



MCOPS-Diamond Jubilee e-Newsletter Issue 11, November 2023

Newspill Monthly once

Dr Srinivas Mutalik and Dr Usha Y Nayak of MCOPS Listed Among the Top 2% Scientists Worldwide by Stanford University

7 October 2023: **Dr Srinivas Mutalik**, **Professor and Head**, and **Dr Usha Y Nayak**, **Professor**, Department of Pharmaceutics, Manipal College of Pharmaceutical Sciences, MAHE, Manipal, are listed among the Top 2% Researchers in the World in the field of Pharmacy and Pharmacology. John P A Ioannidis, Professor at Stanford University and his research collaborators, in association with Elsevier, has created the list of Top 2% scientists across the world.

Dr Mutalik is receiving this recognition consecutively for the third time now. He has 225 publications in SCOPUS indexed journals with more than 5000 citations and h-index of 40. Dr Nayak has







published 123 research papers in Scopus indexed journals with 2435 citations and has Scopus h-index of 27. They are active researchers with several grants from Government funding agencies and industry.

India Leads the World in Observing cGMP Day and Displays the Commitment to Quality

10 October 2023: The Centre for cGMP at Manipal College of Pharmaceutical Sciences (MCOPS), Manipal Academy of Higher Education (MAHE), organized the first-ever "National Current Good Manufacturing Practices Day" or "National cGMP Day", on 10 October 2023, at Manipal. This momentous occasion coincides with the Diamond Jubilee of MCOPS and the 125th Birth Anniversary of its visionary founder, Dr TMA Pai, Padmashree Awardee. This was jointly organized by Centre for cGMP, Manipal and IDMA (Indian Drug Manufacturers Association). The purpose of "National cGMP Day" was to raise awareness about the critical role of current Good Manufacturing Practices (cGMP) in the pharmaceutical industry, ensuring the quality and safety of medicinal products.

Speaking on the occasion, Dr Viranchi Shah, National President IDMA, mentioned that the industry is forever and highly committed to providing quality drugs and ensuring all manufacturing processes error-free. Dr Veeramani SV, Chairman Pharmexcil, said that the IDMA has been helping domestic companies by providing tools and training to mitigate regulatory scrutiny and to meet the increased compliance levels. Celebrating National cGMP day would serve as a message to the world as India's continued commitment to quality of error-free drug manufacturing.

Dr Viranchi Shah, National President IDMA, also inaugurated the Manipal cGMP digital museum, which is the first of its kind and dedicated it to the founder of MAHE, Manipal, Dr TMA Pai. Lt. Gen

(Dr.) M D Venkatesh, Vice-Chancellor MAHE and also the guest of honour, spoke about the values inculcated by Dr TMA Pai and now inherited by MAHE. He also lauded the Centre for cGMP for taking up such a great initiative, and the first-ever national day that MAHE has initiated. He also thanked IDMA for co-organizing and supporting this event in every way. He also mentioned that he was proud to be a part of the inauguration of the world's first-ever digital cGMP museum. Dr Sharath Rao, Pro-VC (Health Sciences) MAHE, Manipal, was the first visitor to the museum.

Dr HS Ballal Pro-Chancellor, MAHE, Manipal, in his presidential address, spoke about the vision of Dr TMA Pai, the founder of MAHE, Manipal, and the event coincides with the 125th birth anniversary of Dr TMA Pai as well as the 60th year of inception of MCOPS. Mr Rajsekhar, Deputy Drugs Controller (India), mentioned that the regulatory bodies worldwide have stressed the need to maintain quality medicine and observe good manufacturing practices. Dr Sharath Rao, Pro-VC (Health Sciences) MAHE, Manipal welcomed the gathering. Dr Girish Pai K, Coordinator, Centre for cGMP, briefed the gathering on conceiving the novel idea of cGMP Day. Dr Pai stressed on the need for inculcating quality culture right from academic set up and dedicated the success of first National cGMP Day to Dr TMA Pai, Architect of MAHE, Manipal. Dr Muddukrishna BS, joint organizing secretary of the National cGMP day, proposed the vote of thanks.

The first-ever NATIONAL cGMP DAY included three symposiums, one mini workshop and a panel discussion by Industry Experts. The sessions dealt with current trends like recent international regulatory updates, GMP Compliance, products for global markets - quality and regulatory challenges, cGMPs in manufacturing and distribution and the future of cGMP compliance. IDMA has also organized workshops and symposiums across the country and brought in a pledge taking event for academia and industry that re-emphasizes the need for maintaining quality in every process, thereby ensuring 100% compliance.



