

# MSPP NEWSLETTER

April 2024



## Editorial Message

Dear MSPP Members,

Almost a year has passed since our last issue was published! Have you missed us?? Well, we certainly missed communicating with you! 🤖

In this edition, we recap all our signature events for the past year including the 35<sup>th</sup> MSPP Annual Scientific Meeting 2023, MSPP Young Investigator Award 2023, MSPP Young Teacher's Award 2023 and MSPP Refresher Course 2023. 🏠

On top of our main events, we were excited to organize new programmes specially for our members. Hats off to the MSPP Undergraduate Chapter Team who managed to conduct inaugural events such as the MSPP UG Chapter Seminar on pursuing a research career as well as an Essay Competition. Our GoLDS webinar is gaining momentum with another two sessions featuring renowned international speakers from the USA and the UK. I was also part a new initiative, 'Research Sharing Session on Ion Channels & Diseases', a platform to forge research collaboration and networking, especially with junior researchers and academicians. 💻

Another exciting piece of news is that MSPP won the bid to host the 11<sup>th</sup> FAOPS Congress in 2027! Well done to the bidding committee, comprised of team leader, Assoc. Prof. Dr. Azizah Ugusman, Assoc. Prof. Dr. Mohd Helmy Mokhtar and Dr. Adila A Hamid who have certainly made us all proud! ✨

Last but not least, don't forget to join all our upcoming events, the details of which are in this issue. 📢 And to all Muslims, I wish everyone Salam Ramadhan & Happy Fasting. 🌙



Till next time, take care & stay safe! ❤️

**Assoc. Prof. Dr. Izuddin Fahmy Abu**  
MSPP Vice President / Newsletter Editor  
[izuddin@unikl.edu.my](mailto:izuddin@unikl.edu.my)



Be a contributor for MSPP Newsletter.  
Send your articles/write-up to us at:  
[mspp.secretariat@gmail.com](mailto:mspp.secretariat@gmail.com)

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## VISIT OUR WEBSITE AND FOLLOW OUR SOCIAL MEDIA



<http://www.mspp.com.my/>



[Malaysian Society of Pharmacology & Physiology](#)

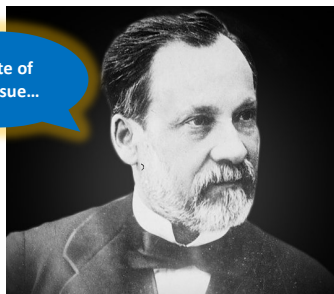


[mspp.secretariat](#)



[Malaysian Society of Pharmacology & Physiology](#)

Quote of  
the issue...



Science knows no country,  
because **knowledge belongs  
to humanity**, and is the torch  
which illuminates the world.

— Louis Pasteur

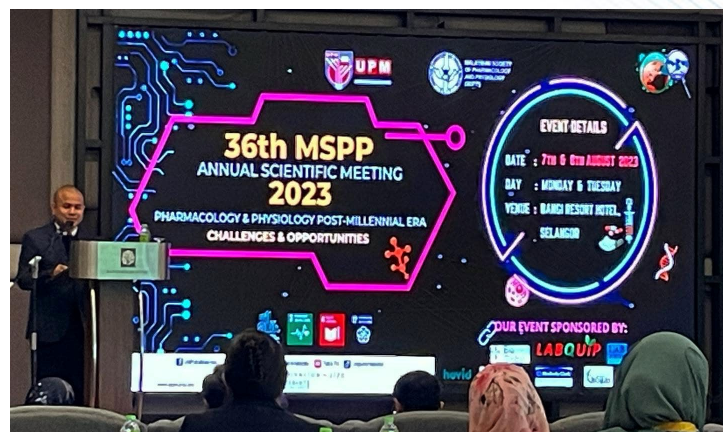
### 36<sup>th</sup> MSPP Annual Scientific Meeting 2023

The Department of Human Anatomy in collaboration with the Department of Biomedical Sciences, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia hosted the 36<sup>th</sup> Malaysian Society of Pharmacology and Physiology Annual Scientific Meeting 2023 on 7<sup>th</sup> and 8<sup>th</sup> August 2023 at Bangi Resort Hotel, Selangor.

The conference was chaired by Assoc. Prof. Dr. Hasnah Bahari, with the theme 'Pharmacology & Physiology Post-Millennial Era: Challenges & Opportunities'. The opening ceremony was officiated by Prof. Dr. Ismi Arif Ismail, Deputy Vice Chancellor of Academic & International, UPM. Prof. Dr. Yu Huang from the City University of Hong Kong delivered the keynote talk entitled, 'Pharmacological reversal of endothelial dysfunction in cardio-metabolic diseases'.

The annual scientific meeting attracted a total of 152 registered participants, coming not only from Malaysia, but also from Pakistan, Qatar and Indonesia. 25 participants were selected for oral presentations, while 35 participated in poster presentations. The three winners in the poster category were Chong Ce Lynn (University of Nottingham), Dr. Norhafiza Razali (UiTM) and Asti Rizki Saputri (Universitas Ahmad Dahlan, Indonesia). While the five lucky winners in the oral category were Dr. Nurul Ain Fatin Raslan (UTAR), Dr. Shazreen Shaharuddin (UPNM), Dr. Nurina Titisari (UPM), Noor Izzah Abd Rahman (UPM), Nur Rafiqah Abdol Wahab (UPM) and Dr. Santhra Segaran Balan (MSU).

The conference also awarded three Travel Aid prizes to three deserving recipients, namely, Veshalini Kasiraja (UniSA), Ali Saeed Ali Mussa (USM) and Dwi Kartika Indriani (Universitas Ahmad Dahlan).



#### S-allylcysteine Injury in Ov

**Dr Satirah Zainal**

Programme of Biomedical Sciences  
Center for Toxicology and Health  
Faculty of Health Sciences,  
Universiti Kebangsaan Malaysia

This scientific meeting was successful in providing the most suitable avenues to facilitate the exchange of scientific endeavours and enhance networking among scientists, academicians, clinicians, and postgraduate students involved in the fields of pharmacology and physiology, as well as multidisciplinary areas such as drug discovery, omics approaches, stem cells, and regenerative medicine.

### MSPP Young Teacher's Award 2023

The MSPP Young Teacher's Award 2023 took place on 6<sup>th</sup> August 2023, at the UKM-MTDC Technology Centre in Bangi. The designated topic for Physiology category was on the 'Electrical activity of the heart', while for Pharmacology category, the topic assigned was 'Antiarrhythmic drugs'. This year, the competition drew participation only from Physiology lecturers representing various institutions namely the International Islamic University Malaysia (IIUM), Universiti Pertahanan Nasional Malaysia (UPNM), Management & Science University (MSU), and Manipal University College Malaysia (MUCM). Unfortunately, there were no contenders in the Pharmacology category for this year's edition.

