Institute of Medical Molecular Biotechnology Newsletter

ISSUE 56 (JUN-SEPT 2025)

Editor's Note

Greetings from the Institute of Medical Molecular Biotechnology (IMMB)!

We are excited to share this latest issue of our newsletter, now with a new format. Previously published monthly, the IMMB Newsletter will now be released quarterly, one issue every three months, allowing us to bring you more comprehensive updates and engaging content.

In this edition, you will find highlights of recent talks, workshops, and events organized by IMMB, along with achievements by our institute and students. These stories showcase the dedication and excellence within our community.

We are also introducing new features: Staff Profile Highlight and Postgraduate Diary. This sections provide a platform for our staff and postgraduate students to share their research journey, experiences, and insights. We believe these stories will foster collaboration and inspire others in their academic pursuits.

We warmly welcome submissions from students and staff whether it's an article, research highlight, or personal reflection. Your contributions will help make this newsletter a true reflection of our vibrant IMMB family.

Thank you for your continued support, and we look forward to keeping you informed and connected through each quarterly issue.

Happy Reading!

Assoc. Prof. Dr. Wang Seok Mui
IMMB, Director

More To Explore:

IMMB Research Talks: Connecting Minds, Sharing Knowledge

At IMMB, we believe that great ideas emerge when knowledge is shared. That's why we regularly host Research Talks featuring speakers from UiTM, other academic institutions, industry partners, and international collaborators. These sessions provide a valuable platform for exchanging insights, fostering interdisciplinary collaborations, and building bridges across local and global research communities.

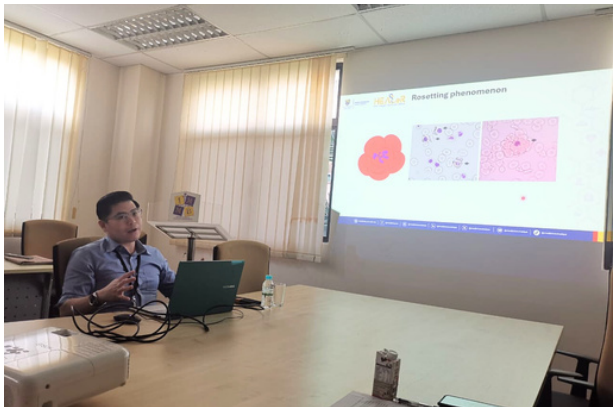
We also run Journal Club sessions for our postgraduate students, an excellent opportunity to present their work, sharpen public speaking skills, and engage in meaningful academic discussions.

Between late May and September 2025, we had the privilege of hosting three research talks and four technical talks, typically held during the Wednesday noon hour. Some sessions were conducted in hybrid mode, and recordings are available on IMMB's YouTube channel: https://www.youtube.com/@immbmedic1048.

HIGHLIGHTS OF RESEARCH TALKS

Dr. Lee Wenn Chyau

On 28 May 2025, Dr. Lee Wenn Chyau, Senior Lecturer at the Department of Parasitology, Faculty of Medicine, Universiti Malaya, delivered an insightful talk titled "The Sticky Business of Plasmodium – A Dive into Malaria Immuno-Pathobiology". The session explored the intricate mechanisms of malaria pathogenesis, focusing on how Plasmodium parasites interact with the host immune system. Dr. Lee highlighted recent discoveries on parasite adhesion and immune evasion strategies, emphasizing their role in severe malaria cases. He also discussed the phenomenon of cytoadherence and its implications for disease severity, illustrating how these molecular interactions could inform the development of improved therapeutic interventions and vaccines. The talk provided a deeper understanding of malaria biology and opened discussions on innovative approaches to combat this global health challenge.



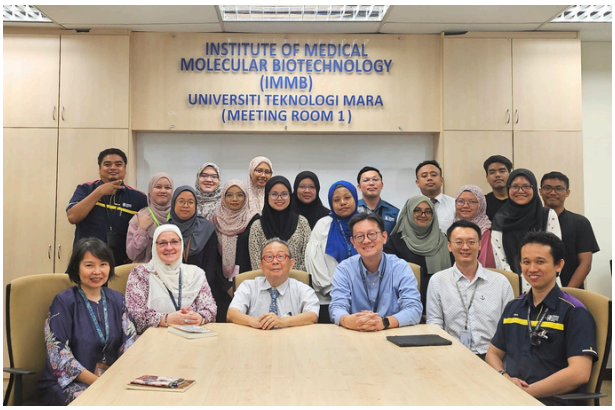
Dr. Lee Wenn Chyau sharing insights on malaria immuno-pathobiology during his talk.

Emeritus Prof. Dr. Ng Kwan Hoong

On 4 June 2025, Prof. Dr. Ng Kwan Hoong, 2020 Merdeka Award Recipient and Emeritus Professor at the Department of Biomedical Imaging, Universiti Malaya, presented a thought-provoking talk titled "Advancing Medical Science Through Interdisciplinary Research". Prof. Ng emphasized the critical role of collaboration across disciplines in driving innovation and solving complex healthcare challenges. He shared inspiring success stories from imaging research, demonstrating how integrating physics, engineering, and clinical expertise has led to breakthroughs

in diagnostic technologies. The talk also addressed common barriers to interdisciplinary work, such as communication gaps and resource limitations, and offered practical strategies to overcome them. Prof. Ng encouraged researchers to embrace cross-disciplinary approaches, highlighting that the future of medical science lies in synergy between diverse fields.

