences

First Prize: Shruti Sivakumar (Author)

Institution: School of Communication, Manipal

Title: Discourse Analysis of the Syrian Crisis Coverage in National Geographic and Smithsonian Website

Second Prize: Devaki B Kotian

Institution: Department of Statistics, Manipal

Title: Determinants of Social Isolation among Elderly People in India: Exploring through Building Knowledge base on Population Ageing in India (BKPAL) Data

Author(s): Binu V S and Suma Nair

Consolation Prize: Shanyce Adrian Fernandes

Institution: Department of Commerce, Manipal University, Manipal

Title: A Conceptual Study on the Major Corporate Fraudulent Cases in the United Kingdom (UK)

Author(s): Ambigai Rajendran and Praveen Kumar



Editorial Team

1. Dr N Udupa, Director Research (Health Sciences)
Manipal University, Manipal
2. Dr Satish Shenoy, Director Research (Technical)
Manipal University, Manipal
3. Dr Raghu A R, Deputy Director Research (Health Sciences)
Manipal University, Manipal
4. Dr Santhosh K V, Deputy Director Research (Technical)
Manipal University, Manipal
5. Dr Rekha R Shenoy, Associate Professor,
Department of Pharmacology, Manipal College of
Pharmaceutical Sciences, Manipal University, Manipal
6. Dr Manthan D Janodia, Associate Professor,
Department of Pharmacy Management, Manipal College
of Pharmaceutical Sciences, Manipal University, Manipal