The panel of judges who evaluated the Physiology category of the competition consisted of Assoc. Prof. Dr. Damayanthi Durairajanayagam from Universiti Teknologi MARA, Assoc. Prof. Dr. Azizah Ugusman from Universiti Kebangsaan Malaysia, and Assoc. Prof. Dr. Priya Pusparajah from Monash University Malaysia. Dr. Siti Hajar Adam from Universiti Pertahanan Nasional Malaysia emerged as the winner and was awarded a cash prize of RM 500, along with a trophy and certificate. Congratulations to Dr. Siti Hajar on a very deserving win!

Prior to the announcement of winner, an insightful sharing session was arranged to discuss strategies for academic excellence, featuring three esteemed Professors, namely, Prof. Dr. Nafeeza Mohd Ismail, Prof. Dr. Datin Sharida Fakurrazi, and Prof. Dr. Zabedah Ismail. The session provided valuable guidance and inspiration for young lecturers as they progress in their academic journeys.

Biomics Lab Malaysia generously sponsored this event, which also included a scheduled lab visit at the conclusion to promote research activities and raise awareness among MSPP members



**By Assoc. Prof. Dr. Roslina Abdul Rahim**  
MSPP Exco / Chair, MSPP YTA 2023  
[roslinaar@iium.edu.my](mailto:roslinaar@iium.edu.my)



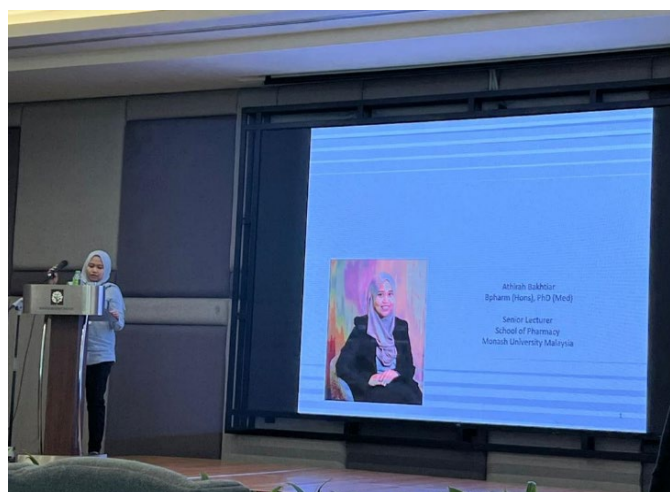
### MSPP Young Investigator Award 2023

The Annual MSPP Young Investigator Award 2023 was held in conjunction with the 36<sup>th</sup> MSPP Annual Scientific Meeting on 7<sup>th</sup> August 2023. The objective of this award is to encourage young researchers in our society to promote their research outputs. Out of five applications, three young researchers were shortlisted; they were Assoc. Prof. Dr. Jayakumar Murthy (Universiti Kebangsaan Malaysia), Dr. Choy Ker Woon (Universiti Teknologi MARA) and Dr. Athirah Bakhtiar (Monash University Malaysia).

The participants were required to showcase their research work and achievements during the 36<sup>th</sup> Annual MSPP Scientific Meeting and were judged on various criteria. The judges tasked to assess the presenters were Prof. Dr. Renu Agarwal (International Medical University), Prof. Dr. Ahmad Rohi Ghazali (Universiti Kebangsaan Malaysia) and Prof. Dr. Vikneswaran Murugaiah (Universiti Sains Malaysia).

All the presenters did a remarkable job in presenting their research outputs. However, there was only one victor that can be awarded, which was conferred to Dr. Choy Ker Woon. Congratulations to the winner, and many thanks to all participants and judges for their excellent commitment.

By Assoc. Prof. Dr. Nurul Alimah Abdul Nasir  
MSPP Exco / Chair, MSPP YIA 2023  
[nurulalimah@uitm.edu.my](mailto:nurulalimah@uitm.edu.my)



## MSPP Refresher Course 2023

The MSPP Society is delighted to highlight the success of the MSPP Refresher Course 2023, a pivotal event held on the 18<sup>th</sup> December 2023 at Jeffrey Cheah School of Medicine & Health Sciences, Monash University Malaysia. With the participation of 33 academicians from various public and private universities across Malaysia, the event served as a dynamic platform for the exchange of profound insights and expertise in Pharmacology and Physiology teachings. MSPP would like to extend our sincere gratitude to the esteemed speakers whose contributions significantly enriched the event:

- Assoc. Prof. Dr. Roslina Abdul Rahim - Refresher Physiology (Renal handling of sodium)
- Prof. Dr. Igor Nikolayevich Iezhitsa - Refresher Pharmacology (Diuretics)
- Prof. Dr. Gan Siew Hua – ‘Tips on Advancing Your Career’

Their impactful presentations inspired attendees, fostering a renewed enthusiasm for academic pursuits and professional growth.



THE MALAYSIAN SOCIETY OF PHARMACOLOGY AND PHYSIOLOGY



MONASH UNIVERSITY  
MALAYSIA



JEFFREY CHEAH  
SCHOOL OF MEDICINE & HEALTH SCIENCES

**MSPP REFRESHER COURSE 2023**

**4 MMA CPD Points**

**Limited seats! Extended Deadline: 30 Nov 23**

**VENUE: MONASH UNIVERSITY**

**DATE: 18 DEC 2023**

**TIME: 8.30 - 3.00 PM**

**Refresher Physiology**  
Renal handling of sodium

**Refresher Pharmacology**  
Diuretics

**Sharing Session**  
Tips on advancing your career



Prof. Dr. Gan Siew Hua  
Monash University



Assoc. Prof. Dr. Roslina Abdul Rahim  
IUM



Prof. Dr. Igor Nikolayevich Iezhitsa  
IMU

**FEE**

- MSPP: RM30
- NON-MSPP RM50
- STUDENT: RM30

\*Fee inclusive of e-certificate, refreshment and lunch

**Register Now!!**

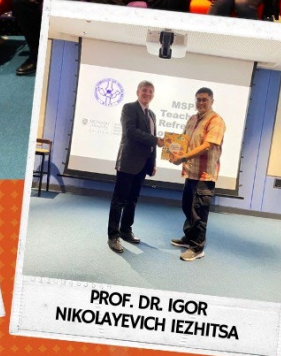


Scan me

Kindly email us at [mspp.secretariat@gmail.com](mailto:mspp.secretariat@gmail.com) for any enquiries.



