

Institute of Medical Molecular Biotechnology Newsletter



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VISIT OF THE SPANISH AMBASSADOR TO IMMB, FACULTY OF MEDICINE, UiTM . IMMB was proud to receive the **SPANISH AMBASSADOR, His Excellency Mr. José Luis Pardo Cuervo** to IMMB on 15 November 2022. This visit was also attended by the Top Management of UiTM and Faculty of Medicine UiTM led by **Prof. Ir. Ts. Dr. Syed Shatir Asghrar Syed Hassan**, the Director of Business Innovation & Technology Commercialization Centre (BITCOM), **Prof. Dr. Nooritawati Md Tahir**, the Director of Research Nexus UiTM and **Assoc. Prof. Dr. Fazah Akhtar Hanapiah**, the Dean of Faculty Medicine. Berjaya Enviroparks was represented by **Mr. Akhtar Abdullah**, the Senior Project Manager of Berjaya Enviroparks who is the industry partner in this research collaboration. The ambassador was presented with the progress of the collaborative research work between both countries at IMMB led by the director of IMMB, Assoc. Prof. Dr Heo Chong Chin and Faculty of Medicine UiTM's research fellow, Dr. Tania Ivorra. Other matters were also discussed during the visit including future collaborations and industrial linkages. It is hoped that these kinds of visits and discussions will be held more often to drive the progress and visibility of IMMB and Faculty of Medicine UiTM.

IMMB DENGUE SYMPOSIUM 2022. IMMB proudly organized the first dengue symposium on 10 November 2022, with the theme "**Dengue Management and Diagnosis: Update and Challenges.**" The invited speakers were **Dr. Saiful Safuan Md Sani** from the **Clinical Research Centre, Department of Medicine, Hospital Kuala Lumpur**, and **Dr. Jeyanthi Suppiah** from **Institute for Medical Research (IMR), National Institute of Health (NIH), Ministry of Health Malaysia**. For the first session, Dr. Saiful shared his knowledge on the topic entitled "**Effect of Comorbidities on the Clinical Outcome of Dengue Fever,**" while for the next session, Dr. Jeyanthi shared her expertise on the topic entitled "**Dengue Detection: Advances and Challenges.**" This symposium was moderated by **Associate Professor Dr. Fadzilah Mohd Nor** from the Department of Medical Microbiology and Parasitology, Faculty of Medicine, UiTM Sg. Buloh. This symposium was successfully attended by 290 participants.

Effect of Comorbidities on the Outcome of Dengue Fever

Institute for Medical Molecular Biotechnology UiTM's Dengue Symposium
Dengue Management and Diagnosis: Update and Challenges

Dr Saiful Safuan Md Sani
MRCGP (UK), MRCGP (UK), MRCGP (UK)
Consultant in Infectious Medicine
Head, Dengue Research Unit
Department of Medicine (M),
K. M. Chellappa Research Centre (M)

**Dengue detection:
Advances and
challenges**

Dr Jeyanthi Suppiah
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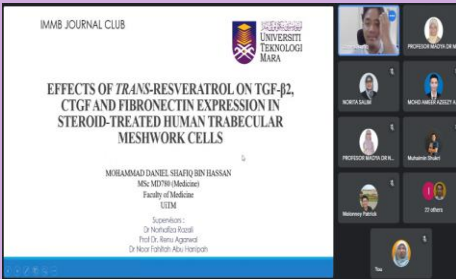
IMMB EXTERNAL ADVISORY BOARD MEETING #4

Heo Chong Chin, PhD, BCE
Director, IMMB
17 Nov 2022
3.00 – 4.00 pm (Malaysian time)

MEETING WITH IMMB EXTERNAL ADVISORS. We were very honored to have the fourth meeting of the IMMB External Advisors on 17 November 2022. We shared our progress and recent activities to achieve our institution objective. A lot of matters were shared and discussed for IMMB improvements including our progress, recent activities, commercialization as well as research collaborations and services. We also introduced and welcomed our newest expert to the IMMB External Advisory board, **Prof. Dr. Hoh Boon Peng**, a professor at School of Health Sciences, International Medical University.

ACTIVITIES, INITIATIVES & INVOLVEMENT

SCIENCE DIPLOMACY TRAINING PROGRAMME AND CAMBRIDGE-MALAYSIA SCIENCE ROUNDTABLE. On 1 November 2022, the Director of IMMB, **Assoc. Prof. Dr. Heo Chong Chin** was invited to participate in **YSN-ASM Science Diplomacy Training Programme**. In this training, participants were exposed to the global landscape of science diplomacy, its importance and the way forward. On 2 November 2022, **Assoc. Prof. Dr. Heo Chong Chin** represented the Young Scientist Network-Academy of Sciences Malaysia in the **Cambridge-Malaysia Science Roundtable Meeting** to explore impactful collaboration between Malaysia and University of Cambridge in science, technology, innovation and economy (STIE).



IMMB JOURNAL CLUB was conducted on 2 November 2022, with **Mohammad Daniel Syafiq Hassan**, a MSc student under supervision of **Dr. Norhafiza Razali** as an invited presenter. He shared his research findings entitled **"The Effects of Trans-resveratrol on TGF-β2, CTGF and Fibronectin Expression in Steroid-treated Human Trabecular Meshwork Cells"**. From his findings and studies, it was concluded that the CTGF pathway reduces ECM deposition in trabecular region, which reduces the resistance of aqueous humour drainage. This session was attended by 31 participants and chaired by Mr Ameer Azezy Abdul Wahab.