Emeritus Prof. Ng Kwan Hoong pictured with his Merdeka Award recognition poster. celebrating his outstanding contributions to medical science.

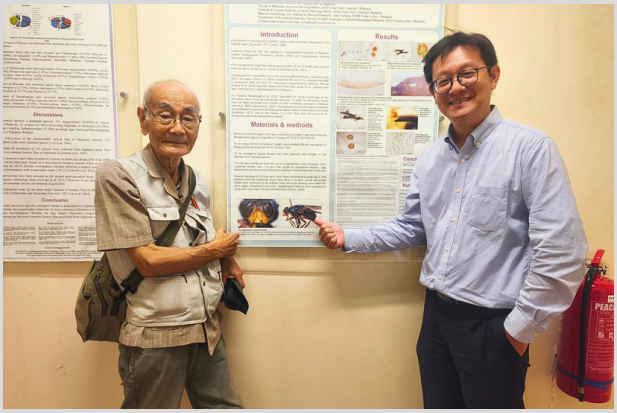


Emeritus Prof. Ng Kwan Hoong with participants after his inspiring talk on advancing medical science through interdisciplinary research at IMMB.

Dr. Hiromu Kurahashi

Dr. Hiromu Kurahashi delivering his hybrid talk.

On 26 August 2025, Dr. Hiromu Kurahashi, Head of the International Department of Dipterology in Tokyo, Japan, delivered a fascinating talk titled “Let’s Know How to Catch, Identify and Study the Carrion Flies of Medical and Forensic Importance”. Dr. Kurahashi introduced practical techniques for collecting and identifying carrion flies, which play vital roles in forensic investigations and disease transmission. He explained morphological identification keys and shared ecological insights into these species. The session included real-world case studies where carrion flies were used to estimate post-mortem intervals, underscoring their importance in forensic science. Attendees gained valuable knowledge on how entomology intersects with medicine and law enforcement, making this talk highly relevant for researchers in parasitology and forensic medicine.

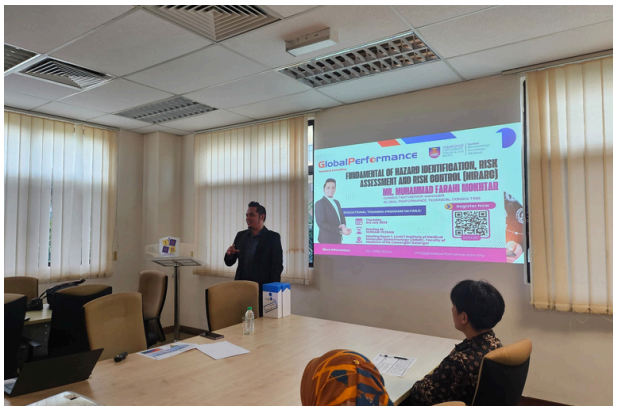


Assoc. Prof. Dr. Heo Chong Chin with Dr. Kurahashi during a tour of IMMB facilities, fostering international collaboration and knowledge exchange.

HIGHLIGHTS OF TECHNICAL TALKS

Mr. Muhammad Farahi Mokhtar

On 3 July 2025, Mr. Muhammad Farahi Mokhtar presented “Fundamental of Hazard Identification, Risk Assessment, and Risk Control (HIRARC)”. The talk covered essential principles of workplace safety, focusing on systematic approaches to hazard identification and risk mitigation in laboratory and clinical settings. Mr. Farahi explained practical steps for implementing HIRARC, including risk prioritization and control measures. He emphasized the importance of continuous monitoring and compliance with safety standards to prevent accidents and ensure a safe research environment. The session also highlighted the role of safety culture in promoting accountability and reducing workplace hazards.



Mr. Muhammad explaining the fundamentals of hazard identification and risk control during IMMB’s technical talk.

Mr. Ahmad Rasyadan Arshad

On 14 August 2025, Mr. Ahmad Rasyadan bin Arshad, Senior Application Specialist at Biomed Global, delivered a technical talk titled “Aplikasi Molekular dalam Bidang Perubatan dan Bioteknologi Molekular – Kolaborasi Biomed Global bersama Applied Biosystems (Real Time PCR)”. The session highlighted advanced molecular applications in medicine and biotechnology, focusing on real-time PCR technology and its role in diagnostics and research collaborations. Mr. Ahmad demonstrated how accurate quantification of nucleic acids supports disease detection and monitoring. He also discussed emerging trends such as multiplex PCR and automation, which enhance efficiency and reliability in clinical and research settings. The talk provided practical insights into optimizing PCR workflows for better outcomes. To further support research excellence, Biomed Global generously placed the Applied Biosystems™ QuantStudio™ 5 Real-Time PCR System at the IMMB RNA Lab for one month. IMMB extends its sincere appreciation to Biomed Global for this valuable contribution.

(Top) Mr. Ahmad Rasyadan presenting advanced molecular applications and real-time PCR technology in medicine and biotechnology.
(Bottom) The Applied Biosystems™ QuantStudio™ 5 Real-Time PCR System.

Mr. Tung Chee Hong & Mr. Cha Yee Kuen

On 27 August 2025, Mr. Tung Chee Hong and Mr. Cha Yee Kuen (Cyrus) from Next Gene Scientific presented “Cell and Tissue Culture in Practice: Fundamental Techniques, Cell Models, and Research Applications”. This session offered comprehensive guidance on cell and tissue culture techniques, covering best practices for maintaining healthy cultures and troubleshooting common issues. The speakers highlighted advanced applications such as 3D culture systems and organoid models, which are transforming drug discovery and personalized medicine. They also discussed the importance of aseptic techniques and quality control to ensure reproducibility in research. The talk was highly beneficial for researchers seeking to enhance their expertise in cell-based studies.