AP. DR. ROSLINA ABDUL RAHIM



PROF. DR. IGOR NIKOLAYEVICH IEZHITS



PROF. DR. GAN SIEW HUA

We eagerly anticipate the reconvening of MSPP Refresher Course 2024, promoting further collaboration and excellence in the field of Pharmacology and Physiology.



By Assoc. Prof. Ts. Dr. Azlini Binti Ismail  
[dr\\_azlini@ium.edu.my](mailto:dr_azlini@ium.edu.my)

Assoc. Prof. Dr. Priya Pusparajah  
[priya.pusparajah@monash.edu](mailto:priya.pusparajah@monash.edu)



MSPP Exco/Co-Chairs, MSPP Refresher Course 2023



## MSPP REFRESHER COURSE 2023

Jeffrey Cheah School of Medicine & Health Sciences,  
Monash University Malaysia  
18th December 2023

## MSPP Undergraduate Chapter Seminar : Insight into Pursuing a Research Career

The Malaysian Society of Pharmacology and Physiology, Undergraduate Student Chapter, organized a webinar on 8<sup>th</sup> April 2023, featuring a panel of esteemed researchers with diverse research journeys. These experts, including Assoc. Prof. Dr. Priya Pusparajah, Assoc. Prof. Dr. Lee Learn Han, Assoc. Prof. Dr. Goh Bey Hing, Dr. Tan Loh Teng Hern, Dr. Jodi Law Woan Fei and Dr. Vengadesh Letchumanan from Monash University, Malaysia, shared their invaluable experiences and insights in succeeding in a research career.

This webinar aimed to provide insights into a career in research in various pathways, share career experiences and research journeys, and connect undergraduate students with the Malaysian Society of Pharmacology and Physiology. This webinar, attended by enthusiastic students from around Malaysia, successfully provided insights into research careers for undergraduate students in the health science stream. The speakers' captivating perspectives and expert advice inspired and empowered our eager audience, sparking engaging discussions and deepening their understanding of the diverse opportunities available in the field of health sciences.

Find out more about research career from our panelists !

**INSIGHT INTO PURSUING A RESEARCH CAREER PANEL DISCUSSION**

**SATURDAY, 8 APRIL 2023**

**9.00 A.M. - 10.30 A.M.**

**ZOOM MEETING**

OPEN TO UNDERGRADUATE STUDENTS (MEDICINE, PHARMACY, DENTISTRY, HEALTH SCIENCES, BIOMEDICINE)

LIMITED TO 250 PARTICIPANTS.

**REGISTER BEFORE 5.4.2023 12.00P.M.**

REGISTRATION FEE: FREE OF CHARGE

We hope this event successfully laid the foundation for future endeavours and inspires the next generation of researchers to embark on their own remarkable journeys in health sciences.

By Dr. Noor Azlina Abu Bakar  
MSPP Exco / Chair, MSPP UG Chapter  
[noorazlina@unisza.edu.my](mailto:noorazlina@unisza.edu.my)



**Panel Discussion: Insights into pursuing a research career**

**OUR AMAZING PANELISTS**

8th April 2023  
9:00 a.m. - 10:30 a.m.

**Panel Discussion: Insights into pursuing a research career**

**THANK YOU FOR JOINING!**

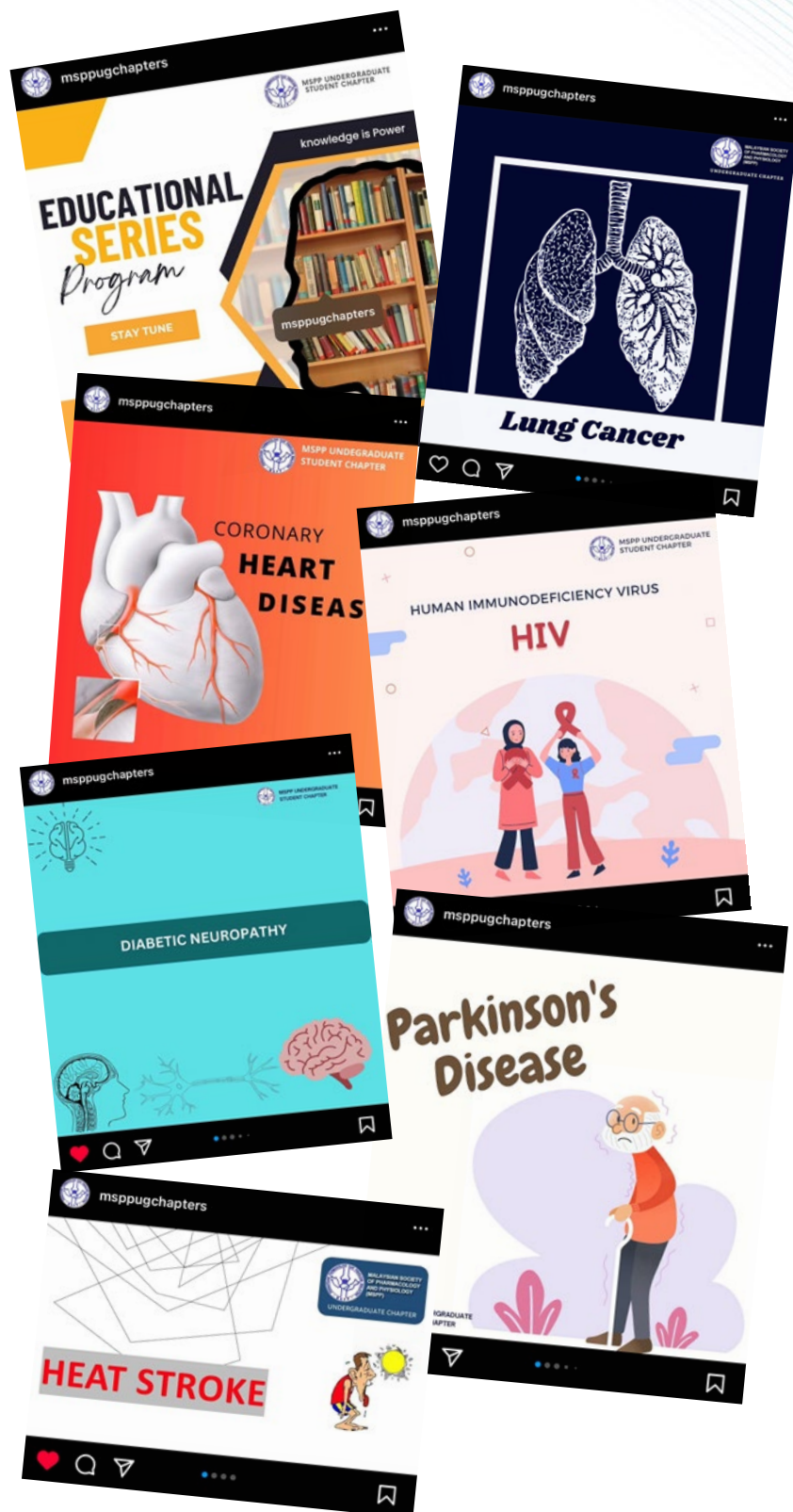
8th April 2023  
9:00 a.m. - 10:30 a.m.