Manipal College of **Pharmaceutical** Sciences, Manipal signs MoU with Prakruti Life Science Pvt. Ltd

October 2023 : Manipal College Pharmaceutical Sciences under Manipal Academy of Higher Education (MAHE) Manipal signed a Memorandum of Understanding (MoU) with Prakruti Life Science Pvt Ltd to promote technology transfer in the area of pharmaceutical product development and also in pharmaceutical skill development to the student community. This agreement will specify the requirements for possibilities for internships and student training through promoting their professional development. The signing and implementation of this MoU have created an excellent foundation for improving expertise in pharmaceutical education, research, and healthcare advancement. The delegates from Prakruti Life Sciences Dineshchandra Hegde-Director, Nikhil **Hegde-Director**, Shetty-General Manager and Banashankari **Shetty-HR Manager** visited the MAHE University on 17 October 2023. Dr Giridhara Kini- Registrar, MAHE, Dr Harish S Kumar, Director of the corporate relationship MAHE, Dr C Mallikarjuna Rao, Principal of Manipal College of Pharmaceutical Sciences and Dr **Anup Naha, Additional Professor, Department** of Pharmaceutics MCOPS, were present for the official exchange of the MoU. The collaboration has been initiated by **Dr Srinivas Hebbar**, Department of Pharmaceutics, MCOPS, and facilitated through the Centre for Pharmaceutical Skill Development, MCOPS.





Guest Lecture "Demystifying on **Entrepreneurship**"

11 October 2023: Department of Pharmaceutical Quality Assurance, MCOPS organized a guest lecture titled "Demystifying Entrepreneurship"

in PGR conference hall, MCOPS. The speaker for the session was, Mr Vijay Kumar, Financial **Phoenix Financial** Consultant, Bengaluru, Karnataka. The session commenced with Dr Muddukrishna BS, Associate Professor, **Pharmaceutical Department** of Assurance, extending a warm welcome to all attendees and a brief introduction about the speaker.

As Vijay started the session by invoking Gloria Steinem's words, "Dreaming, after all, is a form of planning". He emphasized the pivotal role of planning in the entrepreneurial journey and encouraged the audience to dream ambitiously and align their plans accordingly. Mr Vijay engaged the audience in an interactive discussion, prompting them to reflect on the essential qualities and characteristics that successful entrepreneurs possess. Attributes such as ownership, passion, and individuality were highlighted, with the audience actively participating and sharing their insights. He delved into the entrepreneurial journey, focusing on the Boston Consulting Group (BCG) quadrant, a framework categorizing businesses into Dogs, Cash Cows, Stars, and Question Marks. Mr Vijay elaborated on how individuals can transition from being self-employed to entrepreneurs and, eventually, investors. A significant highlight of the session was the screening of a video featuring Bill Gross, a renowned entrepreneur and investor. The video underscored the critical factors contributing to business success, with particular emphasis on the role of timing, idea, and execution. This video served as a compelling illustration of the key components of entrepreneurial achievement.

Mr Vijay concluded by summarizing the key takeaways, particularly emphasizing the pivotal role of timing in the success of a business idea. He encouraged attendees to consider these factors in their entrepreneurial pursuits. Following the presentation, a brief but engaging Q&A session allowed participants to seek clarifications and insights on various aspects of entrepreneurship. The session was attended by postgraduate students, research scholars and faculty members.





DJC Lecture Series Talk on 'How to **Mechanically Understand the Disposition** of NCEs?' by Dr T Thanga Mariappan

14 October 2023: MCOPS Diamond Jubilee Celebrations Lecture Series organized by the Department of Pharmaceutical Quality Assurance held on 14 October 2023 at 10:30 am in PGR conference hall. The esteemed speaker for the session was Dr T Thanga Mariappan, Scientific **Director & Head of Pharmaceutical Candidate** Optimization at Bristol Myers Squibb R&D Centre, Bengaluru. The event began with opening remarks, a warm welcome speech, and an introduction to the esteemed speaker by Dr Sudheer Moorkoth, Head of the Department Pharmaceutical Quality Assurance Department.

