

# PRESCRIPTION

Latest news and updates from the Faculty of Pharmacy



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### Malaysian Stingless Bee Propolis: Unearthing a Bioactive Treasure Trove

Stingless bees, part of the Meliponini tribe, offer a captivating glimpse into the diverse world of bees. Unlike their stinging relatives, these bees are characterized by their lack of a stinger and play an essential role in the pollination of native plants. With over 500 species documented globally, the Neotropical region emerges as a hotspot for their diversity<sup>1</sup>. Known locally as 'lebah kelulut' in Malaysia, these bees have gained recognition for their adept pollination of both wild flowering plants and cultivated crops, a role that underpins biodiversity conservation and food security. Malaysia hosts around 50 species of stingless bees, which has sparked growing interest in stingless beekeeping, also known as meliponiculture [2]. This practice offers significant ecological and economic benefits. Not only does meliponiculture promote habitat conservation, but it also allows beekeepers to engage in high-value honey production and obtain other hive products such as beebread and propolis.

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Malaysian stingless bee propolis has emerged as a topic of significant interest due to its unique chemical composition and diverse biological properties. This resinous substance consists of a blend of plant resins, fragments of plant tissues, bee saliva, and wax [1]. Propolis serves multiple functions in the hive, including structural stability, defence against pathogens, and hive sanitation [3]. While the fundamental purpose of propolis remains consistent, its composition can significantly vary across bee species and geographical locations. Notably, several stingless bee species such as *Heterotrigona itama*, *Geniotrigona thoracica*, *Tetragonula laeviceps*, *Lepidotrigona terminata* and *Tetrigona apicalis* are commonly domesticated in the Malaysia's meliponiculture industry [4].

The chemical composition of Malaysian stingless bee propolis is highly variable, influenced by the species of bee, geographical area, the local flora, and environmental conditions. Key constituents typically include flavonoids, phenolic acids, terpenes, and aromatic acids. Analytical techniques such as Gas Chromatography-Mass Spectrometry (GC-MS) and High-Performance Liquid Chromatography (HPLC) have identified numerous bioactive compounds, including phenolic, terpenoids, steroids, sugar alcohol, and fatty acids [5],[6],[7]. The unique chemical profile translates to a diverse range of biological activities for Malaysian stingless bee propolis. It exhibits significant antibacterial activities against a broad spectrum of bacteria, including both gram-positive and gram-negative strains [8]. Its potency is particularly pronounced against gram-positive bacteria, largely due to the simpler cell wall structure featuring a thick peptidoglycan layer. Moreover, Malaysian stingless bee propolis is rich in antioxidants, which help neutralize free radicals and protect cells from oxidative stress [9]. This property is crucial for preventing chronic diseases and promoting overall health. Additionally, it has demonstrated potential anticancer properties by inhibiting cancer cell proliferation and inducing apoptosis [10].

In conclusion, the distinctive chemical composition and diverse biological activities of Malaysian stingless bee propolis present significant potential for various applications. Its robust antibacterial, antioxidant, and antiproliferative properties underscore its value as a bioactive compound in pharmaceuticals, nutraceuticals, and cosmeceuticals. Continued research and innovation in this domain are likely to reveal even more applications, enhancing its role in promoting human health and well-being through advanced therapeutic and preventive measures.

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**About the Author**

Assoc. Prof. Dr. Rozaini Mohd Zohdi earned her PhD in Anatomy from Universiti Putra Malaysia in 2010. She began her career as a research officer at Malaysia Nuclear Agency before transitioning to an academic role at Universiti Teknologi MARA, Puncak Alam Campus. Her research explores the fascinating world of natural products, with a special focus on those derived from bees. She has made significant contributions to the field, including a notable book chapter on their therapeutic potential and several related articles. Dr. Rozaini's expertise extends to tissue regeneration, diabetic wound management, metabolic disorders, obesity, and malaria. As a research fellow at the Atta-ur-Rahman Institute for Natural Product Discovery, she conducts *in vitro* and animal studies to uncover the mechanisms behind the therapeutic effects of natural products.



**Associate Professor Dr.  
Rozaini Mohd Zohdi**

**Questions**

Let's dive deeper into the article and evaluate your comprehension. We have three questions for you [here](#).

# A patient-centred Framework for Pharmacist-led Atrial Fibrillation Better Care: The Pharm-ABC Study

By: Dr. Hanis Hanum Zulkifly

Atrial fibrillation (AF) is a common cardiac arrhythmia that affects approximately 33 million people worldwide. AF is associated with significant morbidity and mortality, including a fivefold increased risk of stroke, heart failure, and other cardiovascular complications[1]. They also face significantly higher mortality rates (25% vs. 8.7%) and greater functional disability from stroke complications compared to those without AF[2]. Despite advances in pharmacological therapy, the management of AF remains challenging due to its complex nature and the need for individualized care. Despite the availability of evidence-based guidelines for the management of AF, many patients receive suboptimal care, leading to poor outcomes.

Many international guidelines have recommended an integrated management of AF patients that requires a coordinated and agreed patient-individualized care pathway to deliver optimised treatment by an interdisciplinary team consisting of cardiologist, physicians, nurses and pharmacist. Pharmacists are ideally positioned to play a crucial role in the management of AF, given their expertise in medication management especially in area of stroke prevention and their ability to work collaboratively with other healthcare professionals. However, their roles and responsibilities beyond stroke prevention is unclear and their challenges and barriers providing the current and future care have not been explored. Furthermore, there is no patient-centered framework for pharmacists-led atrial fibrillation care to improve patient outcomes. As such, there is a critical need for an integrated approach to their care, one that involves coordinated efforts from interdisciplinary healthcare teams.

Recognizing the pivotal role pharmacists play in medication management, patient education, and monitoring for drug interactions and adverse effects, international guidelines recommend their active involvement in the care of AF patients. However, in Malaysia, there remains a gap in standardized frameworks outlining pharmacist involvement beyond stroke prevention in AF.

**To address this gap, our team is embarking on a ground-breaking study led by a distinguished team of experts:**



Principal Investigator:  
Dr. Hanis Hanum bt Zulkifly



Prof. Dr. Sazzli Shahlan Bin Kasim  
Professor of Internal  
Medicine/Cardiology, Faculty of  
Medicine, UiTM



Prof. Dr. Gregory Y.H. Lip  
Professor of Cardiology,  
University of Liverpool



Assoc. Prof. Dr. Mohd Shahezwan  
Bin Abd Wahab  
Deputy Dean of Research, Faculty  
of Pharmacy, UiTM