### The Educational Series on @msppugchapters

The Educational Series, a collection of posts on the MSPP Undergraduate Instagram account (@msppugchapters), is an outstanding project by MSPP undergraduate members, that aims to spread awareness on diseases that are prevalent, underrepresented or misunderstood by the general public. The posts are designed to be easily digested, providing concise information with as few words as possible. They are uploaded on the 15<sup>th</sup> of every month, starting from May 2023 and projected to end on May 2024. The selected topics were thoughtfully curated to address key areas of interests and concerns within the healthcare and scientific communities. These topics include Coronary Heart Disease, Heat Stroke, HIV/AIDS, Parkinson's Disease, Diabetic Neuropathy and Lung Cancer.

Each month, engaging and informative posts were shared on our undergraduate social media platforms, providing students with valuable insights into the pathophysiology, management, and prevention strategies associated with these conditions. The series aimed to foster a deeper understanding of health-related issues and inspire students to explore potential avenues for research and intervention.

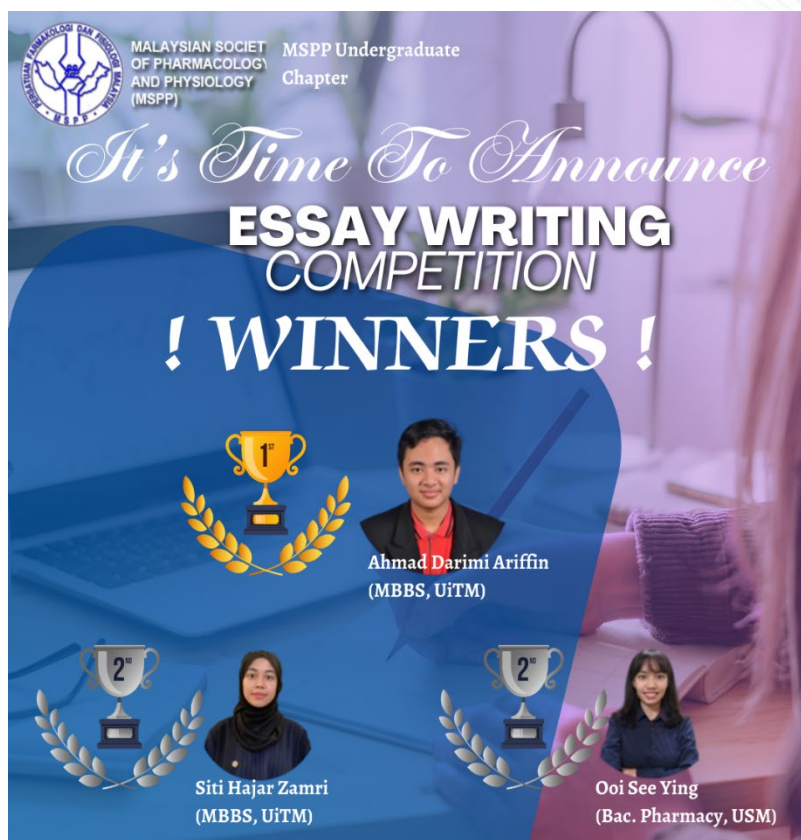
As we reflect on the achievements of the Educational Series, we look forward to building upon this momentum and exploring new opportunities for educational enrichment and collaboration within our academic community. We strive to continue fostering a culture of learning, inquiry, and innovation that empower students to become future leaders in the field of Pharmacology and Physiology.



### MSPP Undergraduate Chapter Essay Competition 2023

We are thrilled to report the successful conclusion of the Undergraduate Essay Competition in Physiology and Pharmacology, organized by the MSPP Undergraduate Student Chapter. This exciting event took place in October 2023 and showcased undergraduate students' academic excellence and research prowess in the field.

The competition aimed to explore pressing issues in Physiology and Pharmacology, providing a platform for students to explore topics of significant relevance to healthcare and scientific inquiries. The two key themes for discussion were the Effects of Anxiety and Stress on Physiological Mechanisms of the Brain Among Students and Its Management, and the Effects of Hormonal Imbalance on the Physiology of Women and the Concerns of Hormone Replacement Therapy.



These thought-provoking themes elicited insightful reflections and critical analyses from participants, shedding light on complex issues impacting human health and well-being. We are delighted to acknowledge the enthusiastic participation of undergraduate students from various institutions across Malaysia. Five students representing their respective institutes brought unique perspectives and discussions to the competition.

We are thrilled to announce the winners of the Undergraduate Essay Competition as follows:

Winner: Ahmad Darimi Ariffin (UiTM, MBBS)

Runner-Up: Siti Hajar Mohd Zamri (UiTM, MBBS) and Ooi See Ying (USM, Pharmacy)

Warmest congratulations to the winners and sincere appreciation to all participants for their dedication and scholarly contributions to the competition.

This event would not have been possible without the tireless efforts of the organizing committee, the support of the Malaysian Society of Pharmacology and Physiology, and the commitment of our esteemed judges.