Speakers together with participants after the technical talks.

Mr. Yoshigshima delivering a talk on the CCK-8 assay, sharing practical insights on its sensitive, reproducible, and user-friendly application in cell-based research.

Mr. Yudai Yoshigshima

On 23 September 2025, IMMB hosted an engaging technical session titled “Bright Signals of Cell Fate: CCK-8 as the Modern Alternative to MTT”, organized in collaboration with Everlife Analisa Resources. The talk was delivered by Mr. Yudai Yoshigshima from Dojindo Asia-Pacific at IMMB Meeting Room 1. This session introduced participants to the advantages of the CCK-8 assay, a modern and efficient alternative to the traditional MTT method for assessing cell viability and cytotoxicity. Mr. Yoshigshima explained how CCK-8 offers improved sensitivity, simplicity, and reproducibility, making it highly relevant for researchers in biotechnology, pharmaceuticals, and life sciences. The talk sparked interest among attendees, particularly those involved in drug discovery and cytotoxicity studies, and provided practical insights into optimizing cell-based assays for research applications.

Want to Share Your Research?

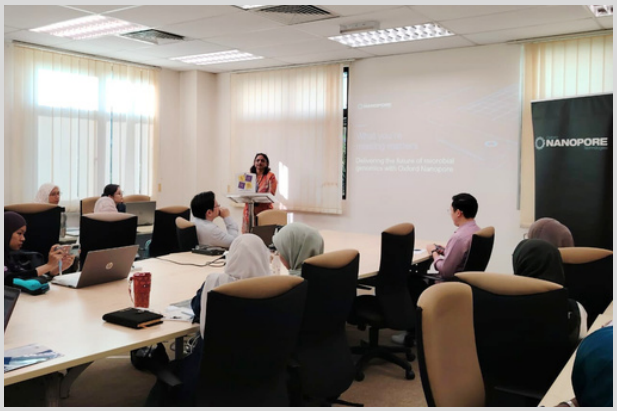
IMMB welcomes academic staff, students, and collaborators who wish to present their findings or invite guest speakers. If you’re interested, please contact: Pn. Fara Fariza Zahar. Email: fara_fariza@uitm.edu.my

PRE-CONFERENCE WORKSHOP: UNCOVERING NOVEL BIOLOGY WITH OXFORD NANOPORE TECHNOLOGIES

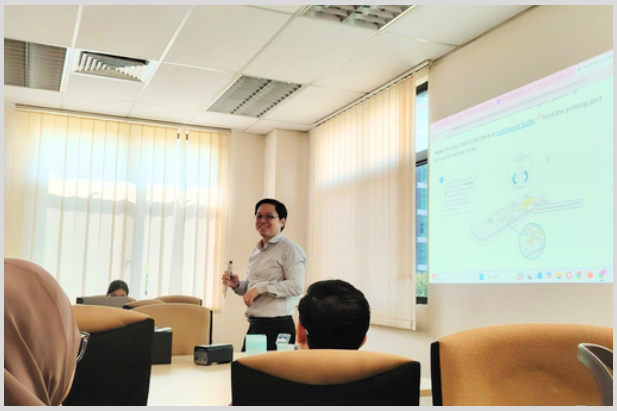
As part of the 8th International Conference on Molecular Biology and Biotechnology (ICMBB 2025), a pre-conference workshop titled “What You’re Missing Matters: Uncover Novel Biology Using Oxford Nanopore Technologies” was successfully held on 24 June 2025 at the Faculty of Medicine, UiTM Sungai Buloh Campus.

The workshop, jointly organized by the Department of Medical Microbiology and Parasitology (MMP) and the Institute of Medical Molecular Biotechnology (IMMB) in collaboration with Next Gene Scientific, provided participants with an in-depth understanding of Oxford Nanopore, a cutting-edge sequencing platform that enables real-time analysis of DNA and RNA. This next-generation technology is widely recognized for its versatility and impact across molecular research, offering unprecedented opportunities to explore complex biological systems.

The session was led by Mr. Tung Chee Hong and Ms. Jia Shiun from Next Gene Scientific, together with Mrs. Norazimah Tajudin from MKAK (National Public Health Laboratory). They shared practical insights into the workflows and applications of Oxford Nanopore Technologies. Participants gained hands-on exposure to sequencing techniques and learned how this technology can accelerate discoveries in genomics, transcriptomics, and beyond. The workshop was well-received, sparking engaging discussions and paving the way for future collaborations in molecular biology research.



Organizing Chair of the Pre-Conference Workshop, Associate Professor Dr. Navindra Kumari, officiating the event.



Trainer Mr. Tung delivering a lecture during the workshop session.

Workshop participants engaging in a group discussion.

EXPLORING FORENSIC ENTOMOLOGY: FLY TAXONOMY WORKSHOP @ IMMB

On 28 August 2025, the Institute of Medical Molecular Biotechnology (IMMB), Faculty of Medicine, UiTM Sungai Buloh, in collaboration with Universiti Malaya, successfully organized the Fly Taxonomy Workshop: Identification of Flies of Forensic Importance in Malaysia. The event was held at IMMB Meeting Room 1, with practical sessions conducted at the Multipurpose Laboratory in the Academic Building.