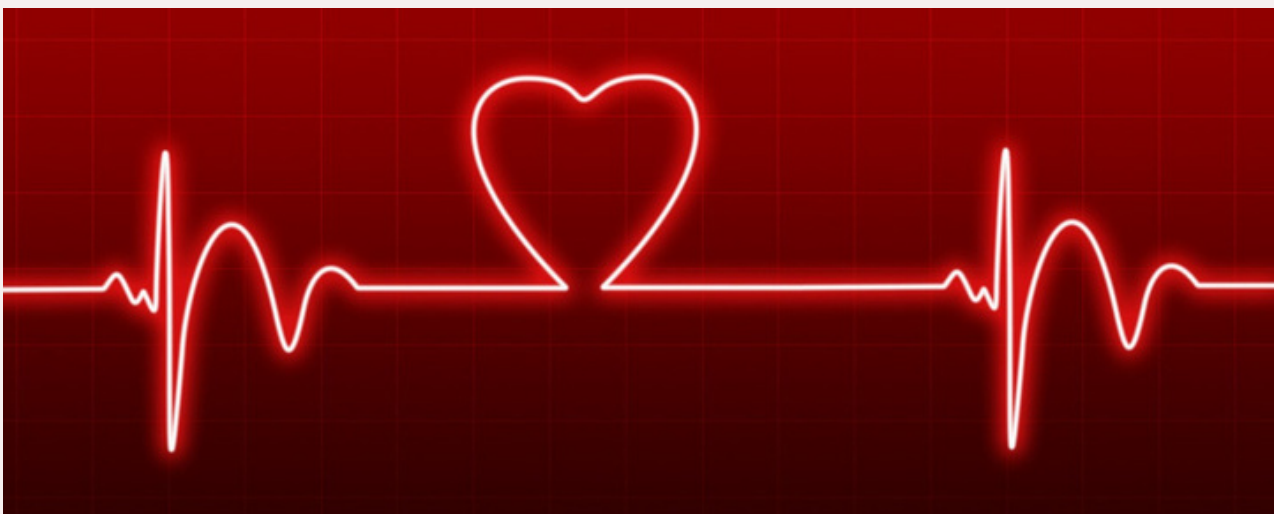


Dr. Sahimi Mohamed  
Subject Matter Expert in  
Anticoagulation, Hospital  
Serdang

**Through this study, we aim to:**

1. Explore perceptions and identify barriers through focus group discussions (FGDs) with healthcare professionals (including pharmacists, cardiologists, and nurses) and patients. We seek to understand current perceptions, roles, responsibilities, and barriers in managing patients with AF.
2. Develop an interdisciplinary framework: Building upon insights gathered in phase one, our team will develop an interdisciplinary, patient-centered care framework aimed at optimizing AF management. This framework will aim to facilitate pharmacist involvement, overcome existing barriers, and improve patient outcomes.
3. Evaluate Impact of the framework in terms of its feasibility and patient health outcomes: In the final phase, the efficacy of the developed framework will be evaluated through additional FGDs and a pilot study involving 100 AF patients. The study will assess the feasibility of the framework and its impact on patient health outcomes, including stroke incidence, hospitalization rates, and mortality.

The anticipated outcome of this study is a novel patient-centred framework for pharmacist-led AF care. By enhancing AF management, we aim to reduce hospitalizations, emergency visits, and overall healthcare costs for patients. These objectives align with the goals of the Malaysian Ministry of Health to reduce productivity loss and the disease cost burden associated with cardiovascular diseases.

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# Boosting Public Health

## How Global Pharmaceutical Giants are Transforming Malaysia's Vaccine Landscape

By: Dr. Choon Wai Yee



Multinational innovative pharmaceutical companies have been creating a lot of buzz lately in Malaysia's vaccine landscape, significantly contributing to public health by addressing vaccine-preventable diseases (VPDs). GlaxoSmithKline Pharmaceutical (GSK), a global biopharma company, is one of the key players in this effort. Through various initiatives, the company emphasises the importance of vaccinations as a foundation for building immunity, particularly in infants and young children.

Working closely with healthcare professionals and medical institutions nationwide, GSK engages community leaders to ensure that people know the importance of vaccination. The National Immunisation Programme (NIP) was designed based on the World Health Organisation (WHO) Expanded Programme on Immunisation (EPI) in 1974, which initially recommended immunisation against six diseases. Like most countries, Malaysia expanded its NIP to 12 major childhood VPDs, including Haemophilus influenzae type B, hepatitis B and pertussis (also known as whooping cough). Despite the Immunisation Schedule of the NIP in Malaysia being provided free of charge at all government healthcare facilities, the country has seen a rise in VPDs over the last few years.

At the recent launch of 'The Protector' website, GSK vaccines medical director Dr. Fonseka highlighted how vaccinations provide substantial benefits not only to individuals but also to society by bolstering community immunity. He pointed out that demographic changes and shifting disease burdens necessitate new vaccination strategies, especially for adults. To bridge the vaccination gap, 'The Protectors' website is aimed at educating Malaysians about VPDs, their transmission, symptoms, and health impacts. The website is part of GSK's broader mission to positively impact the health of 2.5 billion people over the next decade by supplying more than 20 vaccines to over 120 countries.

### **Arrival of MSD's new 15-valent pneumococcal vaccine, Vaxneuvance, in Malaysia**

Another pharmaceutical giant, Merck Sharp & Dohme (MSD), recently introduced its 15-valent pneumococcal conjugate vaccine, Vaxneuvance, in Malaysia, extending protection against additional serotypes 22F and 33F. Approved by the Drug Control Authority (DCA) for a broad age range, this vaccine promises to enhance the fight against invasive pneumococcal diseases, which are a significant health concern in Malaysia. Pneumococcal disease, a leading cause of various infections like pneumonia and meningitis, poses a serious threat, especially to young children and older adults.

The introduction of Vaxneuvance follows years of rigorous research and clinical trials, demonstrating robust immune responses against all 15 serotypes covered by the vaccine. At the media launch on April 25, Dr. Abdullahi Sheriff, managing director of MSD Singapore, Malaysia, and Brunei, underscored the importance of making this vaccine widely available in Malaysia, aligning with MSD's mission to save and improve lives. The significant prevalence of pneumonia in Malaysian children under five and its status as the second leading cause of death across all age groups further emphasize the need for such vaccines.

### First dengue vaccine launched in Malaysia

Another significant milestone in Malaysia's vaccine landscape is the introduction of Takeda Pharmaceuticals Malaysia's dengue tetravalent vaccine, Qdenga. Officially launched on June 11, the vaccine is designed to protect against all four dengue virus serotypes, addresses the pressing issue of dengue fever, which has seen a sharp increase in cases in recent years. Approved by the DCA, Qdenga requires two doses at a three-month interval and can be administered to individuals aged four and above. Takeda Malaysia & Singapore's country general manager, Dr. Lynette Moey, notes the heavy toll of dengue fever, particularly in Asia, and emphasizes the urgency of collective efforts to combat this health threat.

The impact of these vaccines is profound, not only in preventing diseases but also in reducing healthcare costs associated with treating severe infections. For instance, pneumococcal vaccination, which is part of Malaysia's National Immunisation Programme (NIP), helps prevent hospital admissions and intensive care stays for pneumonia, a common consequence of the disease.

Overall, the contributions of pharmaceutical companies like GSK, MSD, and Takeda are instrumental in enhancing Malaysia's vaccine landscape. Efforts from innovative biopharma companies in developing and distributing innovative vaccines, educating the public, and collaborating with healthcare providers ensure that Malaysians are better protected against a range of preventable diseases, thereby improving public health outcomes in Malaysia.