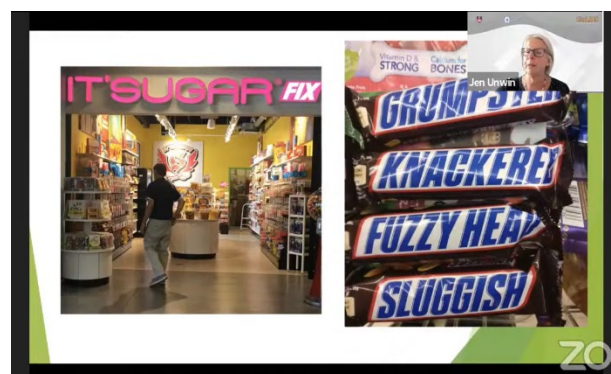
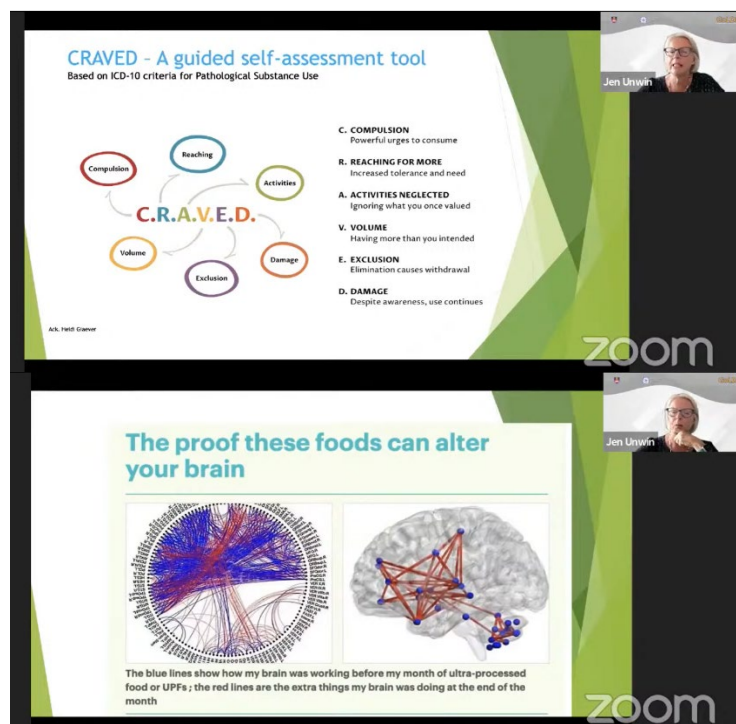
By Dr. Noor Azlina Abu Bakar  
MSPP Exco / Chair, MSPP UG Chapter  
[noorazlina@unisza.edu.my](mailto:noorazlina@unisza.edu.my)



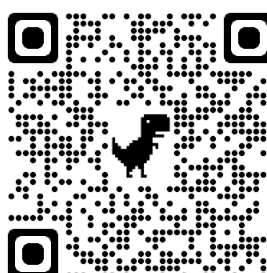
## GoLDS: Global Lecture & Discussion Series Food Addiction: Prevalence, Screening & Management

On 6<sup>th</sup> June 2023, MSPP and Faculty of Medicine, UiTM kicked off the new season of GoLDS with a talk by Dr Jennifer Unwin from the UK entitled “Food Addiction: Prevalence, Screening and Management”. After a brief introduction by Prof Dr Nafeeza Mohd Ismail as the moderator for the night, Dr Unwin proceeded to capture the attention of the 28 participants via Zoom and YouTube live with her deep knowledge and vast experience as a clinical psychologist in the subject matter.

The talk was followed by a thought-provoking Q&A session, and in the end was well-received by participants of various backgrounds and place of practice. Eligible participants were awarded 1 MMA CPD point.



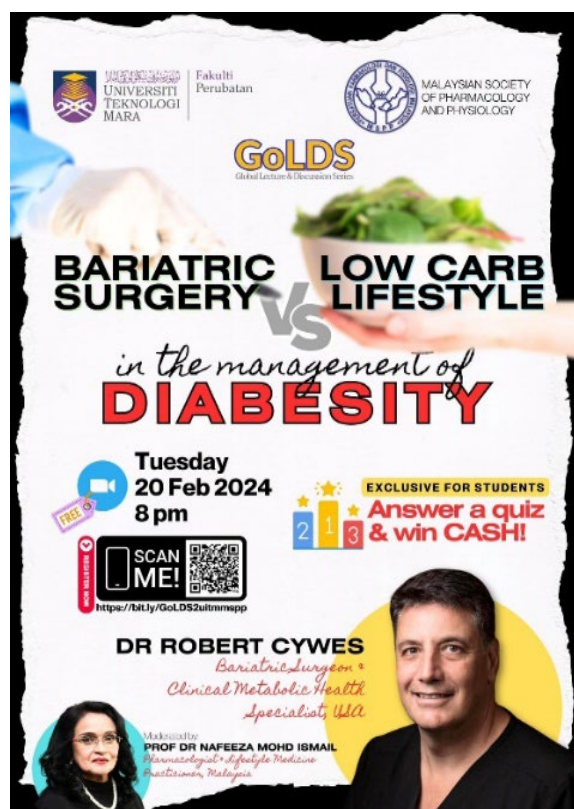
By Dr. Muhammad Huzaimi Haron  
MSPP Exco / Chair, GoLDS  
[drhuzaimi@uitm.edu.my](mailto:drhuzaimi@uitm.edu.my)



For those who missed this GoLDS series, you may scan the QR code or directly follow the link below to watch the recording of the session:

<https://www.youtube.com/watch?v=WcOK74XZ-pk>

## GoLDS: Global Lecture & Discussion Series Bariatric Surgery vs Low Carb Lifestyle in the Management of Diabetes



**GoLDS**  
Global Lecture & Discussion Series

**BARIATRIC SURGERY VS LOW CARB LIFESTYLE**  
in the management of **DIABESITY**

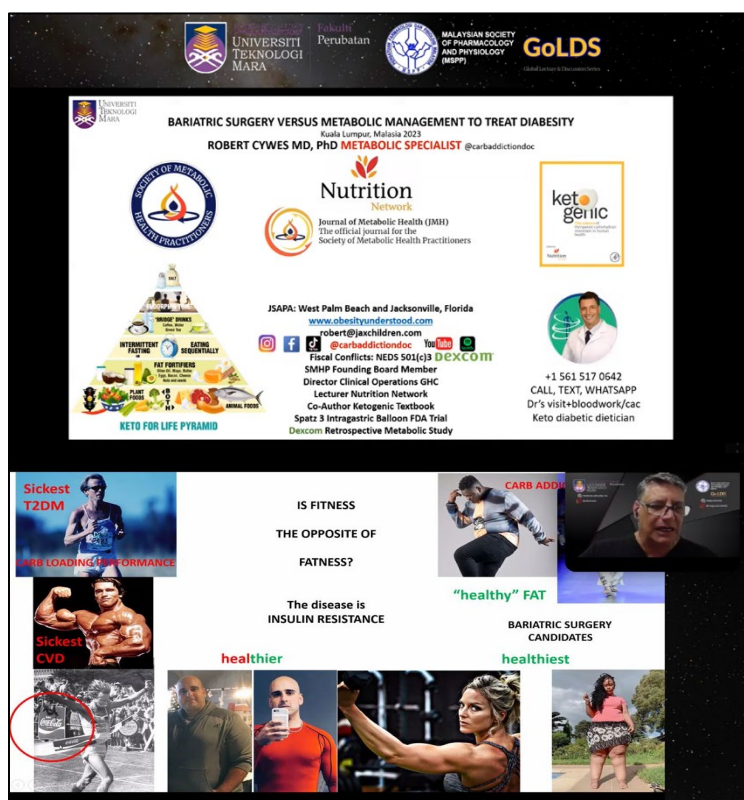
**Tuesday 20 Feb 2024 8pm**

**Answer a quiz & win CASH!**

**DR ROBERT CYWES**  
Bariatric Surgeon & Clinical Metabolic Health Specialist USA

Moderator: **PROF DR NAFEEZA MOHD ISMAIL**  
Pharmacologist & Lifestyle Medicine Practitioner, Malaysia

Dr. Robert Cywes from the USA joined Prof. Dr. Nafeeza Mohd Ismail on 20<sup>th</sup> February 2024 for another GoLDS organized by MSPP and Faculty of Medicine, UiTM. Prof. Nafeeza started the session off by introducing Dr Cywes, who then proceeded to deliver the talk with much enthusiasm and passion, to the delight of the 83 participants, which included scientists, medical doctors and medical students from UiTM.