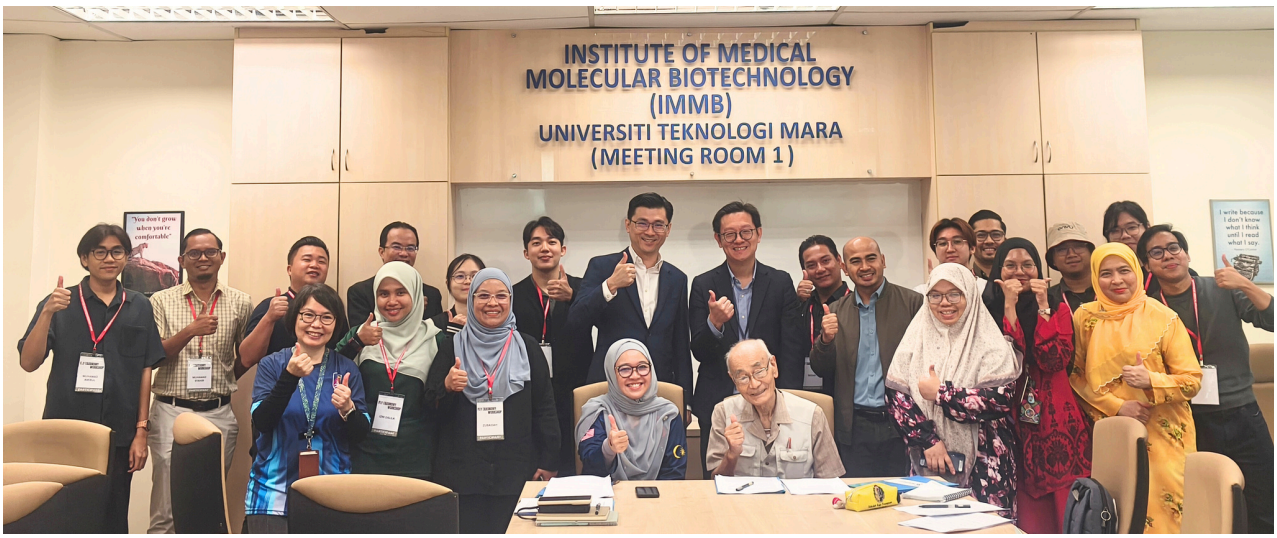
The workshop was designed to enhance participants' knowledge and skills in identifying fly species that play a critical role in forensic investigations. Accurate identification of forensic flies is essential for crime scene analysis and post-mortem interval estimation, supporting both legal and medical investigations. This initiative also strengthens academic collaboration and positions the Faculty of Medicine as a leader in forensic entomology research.

The day began with participant registration and breakfast, followed by a doa recitation and an opening address by Prof. Dr. Fazah Akhtar Hanapiah, Dean of the Faculty of Medicine, UiTM. The scientific program featured two distinguished speakers: Dr. Hiromu Kurahashi, Head of the International Department of Dipterology, and Assoc. Prof. Dr. Khang Tsung Fei, at the Institute of Mathematical Sciences, Faculty of Science, Universiti Malaya. They delivered comprehensive lectures on the basics of fly taxonomy and the morphological identification of forensic fly species, providing participants with a strong theoretical foundation.

The highlight of the workshop was the hands-on practical session, where participants learned to identify flies from families Calliphoridae, Muscidae, and Sarcophagidae. Techniques using wing morphology were demonstrated, allowing attendees to apply their newly acquired knowledge in a real-world context. The interactive nature of the session encouraged active participation and discussion, making it a highly engaging experience.

The workshop concluded with a lively exchange of ideas, paving the way for future collaborations in forensic entomology. Overall, the event was well-received and served as a valuable platform for knowledge sharing and skill development in this specialized field.

Dr. Hiromu Kurahashi is a leading entomologist and Head of the International Department of Dipterology in Tokyo, Japan. He specializes in the taxonomy and identification of medically and forensically important flies, particularly families such as Calliphoridae, Muscidae, and Sarcophagidae. With decades of experience, Dr. Kurahashi has contributed extensively to research on fly biodiversity and its applications in forensic science.



Photos captured during the workshop.

Event Retrospective
8th International Conference on Molecular Biology and Biotechnology (ICMBB) 2025

By Dr. Lau Su Ee (MSMBB) & Assoc. Prof. Dr. Wang Seok Mui (UiTM)

The 8th International Conference on Molecular Biology and Biotechnology (ICMBB) 2025 was successfully held on 25 - 26 June 2025, in conjunction with the 31st Scientific Meeting of the Malaysian Society for Molecular Biology and Biotechnology (MSMBB) and the 9th UiTM International Medical Innovation Competition. Organized by MSMBB and the Faculty of Medicine, UiTM, and co-organized by Universitas Wijaya Kusuma Surabaya (UWKS), Indonesia, this two-day event provided a vibrant platform for researchers, academics, and industry professionals to exchange knowledge and foster collaborations in molecular biology and biotechnology.

This year's theme, "Revolutionizing Molecular Biology and Biotechnology with AI: Transforming Data for Impactful Innovation," reflected the growing influence of artificial intelligence in biosciences and its potential to drive transformative innovation. The conference attracted 193 participants, including 15 international delegates from countries such as Indonesia, Singapore, Nigeria, Taiwan, Iraq, Afghanistan, Pakistan, and the United Kingdom. Over 125 research presentations, delivered through oral and poster sessions, showcased groundbreaking work across diverse scientific disciplines, sparking meaningful dialogue and interdisciplinary collaboration.