Prior to joining UiTM, Dr. Choon Wai Yee was an academic and health economics researcher at Monash University Malaysia. She sat on various advisory boards for pharmaceutical companies and served as the Scientific Advisor for the Pharmaceutical Association of Malaysia (PhAMA), focusing on Health Technology Assessment and Clinical Research committees. Her passion lies in improving patient access to potentially life-saving innovative medicines in Malaysia.



# Inside UiTM's Pharmacy Program Interview: Discovering Tomorrow's Pharmacists

By: Ms. Zakiah Mohd Noordin, Ms. Nik Aisyah Najwa Nik Mustaffa Shapri & Mdm. Syahida Fathiah Ahmad Kamal

The Faculty of Pharmacy at Universiti Teknologi MARA (UiTM) successfully conducted an interview session for prospective students of the Bachelor's in Pharmacy Program (PH240) from June 20 to 23, 2024. The event, held at the UiTM Selangor Puncak Alam campus, attracted over 1200 applicants eager to join the esteemed program.

From this large pool of applicants, 608 were selected to attend the interview. The session was meticulously designed to assess the academic capabilities, critical thinking skills, and personal attributes of each candidate. This year, the Faculty of Pharmacy continued to implement the Multi-Mini Interview (MMI) model, a novel approach to student selection in Malaysia's pharmacy education sector.



Developed by the faculty in 2016, the MMI model serves as a structured interview instrument. It assesses candidates across four major domains: communication skills, ethics and morale, critical thinking, and interest in pharmacy. Rubrics for evaluating these four attributes were thoroughly developed to ensure a fair and comprehensive assessment. The MMI involves six stations, four of which are active interview stations, while the remaining two are rest stations. Each active station assesses one of the four major domains. The MMI circuit allows for concise and objective interviewing of multiple candidates at the same time, minimising bias and ensuring a fair assessment of each candidate's non-cognitive attributes.

Dr. Hanis Hanum Zulkifly, Deputy Dean of Academic Affairs, emphasised, "We are looking for students who not only excel academically but also demonstrate a passion for the field of pharmacy and a commitment to community health." During the MMI process, candidates faced challenging problem-solving exercises and personal interviews, evaluated by expert faculty members. An impressive 91.9% of students who were called for interviews attended the session, reflecting the applicants' enthusiasm and commitment.



Professor Dato' Dr. Abu Bakar Abdul Majeed, Dean of the Faculty of Pharmacy, remarked, "We're highly impressed by the strong performance of the candidates during the interview session. It was also an insightful experience for all of us who were involved, as we had the opportunity to speak to the candidates on various topics. We also wish to thank the parents and guardians for their support." Applicants voiced their satisfaction with the MMI process, noting its fairness and thoroughness. The structured assessment allowed them to demonstrate their knowledge and passion for pharmacy, leaving them hopeful and excited about the possibility of joining UiTM.

The high number of aspiring applicants augurs well for Malaysia, which is facing a growing demand for healthcare professionals, including pharmacists. The nationwide shortage of healthcare workers has highlighted the need for enhanced training and education in healthcare-related fields, making programs like UiTM's Bachelor in Pharmacy (PH240) more crucial than ever.

The Bachelor in Pharmacy Program at UiTM is renowned for its comprehensive curriculum and strong emphasis on practical training. Graduates from this program are well-equipped to pursue various career paths in the pharmaceutical industry, healthcare settings, and research institutions, thus contributing significantly to Malaysia's healthcare needs.

The interview session marks an important step in the admissions process, demonstrating the Faculty of Pharmacy at UiTM's commitment to maintaining high standards of education and training. The faculty is excited to welcome the new cohort of future pharmacists, who will play a crucial role in addressing Malaysia's healthcare challenges, and will announce the selected 240 candidates in the coming weeks.

# Drug of Abuse Talk and Sharing Session

By: Mdm. Saliha Azlan

The Drug of Abuse Talk and Sharing Session, organised collaboratively by students of the Drug of Abuse (PHC665) course and the Society of Pharmacy Students (SOPHYS) at Universiti Teknologi MARA, took place on 5th June 2024 at Dewan Kuliah 7, FF4, Faculty of Pharmacy, UiTM Puncak Alam Campus. This academic initiative was designed to provide participants, primarily students enrolled in PHC665 (Drug of Abuse), with an immersive exploration into the complexities of addiction, emphasizing both theoretical knowledge and practical insights into recovery methodologies.

The programme was developed with the overarching goal of enhancing understanding among students regarding addiction's multifaceted nature, its profound impact on individuals and communities, and the therapeutic strategies employed in rehabilitation processes. Through interactive sessions and shared experiences, attendees gained a comprehensive view of addiction's biological, psychological, and social dimensions.



Central to the event were presentations by esteemed speakers from Narcotic Addiction Rehabilitation Center/"Pusat Pemulihan Penagihan Narkotik" (PUSPEN) Sg. Besi, including experienced counselors, Yang Mulia Raja Shahrul Hatta bin Raja Abdullah, Head of Rehabilitation Unit, and a rehabilitated ex-client who subsequently became a peer support at PUSPEN for the past 25 years, Mr. Azizi bin Mizan. Mr. Azizi courageously shared his personal journeys of addiction and recovery. Their narratives not only shed light on the challenges faced by those grappling with substance abuse but also underscored the transformative power of empathy and support networks in fostering recovery.

The session spanned two hours, during which participants engaged in meaningful discussions and dialogues aimed at deepening their empathy and understanding. The involvement of faculty members and pharmacy students further enriched the discourse, facilitating an exchange of perspectives and insights that transcended academic boundaries.

With an attendance of approximately 80 participants, comprising students and faculty members from the Faculty of Pharmacy, the programme successfully achieved its educational objectives while reinforcing the importance of community engagement in addressing societal issues such as addiction. The positive feedback received from the participants highlighted the programme's efficacy in broadening perspectives and equipping students with practical knowledge applicable to their future professional roles.



# Master the Art of Cell Culture! Workshop 2024

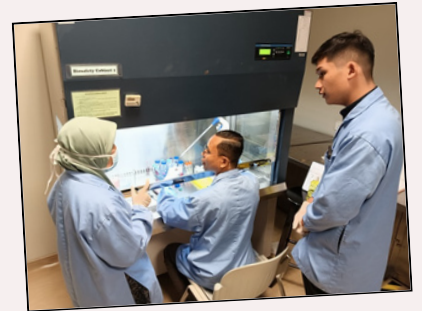
By: Mdm. Nur Fathiah binti Mohd Radzi

From May 28 to May 30, 2024, the "Master the Art of Cell Culture! Workshop 2024" was successfully conducted. This workshop was organized by the Tissue Culture Unit of the Faculty of Pharmacy, Universiti Teknologi MARA (UiTM) in collaboration with Biomarketing Services (M) Sdn Bhd. The workshop featured a select group of ten participants, comprising students from Universiti Sultan Zainal Abidin (UniSZA), Terengganu, and Universiti Malaysia Sarawak (UNIMAS), Sarawak, alongside staff and students from various UiTM faculties and a centre of excellence, namely the Faculty of Pharmacy, Medicine, Dentistry, and the Atta-ur-Rahman Institute for Natural Products Discovery (AuRIns) centre.