Dr Thanga emphasized on the importance of India's youth on the global stage and discussed the relatively low level of achievements in the field of drug discovery. Drawing a comparison between space research and drug research, he explained why drug research can be even more challenging than rocket science. The speaker elaborated on the stages of drug discovery, focusing on animal models for mechanistic understanding of the disposition of New Chemical Entities (NCEs) and drug disposition. He engaged the audience with a hypothetical example of a compound A and B featuring various scenarios of solubility and metabolism. This case study encompassed usage of different in-vivo animal models, including Portal vein cannulation in rat study, Intestinal perfusion with mesenteric sampling, pH-dependent absorption model and Bile duct cannulated rats. He explained each models and elaborated on the advantages and disadvantages of each model. Dr Thanga encouraged the audience to work together to solve the case study he presented. He also explained the reasons for choosing these models to evaluate the new NCEs. He concluded his lecture by delivering a powerful take-home message, imparting wisdom to motivate aspiring youths in their careers, and presenting an equation for success and happiness. Following the lecture, the audience had the opportunity to ask questions, which Dr Thanga graciously answered. Dr Sudheer Moorkoth delivered closing

remarks, expressing gratitude to the speaker for sharing his valuable insights. He also thanked the attendees for their active participation in the event. The lecture provided valuable insights into drug discovery and mechanistic understanding, and it served as a source of inspiration for the future generation of pharmaceutical researchers. The program concluded with the felicitation of the esteemed speaker by Dr C Mallikarjuna Rao, Principal, MCOPS and Dr Krishnamurthy Bhat, Vice Principal, MCOPS.







Two Days Guest Lecture by Dr Rajkumar **Banerjee**

16-17 October 2023: Dr Rajkumar Banerjee, Faculty Scientist, Applied Biology Division, CSIR-IICT, Hyderabad, delivered a lecture on the topic "Reactive oxygen species- From Concepts to Therapeutics for Cancer" at PGR Conference Hall, MCOPS, Manipal on 16 & 17 October 2023, organized by the Department of Pharmacology, MCOPS. Dr Banerjee elucidated the dual functionality of specific chemotherapeutic agents, including quinones, nitrogen mustards, nitrosoureas, and nucleosides, which act as a twoedged sword in cancer therapy. These compounds serve both as cytotoxic agents and as inducers of ROS. Dr Banerjee emphasized on the substantial modifications in glycolysis, a fundamental metabolic pathway, leading to a phenomenon known as "Warburg effect" in cancer. He also highlighted that elevating the pH of the tumour microenvironment and reducing the build-up of acidic compounds may hold promise for mitigating tumour aggressiveness. This lecture was a preamble to the next session scheduled on 17 October 2023. On the second day, Dr Rajkumar emphasized on the approach of lipids as adaptable molecules that can be modified to deliver a variety of therapies such as medicines, genes, and proteins. Dr Banerjee added that lipids are also important in treating disorders such as cancer. Over fifty participants attended and got benefitted from the guest lecture.



Guest Lecture by Dr Rajkiran Narkhede on "Importance of Excipient in Quality of Pharmaceuticals"

27 October 2023: Department of Pharmaceutics, Manipal College of Pharmaceutical Sciences (MCOPS), MAHE, Manipal organized a Guest Lecture entitled "Importance of Excipient in Quality of Pharmaceuticals" on 27 October 2023. Dr Rajkiran Narkhede, Senior Manager, Technical Services, BASF Pharma Solutions, Innovation Campus, BASF India Ltd., was the resource person.

Dr Rajkiran, discussed various excipients and their purpose, facilitating the overall delivery and administration of the drug followed by novel formulation technologies and advancements in excipients for instant and modified release. The talk also covered various challenges in developing novel excipients and limitations in the availability of comprehensive data on the long-term stability and potential side effects of novel excipients.







Manipal GoK **Bioincubator-BioNEST** organized Manipal BioPharma Hackathon 2023

27 October 2023: Manipal College of Pharmaceutical with Sciences association Manipal-GoK Bioincubator-BioNEST, its Student Entrepreneurship Cell and other Knowledge partners, organized MANIPAL BIOPHARMA HACKATHON 2023 in the month of October 2023. Manipal BioPharma Hackathon 2023 wass designed with the vision of promoting student innovations, Start-Up creation, and encouraging critical thinking to address critical and unsolved needs of the Pharma/BioPharma

domain. Manipal - Government of Karnataka Bioincubator, is established with support of Manipal Academy of Higher Education (MAHE), Government of Karnataka and DBT's BIRAC. The event finale was conducted on 27 October 2023, 09:30 AM onwards. The Jury comprised of experts in domains like BioPharma/Pharma, Business, Innovation and Commercialization. All the jury members were provided with a detailed and mechanistic overview, by the CEO Dr Manesh Thomas, for the assessment of the all the proposals submitted by the participating teams in Manipal Biopharma Hackathon 2023.