Opening Remarks by Assoc. Prof. Dr. Jamal Houssaini, Organising Chair of the 8th ICMBB 2025.

Welcoming Address and Officiation Opening by Prof. Ir. Ts. Dr. Mohamad Hafiz Mamat, Deputy Rector for Research & Innovation, UiTM Cawangan Selangor.

The scientific program featured two keynote addresses by distinguished speakers: Professor Liu Boxiang from the National University of Singapore and Professor Mohd Shahir Shamsir, Vice President of the Innovation and Technology Managers Association (ITMA), Universiti Teknologi Malaysia. Their presentations explored emerging frontiers in molecular biology, the integration of AI, and the importance of innovation in shaping the future of science and society. Plenary speakers further enriched the program with cutting-edge insights, inspiring participants and fueling discussions on the latest advancements in the field.

Beyond the presentations, the conference served as a dynamic networking hub, connecting experts from academic institutions, research agencies, industry

A memorable moment with participants, speakers, and honored guests at the 8th ICMBB 2025.

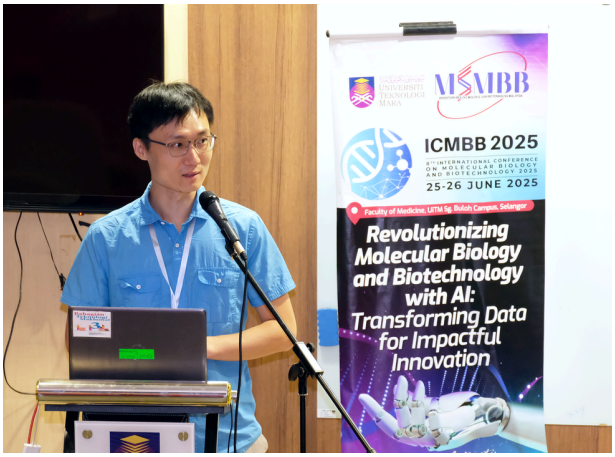
partners, and government bodies. These interactions are expected to pave the way for new research collaborations, grant proposals, and long-term partnerships that extend beyond the event. The conference also celebrated scientific excellence with the Distinguished Scientist Award 2025 presented to Prof. Pung Yuh Fen (University of Nottingham Malaysia) and the Best Young Scientist Award 2025 awarded to Dr. Khor Wai Ho (UMT). Additionally, MSMBB EduSTEM Grant 2024 recipients, Assoc. Prof. Dr. Khor Wai Ho and Dr. Lau Su Ee,showcased the outcomes of their funded projects, highlighting MSMBB's commitment to nurturing scientific talent.

The success of ICMBB 2025 was made possible through the generous support of sponsors, including Diamond Sponsors Everlife Analisa Resources and Biomedia SPD Scientific, Platinum Sponsors Aseptec Sdn. Bhd., Apical Scientific Sdn. Bhd., Histocenter, and Accuflex, and Gold

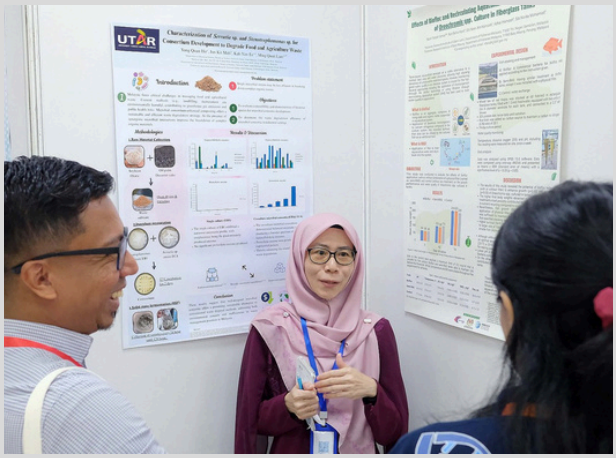
From left to right: Assoc. Prof. Dr. Wang Seok Mui (Conference Co-Chair), Assoc. Prof. Dr. Tan Boon Chin (MSMBB President), Prof. Ir. Ts. Dr. Mohamad Hafiz Mamat (Deputy Rector for Research & Innovation, UiTM Selangor Branch), Assoc. Prof. Dr. Jamal Houssaini (Conference Chair), Prof. Dr. Fazah Akhtar Hanapiah (Dean, Faculty of Medicine, UiTM), Prof. Dr. Anis Safura Ramli (Deputy Dean of Research and Innovation, Faculty of Medicine, UiTM), Assoc. Prof. Dr. Leny Suzana Suddin (Deputy Dean of Industry, Community and Alumni Network, Faculty of Medicine, UiTM), dr. Fara Disa Durry (Universitas Pembangunan Nasional Veteran Jawa Timur) and Dr. dr. Sukma Sahadewa (Universitas Wijaya Kusuma Surabaya).

Sponsors Matrioux and Impaco, along with numerous other contributors. Their support was instrumental in ensuring the smooth execution of the event. Special recognition is extended to Assoc. Prof. Dr. Jamal Houssaini (Organising Chair), Assoc. Prof. Dr. Wang Seok Mui (Co-Chair I), Assoc. Prof. Dr. Navindra Kumari Palanisamy (Co-Chair II), and the entire Organising Committee for their exceptional dedication and meticulous planning. Gratitude is also extended to Universitas Wijaya Kusuma Surabaya (UWKS) for their support as a co-organising institution.