The workshop featured two comprehensive packages comprising lectures, forum sessions, and hands-on activities. Package A, focusing on the basic cell culture techniques and cell cytotoxicity, spanned the initial two days. Participants engaged in lectures and practical sessions that encompassed essential tissue culture topics, including aseptic techniques, media preparations, subculturing cells, counting cells, cell seeding, and the preparation of 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl-2H-tetrazolium bromide (MTT) assays to determine the IC<sub>50</sub> on HepG2 liver cancer cells. Additionally, the attendees also conducted data analysis using GraphPad Prism and Excel. Facilitated by research experts in the field, a special hybrid forum session addressing sources of contamination and challenges in cell culture work was conducted. This session provided valuable guidance for the participants, equipping them with the knowledge and strategies to minimize contamination risk and advance best practices in cell culture work.

Package B, offered on the third day, centred on the fundamental BD FACSVerse Flow Cytometry workshop. This session was led by Mr. Muhammad Zul'atfi bin Rahmat from Biomed Global providing participants with a comprehensive lecture and practical session on operating the BD FACSVerse Flow Cytometer and conducting the MDA-MB-231 cell Annexin V Apoptosis Assay.

The "Master the Art of Cell Culture! Workshop 2024" successfully achieved its goal of providing comprehensive training while fostering a collaborative atmosphere among students and professionals in the field of cell culture. The event not only enriched the participants' knowledge and skills but also provided an excellent opportunity for staff to upgrade their expertise and experience. The feedback from participants was overwhelmingly positive. Many highlighted the value of the hands-on sessions, which allowed immediate application of the knowledge gained. Overall, there is a promising continued advancement and excellence in cell culture practices.



# Kenal Ubat, Kekal Sihat (Know Your Medication, Stay Healthy) Diabetes: Bukan sekadar manis (Beyond Just Sweetness)

By: Mdm. Saliha Azlan

In a commendable effort to enhance health awareness and promote healthy living practices, the Faculty of Pharmacy from Universiti Teknologi MARA (UiTM), Puncak Alam campus, organised a community campaign titled "Kenal Ubat, Kekal Sihat" with the theme "Diabetes: Bukan sekadar manis." This significant event took place on May 18, 2024, at Dewan Tun Razak, Pekan Sabak Bernam. The campaign's primary goal was to raise awareness about the importance of understanding the medications used to manage diabetes mellitus (DM) and to provide comprehensive knowledge about this prevalent health condition. By increasing awareness and education, the campaign aimed to empower individuals to take proactive steps in managing their health, thereby enhancing their quality of life.

Diabetes mellitus is a growing global health challenge, with increasing prevalence in many communities. Effective management and prevention of DM requires individuals to be well-informed about their medications and overall health. We aim to educate the public on the critical aspects of DM management, stressing the importance of proper medication adherence and lifestyle modifications.

The program kicked off with the arrival and registration of guests, followed by an informative session where a pharmacist from Tanjung Karang Hospital, Miss Najwa Anaqi binti Muhammad Sharif delivered a talk on diabetes. The session covered various topics, including the nature of diabetes and tips for blood sugar management.

Following the talk, there were a series of health screenings and educational booths available. The health screenings including measuring blood pressure, testing blood sugar level (provided by Big Pharmacy), calculating body mass index (BMI) and analysing body composition, evaluating bone mass composition, and administering a diabetes knowledge questionnaire for individuals with diabetes. The educational booths provided information on medication knowledge specific to diabetes mellitus, the 5R principles of medication use (the right patient, the right drug, the right time, the right dose, and the right route), proper handling of medications, awareness of adverse effects, and the importance of medication compliance. In addition, there were interactive activities such as DIY soap making led by Mrs. Nor Zaleha Ishak and sand art for children, making the event engaging for all ages.

Various community stakeholders supported this initiative, including the local population of Sabak Bernam, Sabak Bernam District Council, Society of Pharmacy Students (SOPHYS), Bachelor of Pharmacy students from UiTM, faculty members, and Big Pharmacy Healthcare Sdn. Bhd. Additionally, two pharmacy students from Andalas University attended the event.

“Kenal Ubat, Kekal Sihat” was more than just a campaign; it was a movement towards a healthier, more informed community. By understanding the critical aspects of diabetes management and medication, individuals can lead healthier lives and mitigate the risks associated with this chronic condition. This event was a significant step towards making Sabak Bernam a beacon of health awareness and proactive living.



# Faculty of Pharmacy Excellence Appreciation Ceremony with the Dean of the Faculty

By: Dr. Mohd Nadzri Mohd Najib & Ms. Nurul Alyaa binti Ibrahim

On May 15, 2024, the Faculty of Pharmacy at UiTM Bertam held a remarkable Excellence Appreciation Ceremony, organised by the Society of Pharmacy Students (SOPHYS). This event aimed to celebrate academic excellence among students and to boost their motivation for the upcoming final examination for this semester.

The events began with student registration and the arrival of faculty members, including lecturers and laboratory staff. The official proceedings commenced with the entrance of Professor Dato' Dr. Abu Bakar Abdul Majeed, the Dean of the Faculty of Pharmacy, into the hall. The event started with an opening address from the Head of the Diploma Pharmacy program, Dr Mohd Nadzri Mohd Najib highlighting the faculty's achievements and progress. This was followed by a speech by the Dean, who officiated the ceremony. Prof Dato' Dr. Abu Bakar's speech emphasised the importance of academic excellence as well as the faculty's role in developing future pharmacy leaders. His words resonated with both students and faculty, emphasising the value of dedication and perseverance.

The highlight of the event was the award ceremony. The Dean's Awards were presented to students from semesters 2 and 4 for the 20234 semester exams. In addition, deserving semester 4 students received the "Vice Chancellor Award (ANC) on Track" award, which recognised their consistent academic achievements by maintaining a place in the Dean's List in the past exams. The "Star of the Batch" award was introduced in this ceremony, to recognise the outstanding achievements of top 5 students from each batch. The 10 highlighted students are hoped to inspire and guide their fellow colleagues in their aspirations for excellence.

A video montage highlighting the faculty's achievements and activities was shown. Towards the end of the event, a town hall session was conducted, during which students had the opportunity to ask the Dean a variety of questions. The event concluded with a group photo session to capture the moments of the day. In general, the event was successful and remarkable, as it celebrated the students' accomplishments and emphasising the faculty's dedication to academic excellence.



# University Hasanuddin (UNHAS) Collaborates with UiTM for Post Graduate Clinical Pharmacy and Pharmacy Practice Experience

By: Dr. Norkasih Ibrahim

From May 8th to 10th, 2024, the Pharmacy Faculty from the University of Hasanuddin (UNHAS) Indonesia and Universiti Teknologi MARA (UiTM) Malaysia continued their collaborative experience with the program hosted at the UiTM Puncak Alam Campus. The purpose of this academic visit was to strengthen the clinical pharmacy experience for UNHAS postgraduate students. During this visit, UNHAS students had the opportunity to immerse themselves in the Advance Clinical Pharmacy course (PHP733) and acquire significant insights into the daily operations of hospital pharmacy services at both locations: the faculty buildings and Hospital Al-Sultan Abdullah (HASA), UiTM Puncak Alam, Selangor. The UNHAS delegation was led by the Vice Dean of Partnership, Research, and Innovation Faculty of Pharmacy, Professor Yulia Yusrini Djabir and joined by five academic staff and nine postgraduate students.