Another **IMMB JOURNAL CLUB** was conducted on 30 November 2022. The invited presenter was **Amir Muhaimin Akmal Shukri**, a PhD student under the supervision of **Dr. Siti Farah Alwani Mohd Nawi**. He shared his research project entitled **"Construction of SARS-CoV-2 Delta variant Virus-Like Particles (VLPs) and Determination of Its Antigenicity."** The main objective of his study was to construct the SAR-CoV-2 Delta variant virus-like particles (VLPs) and to determine their antigenicity. This talk was attended by 36 participants and chaired by Mr Tuan Muhd Hafidz Tuan Kamauzaman.



VIRTUAL INNOVATION COMPETITION 2022. Congratulations to **Norazirah Mat Nayan** for an outstanding achievement in winning the **Diamond Award and Gold Award (Tertiary-Science & Technology)** in the 3rd Virtual Innovation Competition 2022 (VIC22). In this team, **Norazirah, AP. Dr. Rosfaizah Siran, and Dr. Andrean Husin** introduced an innovation entitled **HIPPO**, also known as the **Hippocampus Dissection Platform**. This product will provide a comfortable and convenient way for researchers to conduct a dissection on small tissue such as hippocampus. **HIPPO** can be seen as a great opportunity to assist researchers in sharpening their precision and dissection skills in a conducive setting.

PhD VIVA VOCE. Ms Sarah Zulkifli, who is under the supervision of **Assoc. Prof. Dr. Noor Shafina Mohd Nor** passed her PhD VIVA VOCE (MD990) on 15 November 2022. Her PhD research title is **"The Impact Of Bisphenol A (BPA) Exposure In Utero And Postnatal Trans Fat Diet on Small Intestine Global DNA Methylation and Gut Microbiome of Animal Model"** and her main research objective was to investigate the effects of BPA exposure on the morphology of the small intestine and its global DNA methylation. Throughout her PhD, she successfully published 3 papers in European Journal of Pediatrics (2021), Nutrients (2022), and Malaysian Journal of Fundamental and Applied Sciences (2022).



As the main research center on UiTM Sg Buloh Campus, **Planned Preventative Maintenance (PPM)** is crucial to ensure that the research equipment in IMMB is in optimal conditions. The PPM sessions were handled by a certified engineer from the equipment manufacturers. These sessions were monitored by the lab person in charge who is an IMMB staff member and an engineer representing the Biomedical Unit, Bahagian Pembangunan dan Pengurusan Fasilitas UiTM Kampus Sg Buloh. During the PPM, staff often took the opportunity to discuss and observe the process to improve their skills in operating the involved equipment.

"To achieve any objective, we need two things: Motivation & Right strategy." — Ibn al-Jawzi.

Happy end of year holidays

FRIENDLY REMINDER BEFORE LEAVING FOR A LONG HOLIDAY

IN YOUR LAB AND PANTRY

- Switch off and turn off equipments and lights properly.
- Clean up and dispose waste accordingly.
- Only essential equipment such as freezers and incubators are allowed to operate depending on the needs and risk assessment.



- Make sure the water taps are tightly closed.
- Switch off all the white socket lights for power saving (except in the lift area). Recommended to let the light from the red socket power supply switch on for safety

CORRIDOR, TOILET AND COMMON AREA

OFFICE AND WORKSTATION

- Do not leave your valuable items.
- Dispose waste properly.
- Make sure doors or/and drawers are locked.
- Switch off all the lights.



- Store consumables and kits in the dedicated storage area.
- Store chemicals in the Chemical Store.
- Check and make sure your chemicals are tightly closed and in a safe condition.
- Hang lab coats on the provided space or rack.

STORAGE AREA

BUILDING ENTRANCES AND EXITS

- Make sure no foreign objects/obstacles prevent the access door from working.
- Close the access and emergency door tightly.
- Switch off the automatic sliding glass door.



US FULBRIGHT SCHOLAR : MORIAH ESPANOLA JACKSON



*"I'd be remiss if I didn't admit that on my last night in America, I cried from the fear and uncertainty of the unknown of moving to another country. But I'm so thankful I found the courage to come because the experiences and friends I made at UiTM were well worth it. You have made those long, frustrating days and weekends in the lab and the experiments that never seem to go as planned much brighter. So thank you to everyone who helped me throughout my project. Whether that was to help me find supplies, work through my protocol, or make me laugh after a failed experiment. Thank you to all of the support staff. You all are indeed miracle workers, and your efforts are greatly appreciated. I want to express my appreciation to my lab mates, collaborators and supervisors because none of this would have been possible without all of you. You are why I am here, and I will be eternally grateful. Above all, I'd like to express my deepest gratitude to Prof. Dr. Razuin and AP. Dr. Heo for taking a chance on me and allowing me to come here to work under you. Because of you, I am a better Infectious Disease Scientist but, far more importantly, a better Forensic Entomologist. Reflecting on my time in Malaysia, I am amazed by the person I became. As Americans, we are taught to navigate through life with an emphasis on "I" and rarely "we" unless it benefits the individual. **However, UiTM has taught me that there is more to life than what I was taught.** There is beauty in loving your neighbors and having a strong sense of community. Most importantly, the importance of making sacrifices for the greater good. As I make my way back across the pond, I intend to share with America the life lessons that have become ingrained in my DNA"*