The conference concluded on a high note, leaving participants inspired and motivated to pursue impactful research and foster new partnerships. As we look forward to another exciting and insightful ICMBB next year, we remain committed to advancing molecular biology and biotechnology through collaboration, innovation, and knowledge sharing.



Keynote 1: Toward a Cell-Type-Specific Understanding of Complex Diseases presented by Asst. Prof. Dr. Liu Boxiang from the National University of Singapore.



Photos captured during the oral and poster sessions, highlighting participants presenting their research findings to the judges and engaging in scientific discussions.

From UiTM Roots to Research Excellence: Meet Fara Fariza Zahar

Academic Journey and Early Career

An epitome of "UiTM di Hatiku", Fara Fariza Zahar has built her academic and professional journey within UiTM. She graduated with a Diploma in Science (DIS) and a Bachelor's Degree (Hons) in Biology, both from UiTM. Currently serving as a Senior Science Officer at IMMB, Faculty of Medicine, Fariza's career began as a Research Assistant at UiTM's Research Management Centre (formerly known as Research Management Institute, RMI), where she managed grant applications, ethics approvals, and major events such as the IDEX conference.

Passion for Laboratory Work

Driven by her passion for laboratory work, Fariza later applied for Research Assistant positions at the Faculty of Medicine and Faculty of Dentistry. She successfully secured a position at Dentistry, where she was introduced to the world of cell culture. Her independence and dedication in mastering cell culture techniques for nearly a year led to her official appointment as a Science Officer in 2009.

Expanding Roles and Responsibility

Over the years, she managed key facilities including the Preclinical Laboratory (Teaching & Learning), Cell Culture Laboratory, and Natural Product Extraction Laboratory. She also handled numerous administrative responsibilities such as MYRA, BTU, FRC, ERC, CARE committees, served as SOSHCo Secretary, liaison officer for the Deputy Dean of Research and Innovation, and other academic administrative tasks.

Academic Advancement

In 2019, Fariza pursued a Master's degree at UPM-MAKNA Cancer Research Laboratory, Institute of Bioscience, Universiti Putra Malaysia. Her research focused on identifying active biochemical compounds and their anti-cancer properties in natural herbal products. Graduating in 2024, she continued serving the Faculty of Dentistry until September 2025 before being reassigned to IMMB.

Current Role at IMMB

At IMMB, Fariza now manages the Cell Culture and IHC Laboratories, acts as Safety Representative and Coordinator for chemical, clinical, and infrastructure safety protocols (HIRARC, CHRA), and oversees maintenance, calibration, and operations of IMMB lab equipment. She ensures audit readiness by maintaining compliance with laboratory safety and quality standards. Still adapting to IMMB's management structure, Fariza seeks guidance to serve productively in the years ahead.

Personal Values

Independent, eager to learn, and open to constructive feedback, she is passionate about exploring new techniques that bridge real-life applications with cellular-level biology. An advocate of work-life balance, Farah firmly believes that family comes first — her greatest strength lies in her strong family bond.

Fun Fact about Fariza

When she's not in the lab, Fariza enjoys gardening and exploring nature trails, which she says helps her stay grounded and sparks ideas for her research. Her favorite quote?
"Science is the poetry of reality." – Richard Dawkins

Fariza's journey is a testament to passion, perseverance, and lifelong learning, qualities that continue to inspire the IMMB community.

Chasing Clarity, Carrying Curiosity: A Young Researcher's Journey

By: Amir Muhaimin Akmal Shukri (Faculty of Medicine, UiTM)

As I near the official end of my PhD journey, I find myself reflecting not just on the data collected or papers written, but on the people, places, and experiences that have quietly shaped who I have become along the way.

Based at the Institute of Medical Molecular Biotechnology (IMMB), Faculty of Medicine, UiTM, my research focuses on viruses, particularly within the scope of medical biotechnology and its potential in diagnostic development. My PhD study, entitled "Design and Application of SARS-CoV-2 Delta Variant Virus-Like Particles (VLPs) in Aptamer-Based Diagnostic Assay Development" focuses on viruses and aptamers, particularly within the scope of medical biotechnology and its potential in diagnostic development. Though still in its pilot stage, the process has been enriching, sharpening my technical understanding and opening doors to the possibilities this field holds.

A treasured photo with the 2021 Nobel Laureate in Physiology or Medicine, taken after his lecture in Kuala Lumpur.

This journey has also brought unexpected highlights. I had the privilege of joining several innovation competitions, where I challenged myself creatively and was fortunate to receive recognition through multiple awards. Even more humbling was the invitation to serve as a jury member in both national and international competitions. Taking on the role of evaluator offered a fresh perspective and deepened my appreciation for the innovation and effort in scientific problem-solving.

Outside the lab, I have found immense meaning in contributing to the student community by leading the Medical Postgraduate Association (MediPA), representing postgraduate students at the Faculty of Medicine, UiTM, from 2022 to 2024. MediPA efforts extended beyond academic enrichment, focusing on career development, student welfare, and fostering connections among peers through outdoor events, forums, webinars, and even community cooking sessions. These activities made postgraduate life less isolating, and I'm grateful to have played a part increating that shared space.