On the first day, they were greeted warmly by Dr. Norkasih Ibrahim, Deputy Dean of Industry, Community, and Alumni Network (ICAN), Dr. Janattul Ain Jamal on behalf of the Department of Clinical Pharmacy and Pharmacy Practice (PPCP), Mr. Muhammad Hafidz Abd Satar from the HASA Corporate Office and Mr. Norazmi Badrulzaman, Head of Pharmacy Department HASA. The first day of the visit was based in HASA for the Clinical Pathology Conference, a valuable hospital tour of the pharmacy and other key clinical departments, and case discussions with UiTM MPharm (Clinical) students.



The remaining days of the visit were hosted by DoCPP at the faculty, led by Madam Ezlina Usir for activities that included a tour of the MAKERLAB at Perpustakaan Tun Abdul Razak Puncak Alam, a market survey discussion with Alpro Pharmacy Malaysia on community pharmacy practice between Malaysia and Indonesia, clinical pharmacy collaborative research update meeting, clinical case presentations and site seeing in Shah Alam. On the final day, Professor Dato' Dr. Abu Bakar Abdul Majeed greeted Professor Marianti A. Manggau and all guests at the faculty's Hari Raya luncheon, where the deans discussed future collaboration between the two faculties. The delegates thanked HASA for their warm hospitality. They also thanked all faculty members especially PPCP for the friendship and their impressive clinical teaching.

Overall, the UNHAS visit to UiTM for the clinical pharmacy experience allows students and faculty members to share the best education approach in clinical pharmacy while also fostering cultural exchange and research networking opportunities. It is hoped that such collaborations will continue, enriching the teaching and learning experiences of future pharmacy professionals in both nations.





# Global Education in Practice: Indonesian Students Explore the Faculty of Pharmacy at UiTM Bertam

By: Ms. Nurul Alyaa binti Ibrahim

On May 3, 2024, the Faculty of Pharmacy at UiTM Bertam welcomed four international students from Universitas Muhammadiyah Malang, Indonesia, for a 25-day educational exchange program. These students are pursuing Bachelor of Pharmacy degrees, with two of them in Semester 6, Year 3, and the remaining two in Semester 4, Year 2. The main purpose of this attachment is to expose the students with pharmacy education system in Malaysia and the facilities available at the faculty. Given the different educational backgrounds of our students (UiTM Bertam offers a Diploma in Pharmacy), it is important for the faculty to provide a comprehensive learning experience for these visiting students.



During their time with the faculty, the students fully immersed themselves in academic life by attending lectures, tutorials, and laboratory sessions as scheduled by the lecturer in charge, Ms. Alyaa. The lecture sessions covered a wide range of pharmacy-related topics, including pharmacology and hospital pharmacy. The students enjoyed every lecture session as it familiarised them with Malaysia's pharmacy syllabus and provided insight into hospital settings. One of the most exciting activities for the students was the extensive hands-on laboratory sessions. They actively participated in practical sessions, including the aseptic dispensing lab and hospital pharmacy lab. These two labs not only allowed them to apply their theoretical knowledge but also helped them develop professional communication skills, essential for their future career as pharmacists.

Attending all academic activities provided the Indonesian students with a wealth of new knowledge and insights into pharmacy education in Malaysia. This integration is critical because it allows for the exchange of various ideas and practices, ultimately improving the overall educational experience. The collaborative environment encourages students to share their knowledge and benefit from one another's cultural and academic backgrounds. Lastly, the Faculty of Pharmacy at UiTM Bertam hopes that these students will gain valuable insights from their attachment and bring back new and diverse perspectives on pharmacy education to their home institution in Indonesia.

# Pharmily Enrichment Programme 2024

By: Ms. Dg Siti Nur Anisah Gani & Dr. Gurmeet Kaur Surindar Singh

The Pharmily Enrichment Programme 2024, a collaborative initiative by the two student societies from the Faculty of Pharmacy, UiTM Puncak Alam, namely the Sekretariat Mahasiswa Fakulti (SMF) and the Society of Pharmacy Students (SOPHYS), unfolded over April 27th, 28th, and May 15th, with resounding success. The program aimed to provide final semester students (RX19) of the Faculty of Pharmacy with invaluable exposure to diverse career opportunities within the pharmacy field and insights into life after completing their pharmacy education.

The program commenced with a series of six informative talks, including a dedicated briefing on the Final Year Project (FYP) for RX21 students, who will be embarking on their projects the upcoming semester. A pivotal highlight of the program was the culminating forum, featuring four alumni from the hospital, community, and industrial sector, Mr. Hamim Aiman Bin Kamaruzaman, Mr. Muhammad Farhan Bin Masdar, Mohamad Azam Iskandar Zainal Abidin, and Mr. Hazwan Afif. These distinguished alumni generously shared their valuable tips and insights for the future benefit of RX19 students. The active participation and inquisitive engagement of the participants underscored their passion for learning and their eagerness to glean knowledge from the seasoned professionals.

In a remarkable demonstration of social responsibility, the program also encompassed a blood donation drive at Surau Ibnu Sina. The last day of the program featured a mock interview session, created to prepare RX19 students for impending job interviews. Representatives from four prominent organizations, Klinik Kesihatan Rantau, Seremban, Pfizer Malaysia Sdn. Bhd., GoodScience Sdn. Bhd., and KPJ Healthcare, were invited to conduct the interviews, providing a real-life simulation of the job interview experience. This immersive session, though undoubtedly nerve-racking, proved to be an invaluable preparatory exercise, equipping the participants with practical skills and confidence essential for their professional journey. Overall, the Pharmily Enrichment Programme 2024 successfully equipped pharmacy students with essential knowledge and skills, bridging the gap between academic life and professional careers.



# Unlocking the Path to PRP Academia: Your Gateway to a Bright Career!

By: Dr. Nur Wahida Zulkifli

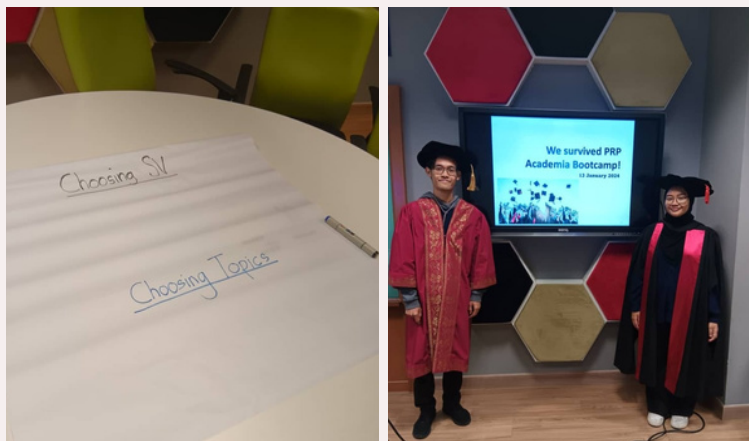
When discussing the provisionally registered pharmacist (PRP) training sites among final-year undergraduate pharmacy students, most opt for hospital or community pharmacy. Only a few choose academia as their training site. This reluctance stems from the perception that academia is a challenging path with limited career opportunities.