The proposals submitted by the participating teams had been assessed on various parameters such as understanding of the problem statement, novelty, technicality, commercial potential and presentation performance. The initial assessment occurred in an online parallel session of three Jury sets by Jury A, Jury B & Jury C assessing 14, 15, & 15 teams, respectively. The experts deliberated on aspects such as proof of principle, innovation involved, feasibility and commercial potential of the pitched ideas.

Six teams such as Team Chemihackers, Team JSS ooty, Team BioXplorers, Team Recall, Team Biopharma Beacons, Team Covalent Quartet were shortlisted with three of them being nominated for special acknowledgement and three were selected for the prizes.

Results

First Prize: Team Chemihackers

Chemihahckers: Ms Tanvi Ambekar. Mr Aarya Deval, Mr Megh Pravin Vithalkar, Ms Akanksha Dessai; Mentor Dr Vijaya Bhaskar K; Institute: MCOPS, MAHE

Second Prize: Team JSS Ooty

Team JSS Ooty: Mr Ashwin Ravichandran, Mr Arjun Raj BK, Mr Jalakh Bhat, Mentor: Dr Raman Suresh Kumar; Institute: JSS college of Pharmacy, Ooty

Third Prize: Team BioXplorers

Team BioXplorers: Ms Japman Kaur, Mr. Annamalai Rama, Mr Jashan Puri, Ms SHreeya Warrier, Ms Anjana A K; Institute: MCOPS, MAHE

Other Activities...

NSS Day Celebration and Community **Initiatives**

4 October 2023 : The NSS Day Celebration took place at MCOPS to commemorate the foundation

of NSS and inspire volunteerism among the students. The event featured Dr Balakrishna Maddodi, NSS Program Officer from MIT, as the distinguished speaker. Dr Maddodi shared valuable insights about the significance of NSS and the pivotal role played by NSS members in community development. He emphasized the importance of active participation in NSS activities and programs, highlighting their contributions to both society and the personal growth of volunteers. The speaker was felicitated by Dr Krishnamurthy Bhat, Vice Principal of MCOPS.

In conjunction with the NSS Day Celebration, two significant community outreach service programs were inaugurated: E-Waste Collection and Safe Disposal Drive and Collection and Safe Disposal of Expired/Unused Medicines. E-Waste Collection and Safe Disposal Drive aimed to collect electronic waste for safe disposal. It took place from 28 September to 4 October 2023, aligning with the Swachh Bharat Abhiyan's objectives. The second initiative focused on the safe collection and disposal of expired and unused medicines, with the same timeline as the e-waste drive.

Student volunteers from the NSS and Community Development Committee (CDC) also initiated the awareness campaign in MAHE hostels and the Housing Board colony, Manipal. They visited each hostel and house to educate residents about the proper disposal of e-waste and expired/unused medicines. Residents were informed about the collection drive scheduled for 4 October 2023, allowing them to hand over the waste items they wished to discard. Over 150 brands of medicine were collected, including tablets, capsules, ointments, and syrup containing bottles. Additionally, e-waste weighing approximately 33 Kg was gathered, which included laptops, cordless phones, headphones, tablets, mobile phones, and iPads.

The collected e-waste was safely handed over to the e-waste collection center of the Udupi municipality. medicines Expired/unused were processed diligently, with tablets and capsules separated from their strips. Ointment tubes and syrup bottles were labeled appropriately and delivered to the collection center at the primary healthcare center of Manipal for safe and proper disposal on 5 October 2023. Empty strips were disposed of as dry waste.

Plans are in place to continue the awareness campaign in various parts of the Udupi district, with collection drives occurring every six months

as a regular practice. 55 student volunteers from the NNS and CDC played an instrumental role in this initiative. There was invaluable support from the Rotary Manipal Hills group. The event and the subsequent community initiatives were conducted with great enthusiasm and dedication, emphasizing the importance of volunteerism, community welfare, and responsible waste disposal.

Daan Utsav 2023: College Clean Up Campaign

04 October 2023: As part of Daan Utsav 2023, a 'Clean Campaign' was organized to demonstrate appreciation and gratitude towards the dedicated cleaning staff. The event was a team effort, involving 15 enthusiastic VSO volunteers from MCOPS actively participating in this initiative. The primary objective of this campaign was to support and recognize the invaluable contribution of the cleaning staff while promoting a cleaner and healthier environment for all members of our college community. The activity helped in reinforcing the importance of cleanliness and hygiene in creating a healthy and conducive learning environment.