**BARIATRIC SURGERY VERSUS METABOLIC MANAGEMENT TO TREAT DIABESITY**  
Kuala Lumpur, Malaysia 2023  
ROBERT CYWES MD, PhD **METABOLIC SPECIALIST** @carbaddictiondoc

**Nutrition Network**  
Journal of Metabolic Health (JMH)  
The official journal for the Society of Metabolic Health Practitioners

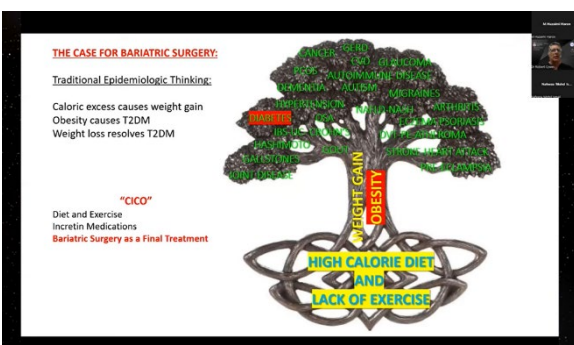
**ketogenic**

**KETO FOR LIFE PYRAMID**

JSAPA: West Palm Beach and Jacksonville, Florida  
www.obesityunderstood.com  
robert@jascchildren.com  
@carbaddictiondoc

Fiscal Conflicts: NEDS 501(c)(3) Dexcom  
SMHP Founding Board Member  
Director Clinical Operations GHSC  
Lecturer Nutrition Network  
Co-Author Ketogenic Textbook  
Spatz 3 IntraGastric Balloon FDA Trial  
Dexcom: Retrospective Metabolic Study

+1 561 517 0642  
CALL, TEXT, WHATSAPP  
Dr's visit+bloodwork/cac  
Keto diabetic dietitian



**THE CASE FOR BARIATRIC SURGERY:**

Traditional Epidemiologic Thinking:  
Caloric excess causes weight gain  
Obesity causes T2DM  
Weight loss resolves T2DM

"CICO"

Diet and Exercise  
Incretin Medications  
Bariatric Surgery as a Final Treatment

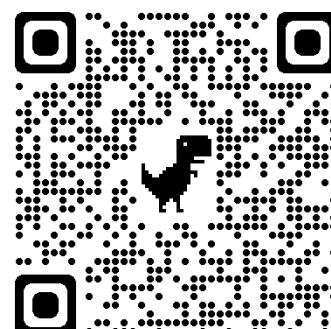
At the end of the talk, students participated in a quiz competition held using Quizizz, answering questions based on the content of Dr Cywes' presentation. The top winners were awarded cash prizes sponsored by the Faculty of Medicine, UiTM. Eligible participants were awarded 1 MMA CPD point. You may scan the QR code or directly follow the link below to watch the recording of the session:

[https://www.youtube.com/watch?v=tMhH4sTa\\_2w](https://www.youtube.com/watch?v=tMhH4sTa_2w)

Both GoLDS talks are available on our MSPP Webinars YouTube channel:

<https://www.youtube.com/@MSPPWebinars>

By Dr. Muhammad Huzaimi Haron  
MSPP Exco / Chair, GoLDS  
[drhuzaimi@uitm.edu.my](mailto:drhuzaimi@uitm.edu.my)



## Research Sharing and Collaboration on Ion Channels and Diseases

The 'Cell and Molecular Biology for Targeted Therapy (CoMBaT)' Research Group, Faculty of Medicine, Universiti Sultan Zainal Abidin (UniZA), in collaboration with the Malaysian Society of Pharmacology and Physiology (MSPP) organised a webinar on "Research Sharing and Collaboration on Ion Channels and Diseases" on 31<sup>st</sup> October 2023 via Cisco Webex Platform. The session was officiated by the Dean of Faculty Medicine UniZA, Prof. Dr. Harmy Mohamed, followed by a welcoming address by the MSPP President, Assoc. Prof. Dr. Wan Amir Nizam Ahmad.

The inaugural event which aimed to gather Malaysian researchers with interests in research on ion channels and diseases in one platform, featured five researchers in the field, namely Dr. Siti Yusrina Nadiah Jamaludin (UniZA), Assoc. Prof. Ts. Dr. Izuddin Fahmy Abu (UniKL), Dr. Aisyah Hasyila Jahidin (UiTM), Dr. Noor Fatmawati Mokhtar (USM) and Dr. Mohd Harizal Senik @ Nawi (USM). The program attracted close to 50 participants attending the thought-provoking presentations.

**TENTATIVE**

**8.45am-9.00am**  
Registration

**9.00am-9.05am**  
Welcoming speech from organiser - UniZA

**9.05am-9.20am**  
Welcoming speech from co-organiser, AP Dr. Wan Amir Nizam Wan Ahmad, President MSPP/ (USM Kubang Kerian)

**Research Sharing & QA session**  
**SPEAKERS :**

**9.20am-9.40am**  
Dr. Siti Yusrina Nadiah Jamaludin (UniZA)

**9.40am-10.00am**  
AP Ts. Dr. Izuddin Fahmy Abu (UniKL)

**10.00am-10.20am**  
Dr. Aisyah Hasyila Jahidin (UiTM)

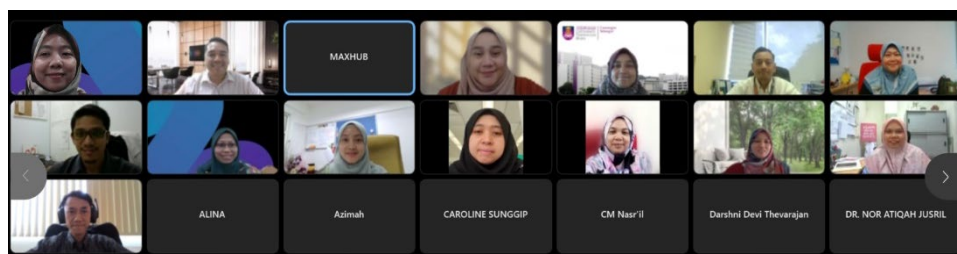
**10.20am-10.40am**  
Dr. Noor Fatmawati Mokhtar (USM)

**10.40am-11.00am**  
Dr. Mohd Harizal Senik @ Nawi (USM)

**11.00am-1.00pm**  
-Photography Session  
-Focused Group Discussion

**RESEARCH SHARING AND COLLABORATION ON ION CHANNELS & DISEASES 2023**

**Date: 31st October 2023**  
**Time: 9.00am-1.00pm**  
**CISCO WEBEX PLATFORM (online)**



**PHILANTHOTOXIN (PhTX)**

Isolated from solitary digger wasp, *Philanthus triangulum* (Piek et al., 1971).