What are the real benefits of choosing PRP academia? It presents a fantastic opportunity for PRP as it accelerates their journey to obtaining a master's degree while completing their compulsory one-year attachment. Furthermore, PRP academia also provides a platform for enhancing teaching, presentation, and research skills, which are essential for effective communication and knowledge dissemination. The invaluable benefit is the sense of fulfillment derived from making a positive impact on students' lives, advancing knowledge, and contributing to betterment of society.

If you're genuinely interested in pursuing PRP academia, you need to take certain steps. Firstly, choose a field you're passionate about, as research may span one to two years, requiring dedication and enthusiasm. Next, select the right supervisor and navigate your journey. As a postgraduate researcher, independence is the key, and you must be proactive in your learning. Your supervisor becomes your ally, as you'll be in constant communication for an extended period. Finally, plan your career trajectory. A master's degree adds value to your career prospects that sets you apart from your peers. This qualification opens up opportunities in various sectors such as private hospitals, community pharmacy, overseas employment, industrial pharmaceutical companies, and academia.

To gain insight into the requirements for successfully completing the PRP academia program, you can visit the official website of the Pharmaceutical Service Division and review the PRP logbook (Academia). This logbook will provide you with an idea of the criteria that must be fulfilled. The program consists of 40 weeks of research and development (R&D) training modules, as well as 12 weeks of fundamental pharmacy practice. By examining the PRP logbook, you will gain an understanding of the requirements you need to meet. It is helpful to think of this project as similar to your undergraduate final year project but with added level of depth and complexity, making it comparable to a master's project.

Don't let fear hold you back! Embrace the world of academia, and you'll discover its hidden beauty."



\* Disclaimer: The pictures are from the PRP Bootcamp, where students were briefed about the PRP academia roadmap if they choose PRP academia for their training

# Public Health Campaign 2024: PharmaAssist

By: Ms. Fatin Izyani binti Azizi & Dr. Gurmeet Kaur Surindar Singh

In a concerted effort to raise awareness and promote safe medication management within the community, a Public Health Campaign 2024 was organised from May 17 to 19. This campaign embarked on a mission to raise awareness in the community regarding safe medication management, with a particular focus on involving students in this crucial initiative. Collaboratively organised by the Society of Pharmacy Students (SOPHYS) 2023/2024, the Sekretariat Mahasiswa Fakultas (SMF) 2023/2024, Majlis Permuafakatan Penduduk Saujana Utama (MPPSU) and the Malaysian Pharmacy Students' Association (MyPSA), this multifaceted program spanned three impactful days, leaving an impactful mark on all participants.

The first day of the event commenced with poster competition and quiz, both designed around the theme of safe medication management. The active participation in these activities underscored the collective commitment of students and the community to understanding and promoting proper medication management. On the second day of the event, the SOPHYS Instagram story announced the winners for both activities.

The program's pinnacle unfolded on May 19, 2024, at Dewan MPKS, Saujana Utama, where a vibrant array of booths and activities awaited eager participants. Notable highlights included a health screening booth and a medication disposal center provided by CARiNG Pharmacy, a compounding booth led by pharmacy students, and an enriching talk by a lecturer, all aimed at imparting valuable insights and knowledge to the attendees.

The presence of esteemed guests, including YB. Dato' Dr. Ab. Halim bin Tamuri, the Assemblyman of Paya Jaras, and Prof. Dato. Dr. Abu Bakar Abdul Majeed, the Dean of the Faculty of Pharmacy UiTM, further elevated the significance of the event. The program's comprehensive approach, encompassing educational activities, interactive sessions, and community engagement, exemplified a holistic commitment to public health. The multifaceted nature of the activities, including a color contest, a post-talk quiz, and stimulating talk by lecturers, ensured a diverse and enriching experience for all participants. The availability of a lucky draw further added an element of excitement, enhancing the overall engagement and impact of the program. The successful culmination of the Public Health Campaign 2024 not only equipped the community and students with invaluable knowledge, but also provided a platform for future pharmacists to experience the profound impact of serving the community.



# Upholding Ethical Standards: The Crucial Role of Pharmacists in Drug Selection, Decision-Making, and Procurement Processes

By: Mr. Mohd Shah Rezan bin Hamzah (RPh 11171), B.Pharm (Hons), M.Pharm (Pharmacy Practice) Malaysia

Introducing a new drug into hospital clinical practice can certainly be overwhelming. This process is typically managed by a Pharmacy and Therapeutic Committee (PTC). The PTC formulates policies regarding the evaluation, selection, monitoring, diagnosis, and therapeutic application of medications, medication-related products, and medication delivery devices [1]. Additionally, the PTC participates in performance improvement activities related to the procurement, prescribing, dispensing, administering, and monitoring of medications [2]. Comprised of physicians, pharmacists, nurses, and other health professionals involved in the medication use process, the PTC serves as a body that advises the medical staff and the organisation's administration on policies for the safe and effective use of drugs [3].

Evaluating medications for inclusion in the formulary is one of the responsibilities of the PTC [1]. The evaluation process should be structured and evidence-based, following a clear and comprehensive approach. The committee should receive impartial information that thoroughly reviews and analyzes the available evidence in scientific literature. This evaluation process should promote unbiased consideration of clinical and care delivery information, while facilitating effective communication. The ultimate goal is to contribute to positive patient outcomes, and ensure the safe and efficient ordering, dispensing, administration, and monitoring of medications. The decisions made by the PTC should aim to enhance patient care outcomes throughout the entire continuum of care, including access to medications after discharge.

The PTC's main responsibility is to create an evidence-based list of approved medications and related products for use within the organization. They must also regularly update and maintain this formulary while promoting the rational, clinically appropriate, safe, and cost-effective utilization of medications through guidelines, protocols, and other means. The committee continuously and impartially assesses, evaluates, and chooses medications to add or remove from the formulary. The formulary itself is based on the most reliable clinical evidence available and incorporates the current professional judgment of medical staff, pharmacists, and other healthcare experts. When deciding which items to include, the committee should objectively evaluate their economic, clinical, and humanistic outcomes and avoid making decisions based solely on financial considerations [4]. When considering a medication for inclusion in the formulary, the committee should identify any potential safety issues and ensure that these concerns are appropriately addressed if the medication is added to the formulary or used within the health system.

Other than that, the PTC should aim to reduce unnecessary duplication of drugs with similar characteristics, such as drug type, entity, or product. By optimizing the selection of drug entities and products offered by the pharmacy, significant benefits can be achieved in terms of patient care and finances. These benefits are further enhanced by utilizing generic equivalents, which are drug products that the United States Food and Drug Administration (US FDA) considers identical or equivalent and therapeutic equivalents, which are drug products that may differ in composition or basic drug entity but are deemed to have similar pharmacological and therapeutic effects [5,6]. It is the responsibility of the PTC to establish policies and procedures that regulate the dispensing of generic and therapeutic equivalents [7].