C Mallikarjuna Rao, Principal and Krishnamurthy Bhat, Vice Principal, addressed the cleaning staff and volunteers during the event. They delivered inspiring speeches that highlighted the significance of this activity, not only for personal growth but also for the betterment of society. Dr Rao stated, "The efforts of our cleaning staff often go unnoticed, but they play a vital role in creating a clean and safe learning environment. Today, we gather here to show our deep appreciation for their dedication and hard work." Dr Krishnamurthy Bhat added, "Cleanliness is not just a duty but a responsibility towards our fellow students, faculty, and the entire community. It is heartening to see our students actively participating in this campaign." The Clean Campaign concluded on a positive note, and it provided excellent opportunity for informal interactions and further strengthened the sense of unity within our college community.















Utsav 2023: **Financial** Daan Workshop

05 October 2023: To equip the next generation with essential life skills, Manipal College of Pharmaceutical Science conducted a Financial Literacy workshop in collaboration with the Centre for Advanced Learning in Finance and Accounting, Department of Commerce, on the 5 October 2023 as part of **VSO Daan Utsav 2023**. This transformative event brought together students from diverse backgrounds to delve into personal finance, budgeting, and investments.

Dr Subramanya Kumar N, Associate Professor, Department of Commerce and Coordinator, Centre for Advanced Learning in Finance and Accounting, was the speaker for this workshop titled "Financial Enlightenment: Exploring Income, Savings, and Investments". Students of different batches including undergraduate, postgraduate and research scholars participated in this workshop and made it a resounding success, empowering students with the knowledge and skills they need to navigate the complexities of personal finance. As these young minds embark on their future journeys, they do so armed with the tools to make informed financial decisions and secure their economic wellbeing.

In a world where financial literacy is synonymous with empowerment, events like these play a crucial role in shaping the economic future of individuals and, by extension, the society at large. Financially literate individuals are better equipped to achieve their dreams and contribute positively to the economy, making such workshops an investment in a brighter future for all.







Daan Utsav 2023: Tree Planting

07 October 2023: On the occasion of **VSO Daan** Utsav 2023, a group of 10 dedicated volunteers including under graduate and post graduate students from Manipal College of Pharmaceutical Science came together to make a positive impact on the environment. Their collective effort was centered around sapling plantations, with the aim of combating climate change and promoting greenery in the community. These saplings were planted in the **Pharmacognosy Department** Garden. A few medicinal plants were also donated to the department by the students. Their selfless contribution on this special occasion exemplified the spirit of giving and environmental stewardship.





Daan Utsav 2023: Sanitary Pad Donation Drive

07 October 2023: As a part of Daan Utsav 2023, a Sanitary Pad Donation Drive was organized with the aim of promoting menstrual hygiene and supporting women in need. The drive was conducted with great enthusiasm and empathy, focusing on collecting and distributing sanitary pads to underserved communities. Donation boxes were placed throughout MCOPS entrance to facilitate easy contributions. The campaign raised awareness about menstrual hygiene and emphasized the importance of supporting women's health, fostering a more informed and empathetic community. It is hoped that such initiatives continue to inspire acts of kindness and support for underserved communities in the future. The collected sanitary pad would be sorted and distributed later to the underserved communities, shelters and schools.



Upcoming Events

2-4 Nov 2023: MCOPS DJC National Conference on Translational Research in Drug Development

organized by Departments of Pharmacology, Pharmaceutical Chemistry,

Pharmaceutical Biotechnology and Pharmacognosy

3-6 Nov 2023: Three Days Skill Based Learning and Certification Program organized by Centre

for Pharmaceutical Skill Development

24 Nov 2023: Teachers' Skill Empowerment Series-2023 on topic "Student Assessment"

organized by Centre for Pharmaceutical Skill Development

MCOPS DJC 2020: The Pinnacle Fest: 11-20 December 2023

Dates	Event
11&12 December 2023	Qalam
11-15 December 2023	MCOPS EXPO
11-18 December 2023	Sanskriti
11, 12, 17-19 December 2023	Athlos
13 December 2023	WorldRx: A Global Pharmacy
16 &17 December 2023	PharmaQuora
17 & 18 December 2023	Pharmacists' Day Out
19 December 2023	Alumni Summit
19 December 2023	Entrepreneurship and Innovation Conclave
20 December 2023	Valedictory