• Original compounds: PhTX-433  
• Analogue termed PhTX-343 was synthesized retaining the pharmacologically active properties of the original compound (Eidefrawi et al., 1988).

PhTX-343 is a potent non-competitive open channel blocker for NMDA receptor → the basis for its neuroprotective effects (Kachel et al., 2019)

• Structurally large with a hydrophobic headgroup and a positively-charged polyamine tail  
• Binds deep within the channel pore → excellent for interaction with NMDA receptors (Kachel et al., 2019)

**The Mystery of Epilepsy: Ion Channel and Connectivity**

Abnormal neural activity is the hallmark of epilepsy, and functional connectivity is critical to understand the neural underpinnings. Our study investigated the effects of pharmacologically induced epileptiform activity on intra- and inter-hemispheric hippocampal functional connectivity in a mouse model.

Dr. Mohd Harizal Senik  
Department of Biomedicine  
School of Medical Sciences  
Universiti Sains Malaysia

**Pushing Boundaries in Drug Discovery and Health Research**

**01** *Clinacanthus nutans*  
Belalai gajah  
Sabah Snake Grass

**02** *Vitex trifolia*  
Lemuni hitam  
Arabian lilac

**03** *Myrmecodia platytrea*  
Sarang semut  
Ant-plant

**Ion channels as cancer biomarkers (clinical perspective)**

**Early diagnosis Predictive Prognostics**

Towards Precision medicine – point-of-care (POC) assay (digital-sensor) for treatment response monitoring

**MY FRGS WORK: TRPV4 AND COLORECTAL CANCER**

- TRPV4 is a non-selective Ca<sup>2+</sup> channel
- TRPV4 is expressed in various types of tissues and is implicated in many physiological processes
- TRPV4 has been implicated in some aspects of tumorigenesis
- The role of TRPV4 in colorectal cancer is largely unexplored

Yu, S., Huang, S., Ding, Y., Wang, W., Wang, A., & Lu, Y. (2019). Transient receptor potential ion channel subfamily V member 4: a potential target for colorectal cancer death & disease. 10671, 487.

The programme was successful in its initiative to provide an avenue where researchers can share their research interests and experiences, as well as to create opportunities for future research networking and collaborations.

**By Assoc. Prof. Dr. Izuddin Fahmy Abu**  
MSPP Vice President  
[izuddin@unikl.edu.my](mailto:izuddin@unikl.edu.my)

## MSPP won the bid to host the 11<sup>th</sup> Federation of the Asian & Oceanian Physiological Societies Congress (FAOPS) 2027!

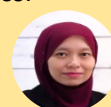
MSPP, with the support of the Malaysia Convention & Exhibition Bureau (MyCEB), undertook the bid to host the FAOPS 2027 and 2031 Congresses in Daegu, South Korea. The bidding presentation took place at the FAOPS General Assembly during the FAOPS 2023 Congress on 2<sup>nd</sup> November 2023, in the presence of FAOPS Council members and representatives from 15 FAOPS member societies. The bidding committee comprised of MSPP members, namely Assoc. Prof. Dr. Azizah Ugusman, Assoc. Prof. Dr. Mohd Helmy Mokhtar, and Dr. Adila A Hamid.

MSPP and the Physiological Society of Thailand bid for both FAOPS 2027 and 2031, while the Chinese Association for Physiological Sciences and the Indonesian Physiological Society bid for FAOPS 2031 only. Each of the four physiological societies was given a chance to deliver a 15-minute bid presentation, followed by question-and-answer sessions. Following the presentations, the first round of voting was to decide the host of FAOPS 2027.



The comprehensive and solid presentation by the MSPP bidding team had secured MSPP a victory in the bid, garnering a total of 26 votes, surpassing Thailand, which received 5 votes. Since MSPP won the bid for FAOPS 2027, we were excluded from the second round of voting to determine the host for FAOPS 2031, which was eventually won by Indonesia. FAOPS 2027 Congress is scheduled to be held at Kuala Lumpur Convention Centre in July 2027. Preparations are currently underway to establish the organizing committee for the FAOPS 2027 Congress. The committee will play a pivotal role in ensuring the successful planning, coordination, and execution of the congress.

By Assoc. Prof. Dr. Azizah Ugusman  
MSPP Exco / Head of FAOPS Bidding Committee  
[dr.azizah@ppukm.ukm.edu.my](mailto:dr.azizah@ppukm.ukm.edu.my)



# MSPP NEWSLETTER

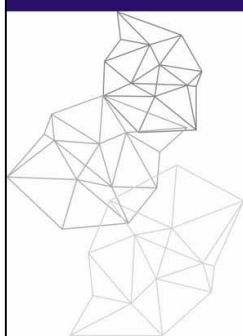
April 2024



## CONGRATULATIONS

**MALAYSIAN SOCIETY OF PHARMACOLOGY  
AND PHYSIOLOGY (MSPP)**

**FOR WINNING THE BID TO HOST**

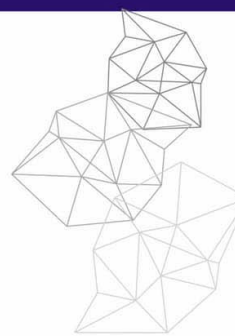


**FAOPS**  
**CONGRESS 2027**

The 11th Federation of the Asian and Oceanian  
Physiological Societies Congress

**Unraveling The Marvels of Physiology**

31st July-3rd August 2027  
KLCC, Kuala Lumpur, Malaysia



### Bid Committee:

Assoc. Prof. Dr Azizah Ugusman  
Assoc. Prof. Dr Mohd Helmy Mokhtar  
Dr Adila A Hamid

### HOSTED BY:

**MALAYSIAN SOCIETY OF  
PHARMACOLOGY AND  
PHYSIOLOGY (MSPP)**



### Supported by:



## 37<sup>th</sup> MSPP Annual Scientific Meeting 2024 & 9<sup>th</sup> Medical Research Symposium : Call for Participation