Even though it may sound simple, introducing a new drug is deceptively challenging. The committee must ensure that the procurement and drug selection processes are cost-effective, transparent, and ethical. It appears that the decision-making process is vulnerable to unethical practices, so it is imperative to instill trustworthiness, fairness, equity, and sincerity in all personnel to maintain system efficiency, thereby preventing bribery and pilferage. Undoubtedly, the inclusion of the new drug in the drug formulary will benefit hospital clinical practice. It will enhance access and availability to a core list of well-proven and cost-effective medicines, outline the necessary steps for physicians before prescribing specific medications, and also serve as a cost-saving measure [8]. Yet, the drug selection process is at risk of unethical practices if moral values and ethical principles that serve as a guide to prevent unethical behavior are not made a priority by the committee.

A Framework for Good Governance in the Public Pharmaceutical Sector, which was published by the Pharmaceutical Service Division, Ministry of Health, Malaysia, highlighted that conflict of interest (COI) has become the driving force behind unethical practices. This is consistent with the previous literature, which found that the influence and financial relationships with industry on decision-making within PTC have been widely reported [9,10]. COI occurs when the professional judgment of an individual or the primary mission of an institution is unreasonably influenced by secondary interests, such as personal or financial gain [11]. COI within the PTC poses a risk to the objective of making cost-effective decisions. With a limited range of drugs being considered, decisions may be influenced by the vested interests of the involved parties rather than being solely evidence-based. Hence, COI can influence the selection of medications to be included in formularies. Therefore, individuals or organizations involved in decision-making committees should be mandated to establish a code of conduct that outlines their responsibilities through selflessness, integrity, objectivity, accountability, openness, honesty, and leadership.

When a request is made by a consultant, specialist, or pharmacist to add a new drug, the requester should disclose their affiliation or relationship with a drug manufacturer to ensure that the PTC can assess the request's objectivity [12]. At this stage, the committee is vulnerable to collusion and manipulation from pharmaceutical companies. Pharmaceutical companies are liable for selecting drugs and creating the Proforma for doctors without considering factors such as budget, drug necessity, morbidity, and disease burden [13]. In addition to that, sales representatives will approach the requesters with freely given samples of drugs, resulting in indiscriminate use. Bribery actions may also be accompanied by incentives, gifts, and sponsorships such as holiday trips, conferences, or seminars. The company will aggressively promote the products as part of their marketing strategies to achieve sales targets.

While awaiting international regulatory approval for the new drugs, which may be delayed, the applications will undergo a thorough review as part of the PTC decision-making process. This review will assess the drug's efficacy, safety, and cost-effectiveness, and formulate recommendations. At this stage, the committee is susceptible to bribery, collusion, and manipulation. Sales representatives may exert pressure to expedite the process, influence the PTC's final decision, and aggressively promote the drug through sample distribution. COI can result in biased acceptance of non-evidence-based literature to support products, along with the possibility of fabricating or omitting clinical data on the product's safety, quality, and efficacy. These actions can lead to an inappropriate selection process. The decision-making and drug selection process by the PTC should not be influenced by pharmaceutical companies with vested interests, favouritism, bias towards a particular company, political or management pressure, or monetary bribes. Ethically, the committee's decision-making must be guided by factors such as disease prevalence, sufficient evidence of efficacy and safety, comparative cost-effectiveness within the same therapeutic category, consideration of available treatment facilities, personnel experience, and alignment with evidence-based recommendations.

Procurement can give rise to various ethical concerns, such as bribery, kickbacks, and COI [13]. These matters hold significant implications, as they can foster corruption and result in severe consequences. From an ethical standpoint, procurement should adhere to Treasury instructions, be guided by end-user and drug pattern usage, prioritize the availability of operating funding, and obtain the "best value for money." At this stage, the PTC or drug purchasers face vulnerability to pressure from pharmaceutical sales representatives, who may prioritize expediting purchases without considering drug usage or movement patterns in the hospital. Their intention may be driven by meeting monthly or quarterly sales targets rather than the hospital's best interests. Ethically, procurement should only involve products that are approved by the US FDA, registered and listed in a national or institutional formulary, and free from any influence of COIs, pressure, bribery, collusion, or manipulation by pharmaceutical companies.

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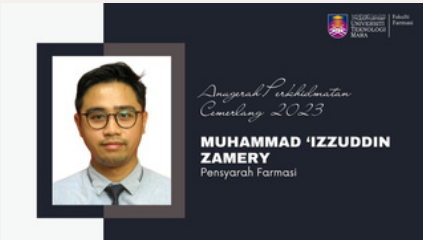
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**ASSOCIATE PROFESSOR. DR. MATHUMALAR**  
**LOGANATHAN**  
**PROGRAM COORDINATOR**  
**BACHELOR OF PHARMACY (HONS.) PH240**  
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5-Methylcoumarin-4 $\beta$ -glucoside mitigated colon tumor progression in mice with AOM/DSS-induced colon carcinogenesis

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Chitosan-Based Nanocarriers for Pulmonary and Intranasal Drug Delivery Systems: A Comprehensive Overview of their Applications

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**Assoc. Prof. Dr. Shariza  
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**Q3: WOS**

The Impact of Pharmacist Medication Reviews on Geriatric Patients: A Scoping Review

<https://doi.org/10.4082/kjfm.23.0220>

**SCOPUS**

Assessing Knowledge and First-Aid Practice Scores of Caregivers of Epilepsy Patients Before and After an Educational Programme in the Kingdom of Saudi Arabia

[DOI: 10.2174/0118749445252851231228055621](https://doi.org/10.2174/0118749445252851231228055621)

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**Assoc. Prof. Dr. Choo Chee Yan**



SCOPUS

Baekkea frutescens L. Promotes wound healing by upregulating expression of TGF- $\beta$ , IL-1  $\beta$ , VEGF and MMP-2

<https://doi.org/10.1016/j.jsps.2024.102110>

**Dr. Hasseri Halim**

# UPCOMING EVENTS

## 7TH INTERNATIONAL CONFERENCE ON ADVANCE PHARMACY AND PHARMACEUTICAL SCIENCES (ICAPPS)

**ICAPPS 2024**  
The 7th International Conference on Advance Pharmacy and Pharmaceutical Sciences (ICAPPS) in conjunction with 7th International Conference on Pharmaceutical, Nutraceutical and Cosmeceutical Sciences (IPNaCS)

**"Synergies in Digital Healthcare: Bridging Pharmacy Research and Patient Wellness"**

**Keynote Speaker**  
Dr. apt. Nika Andriana, M.Pharm., MAIS -  
HL Head of The Indonesian Food and Drug Authority Republic of Indonesia (BPOM RI)  
\*under confirmation