Not all learning happened behind the microscope. One of the most eye-opening chapters took place deep in the Royal Belum Rainforest, where we conducted a COVID-19 seroprevalence study among Orang Asli communities. Each trip required a 40-minute boat ride, a small journey in distance, but a giant leap in perspective.

Me (bottom row, far left) with fellow postgraduate students from the Faculty of Medicine, UiTM, during an outdoor hiking event.

These visits reminded me that meaningful science starts with empathy and understanding, not just data points.

Throughout the journey, I have been guided by incredible mentors and supervisors from UiTM, UPM, and USM. Their insight, support, and patience have shaped both my scientific thinking and personal growth.
I extend my heartfelt thanks to Dr Siti Farah Alwani (UiTM), Associate Professor Dr Wang Seok Mui (UiTM), Associate Professor Dr Chia Suet Lin (UPM), and Associate Professor Dr Citartan Marimuthu (USM) – thank you for believing in me and guiding me through this journey.

From them and this journey as a whole, I have learned more than just techniques. I have learned to think critically, to analyse deeply, to embrace complexity, and to keep asking questions even when the answers aren't clear. These lessons will stay with me long after the lab lights go out.

In retrospect, this PhD experience has been a mosaic of quiet milestones and transformative moments. And yet, despite the progress and lessons gained, I know this is only the beginning. I am still far from fully unlocking my capacity. With every opportunity comes a greater responsibility, not just to pursue knowledge, but to ensure it serves the community and the nation. I carry that responsibility with hope, purpose, and an open heart for whatever lies ahead.

I served as a STEM facilitator at the Karnival Akademik & Hari Koperasi, SMK Rautau Panjang, on 4 October 2024.

En. Hazrul Nizam with one of the judges, Assoc. Prof. Dr. Mohammad Johari Ibrahim, at the CSI MED: The Forensic Experience booth.

IMIC 2025: Celebrating Innovation and Achievement at UiTM

The Faculty of Medicine, Universiti Teknologi MARA (UiTM), proudly hosted the International Medical Innovation Competition (IMIC) 2025 on 25–26 June 2025 at the UiTM Sungai Buloh Campus.

Building on the success of previous IMIC events, this year's competition was held physically, offering participants an exciting platform to share their ideas and connect with a wider audience. Warmest congratulations to all participants from the Faculty of Medicine, UiTM, for their outstanding contributions and achievements during this remarkable event.

A special highlight was the achievement of the Institute of Medical Molecular Biotechnology (IMMB) team, led by Hazrul Nizam Hisham Hasmi, who proudly clinched the Silver Award for their innovative project, "CSI MED: The Forensic Experience." The project impressed judges and attendees with its creative approach to forensic science education.

The winning team members were: Mohd Yusri Idorus, Azhar Ahmad, Norita Slim, Mohd Ameer Azeezy Abul Wahab, Muhammad Daniel Hakim Zulkepeli, Salina Othman, Dayana Syahirah Adam Hong, Siti Aisyah Mokhtar, Wang Seok Mui, and Heo Chong Chin.

Participation in IMIC 2025 reflected IMMB's commitment to staff empowerment, fostering creativity and collaboration within the institute. We are delighted to celebrate this achievement and look forward to more innovative contributions in the future.

Congratulations once again to the IMMB team and all participants for making IMIC 2025 a resounding success!