**Plenary Speakers**

- Dr. Ruth Brewer - Department of Pharmacoepidemiology and Medication Safety, University College London (UCL), London, United Kingdom
- Prof. Dr. Haslina Emanan Harti - Department of Clinical Pharmacy & Pharmacy Practice, Faculty of Pharmacy, Universiti Malaysia, Malaysia
- Prof. Hyoungil Jung - Department of Biotechnology, Division of Life Sciences, Seoul University, South Korea
- Dr. Yukihiko Watanabe - Department of Experimental Pathology, University of Tsukuba, Japan
- Prof. Dr. Mawati Yuselvia Putri, M.Si. - Research Center for Vaccine and Drugs, Research Organization of Health, National Research and Innovation Agency (BRIN) / Faculty of Pharmacy Universitas Indonesia
- Prof. (H.C.UA), Dr. Carina Citra Dewi Joo, B.Sc., M.Sc., Ph.D. - Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia
- Prof. Kouichi Morita M.D., Ph.D. - Depma Infectious Diseases Research Alliance (DIDA) - Vaccine Research and Development Center (VRC) Professor, Institute of Tropical Medicine, Nagasaki University, Japan
- Prof. Mitsunori Uesugi, Ph.D. - Institute for Integrated Cell-Matrix Sciences (i-iCeMS) - Institute for Chemical Research (ICR), Kyoto University, Japan
- Prof. Dr. apt. Hayun, M.Si. - Laboratory of Pharmaco-toxicological Chemistry and Biotoxicity, Faculty of Pharmacy, Universitas Indonesia
- Prof. Mitsuhiro Yoshida - Chemical Genomics Research Group, RIKEN Center for Sustainable Resource Science, Japan
- Prof. Dr. Kalavathy Kamasamy - Universiti Teknologi MABA (UTM), Selangor, Malaysia

**Invited Speakers**

- Dr. apt. Nadia Farhanah Syahran, M.Si., Ph.D. - Laboratory of Clinical Pharmacy, Faculty of Pharmacy Universitas Indonesia
- Dr. Taro Egami - Life Science Center for Survival Dynamics, Tsukuba Advanced Research Alliance (TARA) University of Tsukuba, Japan
- Research on Biotechnology, Ph.D., R.Ph. - Department of Pharmaceutics and Industrial Pharmacy, Faculty of Pharmaceutical Sciences, Chulalongkorn University, Thailand
- Dr. apt. Nur Hafidha Nur Hafidha, M.Si., Ph.D. - Universiti Teknologi MABA (UTM), Selangor, Malaysia
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- Dr. apt. Agus Nur Husein, M.Si. - Department of Pharmaceutical Analysis and Medicinal Chemistry, Faculty of Pharmacy, Padjadjaran University, Bandung, Indonesia
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**ICAPPS 2024**  
The 7th International Conference on Advance Pharmacy and Pharmaceutical Sciences (ICAPPS) in conjunction with 7th International Conference on Pharmaceutical, Nutraceutical and Cosmeceutical Sciences (IPNaCS)

**"Synergies in Digital Healthcare: Bridging Pharmacy Research and Patient Wellness"**

**Date**  
October 31st - November 2nd, 2024

**Venue**  
The Alana Hotel, Yogyakarta

**Organized by**  
Faculty of Pharmacy Universitas Indonesia

**Supported by**  
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**Program**

**Pre-conference (October 31st 2024)**

- Mini seminar : Asian Chemical Biology Initiative (ACBI) - Sponsored Class
- Coaching Clinic On Scientific Article Writing
- Workshop
  - a. Extraction & Separation Techniques
  - b. Management of Impurities in Pharmaceuticals
  - c. SP in vivo Assay of Cosmetics
  - d. Registration of Herbal Medicine to BPOM

**Conference Program**  
Big Theme: **"Synergies in Digital Healthcare: Bridging Pharmacy Research and Patient Wellness"**

**Plenary Speaker & Invited Speaker**

**Oral and Poster Presentation Session**

**Conference Topics**

- Digital Health and Patient Wellbeing
- Natural Products and Wellness
- Drug Discovery
- Drug Delivery and Targeting
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- Pharmaceutical Chemistry
- Cosmetics
- Nutraceuticals

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1 Day Trip	
Student	Non Student
IDR 2.800.000   USD 280	IDR 4.200.000   USD 420
Bundling Pre Conference + Conference	
Student	Non Student
IDR 1.800.000   USD 180	IDR 3.200.000   USD 320
Gala Dinner Only	
Student	Non Student
IDR 300.000   USD 30	IDR 1.000.000   USD 100

**Important Date**

**ABSTRACT SUBMISSION (REGISTRATION)**

- Up to July 15th 2024 (Early Bird)
- July 16th to August 31st 2024 (Late)

**Registration Fee**

- Before July 15th 2024

**Contact Us:**  
Health Science Cluster Building A 3rd Floor, Faculty of Pharmacy, Universitas Indonesia, Depok, West Java, Indonesia, 16424.  
icapps@farmasi.ui.ac.id | @fui\_official | icapps.ui.ac.id

Register now at [icapps.ui.ac.id](https://icapps.ui.ac.id)

Contact Us

Email : [icapps@farmasi.ui.ac.id](mailto:icapps@farmasi.ui.ac.id)

Website: [icapps.ui.ac.id](https://icapps.ui.ac.id)

Social Media: [fui\\_official](https://www.instagram.com/fui_official)

# UPCOMING EVENTS

25 UNIVERSITI TEKNOLOGI MARA | Fakulti Farmasi

## ASEPTIC DISPENSING COURSE 2024 (ADC-UITM 2024)

- Recent updates
- Hands-on training on aseptic techniques
- Open to all healthcare providers (doctors, pharmacists, dietitians, nurses, others), academicians and students

**3 AUGUST 2024**

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## ADC-UITM 2024 PROGRAM HIGHLIGHTS

**Basics of Nutrition Support in Adults  
Parenteral Nutrition in Adults (Surgical) - When and Why**

**DATO' DR. TIKFU GEE**  
General and Bariatric Surgeon,  
Prince Court's Medical Centre &  
Sunway Medical Centre

**Nutrition Screening & Assessment (surgical)  
Enteral Nutrition - Feeding & Complication**

**CEAPN MAZUIN KAMARUL ZAMAN**  
Lecturer (Dietitian) Faculty of Health Sciences,  
UiTM Selangor Branch, Puncak Alam Campus

**Parenteral Nutritions : Compositions and Calculations**

**PN NUR AIN BINTI ROSLI AHMAD ABDUL**  
Pharmacist UFS4, Hospital Tengku Ampuan Rahimah

**PN Administration - Infusion devices, Filters & Pumps  
PN Aseptic manipulations**

**MR LEE V'JOON**  
Pharmacist UFS4, Hospital Sungai Buloh

**PN Safety: Stability & Compatibility (Online)**

**DR. ALLAN COSSLETT**  
The Welsh School of Pharmacy and Pharmaceutical Sciences,  
Cardiff University, United Kingdom

## ASEPTIC DISPENSING COURSE 2024 (FOR ALL HEALTHCARE PROFESSIONALS AND STUDENTS)

Date: 3 August 2024 (Saturday)

Time: 8.00 am - 5.30 pm

Venue: Faculty of Pharmacy, UiTM Selangor Branch, Puncak Alam Campus, Selangor, Malaysia

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By: Madam Nur Sabiha Md Hussin

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