IMMB Achieves Silver at UiTM KIK Zon Tengah 2025

Driving Innovation, Collaboration, and Continuous Improvement

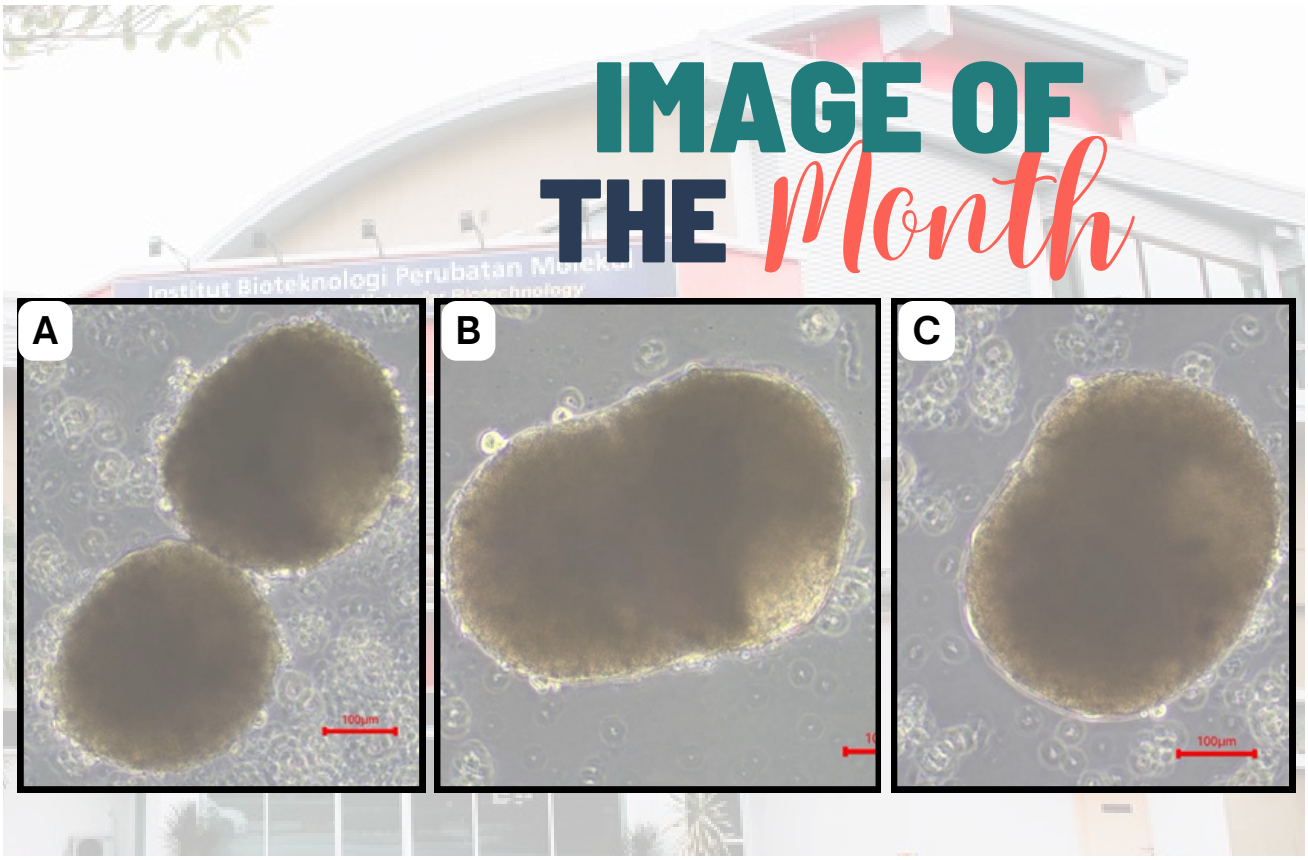
The Institute of Medical Molecular Biotechnology (IMMB) proudly participated in the Konvensyen Kumpulan Inovatif & Kreatif (KIK) UiTM Zon Tengah 2025, held from 24–26 September 2025, as part of its commitment to fostering teamwork, innovation, and continuous improvement within the organization. IMMB competed with the project titled "Modul Short Course for Forensic Medicine," which was selected for its proven success in IMMB's international programs since 2021. The team adapted data and reports to meet UiTM KIK standards, demonstrating creativity and quality in project execution.

Among 30 participating groups, IMMB was honored to be among the 15 teams selected for the Zon Tengah Convention and proudly earned a Silver Rating for its efforts. This achievement reflects IMMB's dedication to staff empowerment and organizational excellence, showcasing the institute's ability to innovate and collaborate effectively.

The success of this initiative was made possible through the leadership and commitment of the team, which included Dr. Muhammad Huzaimi Haron as Head of Quality, En Wan Azizi Wan Kamaruzaman as KIK Coordinator, AP Dr. Wang Seok Mui as Head of Group, and AP Dr. Heo Chong Chin as Facilitator, alongside members Zaleha Affandi, Azhar Ahmad, Mohd Yusri Idorus, Salina Othman, Hasrul Nizam Hisham Hasmi, Mohd Ammer Azeezy Abdul Wahab, Dayana Syahirah Adam Hong, Siti Aisyah Mokhtar, and Muhammad Daniel Hakim Zulkepeli.

Congratulations to the IMMB team for their outstanding performance at KIK Zon Tengah 2025!

IMMB KIK team presenting their innovative project, 'Modul Short Course for Forensic Medicine,' on stage at UiTM Zon Tengah 2025.



When Two Become One: Fusion of Breast Cancer Spheroids. The images show the natural process of spheroid fusion in a three-dimensional (3D) culture system using patient-derived primary breast cancer cells (BRCA 06). The spheroids were cultured in an ultra-low attachment plate to promote spontaneous aggregation and growth (100X magnification). (A) Day 14: Two spheroids within the same well came into close contact. (B) Day 15: The spheroids began to merge, guided by cell–cell adhesion and cytoskeletal rearrangement. (C) Day 20: The two spheroids compacted and stabilized into a single, larger spheroid.

Image courtesy of Ros Akmal Binti Mohd Idris, PhD student under supervision of Assoc. Prof. Dr. Mohammad Johari Ibahim.

Above is the Image of the Month for September.

Calling all researchers and students

Do you have an amazing microscopic image or a fascinating photo captured during your research? We would love to showcase it! Share your research images with us and let your work inspire others. Microscopic images, fieldwork photos, or any research-related visuals are welcome, and every contribution will be credited to you. Selected images will be featured in our Image of the Month section, celebrating the beauty of science through your lens. Send your images to salina4860@uitm.edu.my and be part of this exciting initiative!

"In science, many times it's the things we take for granted that are of high interest"

Ardem Patapoutian

Nobel Laureate in Physiology or Medicine (2021)

About Ardem Patapoutian

Ardem Patapoutian is a molecular biologist and neuroscientist renowned for discovering mechanosensitive ion channels, proteins that allow cells to sense touch and pressure. His groundbreaking work in the early 2000s revealed how pressure is converted into nerve impulses by identifying a pressure-sensitive ion channel after systematically silencing 72 candidate genes. These discoveries have transformed our understanding of sensory perception and have significant implications for pain research and therapeutic development.

What This Quote Means

Patapoutian reminds us that scientific breakthroughs often emerge from questioning what seems obvious. The simplest phenomena can hold hidden complexities, leading to transformative discoveries. This mindset encourages curiosity, critical thinking, and exploration beyond assumptions.

Reference: https://www.nobelprize.org/prizes/medicine/2021/patapoutian/interview/

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Thank you for reading!