**MALAYSIAN SOCIETY OF PHARMACOLOGY AND PHYSIOLOGY (MSPP)**

LEADING THE WAY  
LEADING THE WORLD

INTERNATIONAL MULTI-AWARD WINNING INSTITUTION FOR SUSTAINABILITY

**CALL FOR PAPERS**

**37<sup>TH</sup> MSPP ANNUAL SCIENTIFIC MEETING**

**9<sup>TH</sup> MEDICAL RESEARCH SYMPOSIUM**

**KUANTAN 2024**

**"INTEGRATING MISSION ORIENTED RESEARCH IN MEDICAL SCIENCES"**

**11<sup>TH</sup> & 12<sup>TH</sup> SEPTEMBER 2024**

**AC HOTEL BY MARRIOTT**

**KUANTAN, PAHANG MALAYSIA**

**Keynote Speaker**

**PROF. DR. TOSHIHIDE YAMASHITA**  
Chairman  
Department of Molecular Neuroscience  
Osaka University, Japan

**Plenary I**

**PROF. DATO' DR. HAMIZAH ISMAIL**  
Maternal Fetal Medicine Specialist  
& Consultant O&G  
Kulliyah of Medicine, IIUM

**Plenary II**

**PROF. EMERITA DATUK DR. ASMA ISMAIL**  
FASc  
Ibn Sina Chair & Molecular Biology Expert  
Kulliyah of Medicine, IIUM

**REGISTRATION FEE:**

| Category             | Early Bird<br>1 Mar - 30 May 2024 | Late<br>1 Jun 2024 - Onward |
|----------------------|-----------------------------------|-----------------------------|
| Student              | RM 500.00                         | RM 550.00                   |
| IIUM/MSPP Member     | RM 750.00                         | RM 800.00                   |
| Non-IIUM/MSPP Member | RM 800.00                         | RM 850.00                   |
| International        | USD 170                           | USD 200                     |

**IMPORTANT DATE:**  
REGISTRATION & ABSTRACT SUBMISSION IS OPEN FROM  
**29<sup>TH</sup> FEBRUARY 2024 - 15<sup>TH</sup> JUNE 2024**

**REGISTRATION SCAN HERE**

**PRESENTATION CATEGORY:**

☒ Oral
 ☒ Poster
 ☒ Case Report

*All accepted abstracts will be published as proceedings in Medicine and Health Journal.*

For enquiries, please contact:  
**OFFICE OF RESPONSIBLE RESEARCH & INNOVATION**  
**KULLIYAH OF MEDICINE**

Follow us: [facebook.com/mrskomiium](https://facebook.com/mrskomiium)

<http://iiuimedic.net/mrs/> +609-570 4633

**CPD FOR MEDICAL DOCTORS TO BE AWARDED**

MSPP Annual Scientific Meeting 2024 and Medical Research Symposium 2024 would like to invite academicians, researchers and postgraduate students to participate in MSPP-MRS 2024 with the theme "Integrating Mission Oriented Research in Medical Sciences".

**Date: 11<sup>th</sup> & 12<sup>th</sup> September 2024**  
(Wednesday & Thursday)

**Venue: AC Hotel by Marriot, Kuantan, Pahang, Malaysia.**

Meet our esteemed speakers:

1. Prof. Dr. Toshihide Yamashita, Japan
2. Prof. Dato' Dr. Hamizah Ismail, Malaysia
3. Prof. Emerita Datuk Dr. Asma Ismail, Malaysia
4. Prof Dr. Zulfaezal Che Azemin, Malaysia
5. Assoc. Prof. Dr. Wan Amir Nizam Wan Ahmad, Malaysia
6. Assoc. Prof. Dr. Dharmani Devi A/P Murugan, Malaysia
7. Assoc. Prof. Dr. Ailin Razali, Malaysia
8. Assoc. Prof. Dr. Maizura Mohd Zainudin, Malaysia
9. Assoc. Prof. Dr. Azizah Ugusman, Malaysia
10. Dr. Florence Pribadi, Indonesia
11. Asst. Prof. Dr. Mohammad Farhan Rusli, Malaysia

Submit your abstract now!!!


Presentation Categories: ORAL, POSTER & CASE REPORT

Registration for Early Birds is now open until 30<sup>th</sup> May 2024.

For further information, visit our webpage at <http://iiuimedic.net/mrs>

## MSPP Young Investigator Award 2024 Announcement

MSPP is pleased to invite eligible MSPP members to participate in the MSPP Young Investigator Award 2024. This annual event aims to encourage young members to showcase the research in the field of Pharmacology and Physiology. Please refer to the poster for more information. The deadline for registration is on 15<sup>th</sup> June 2024.



### MSPP YOUNG INVESTIGATOR AWARD 2024

#### CRITERIA FOR ELIGIBILITY TO PARTICIPATE

- **Age 40 or younger** on December 31 of the year during which the award is presented.
- **Active member** of Malaysian Society of Physiology and Pharmacology (MSPP).
- **Conducting research** in any area of physiology and pharmacology.
- Currently domiciled and conducting research in **Malaysia**.

#### REQUIREMENTS DURING SUBMISSION

- A **full-length CV**, including the list of all publications (including the impact factor (IF) of the journals in which articles have been published) and research grants.
- Total citations in the last three years.
- A **synopsis of not more than 500 words** on their research, its significance or its potential benefit to the society.
- Scopus ID, ORCID ID, Google Scholar ID must be provided on submission.
- **Supporting letters from TWO (2) referees** who are working within the disciplines of physiology and pharmacology.

#### EVALUATION

- Evaluation will be made by the MSPP Young Investigator Award Committee that will be appointed by the MSPP EXCO.
- **Shortlisted candidates** will be notified in advance of the 37<sup>th</sup> MSPP Scientific Meeting 2024.
- All shortlisted candidates **MUST register to attend 37<sup>th</sup> MSPP Scientific Meeting 2024**. (<https://iiumedic.net/mrs/>)
- All shortlisted candidates will be required to make a **10-minute presentation** which will be followed by a **10-minute Q&A** session at 37<sup>th</sup> MSPP Scientific Meeting 2024.
- Evaluation shall include feedback from the MSPP Young Investigator Award Committee and the judges following the presentation at 37<sup>th</sup> MSPP Scientific Meeting 2024.

#### SUBMISSION

- Submission for participation is by **nomination** from either the head of institute/department, or another colleague from the same or any other institute, or self-nomination.
- Submission has to be made before the **15<sup>th</sup> of JUNE 2024**.

**All submission for MSPP Young Investigator Award for 2024 must be forwarded to:**  
MSPP Young Investigator Award Committee  
c/o Assoc Prof Dr Dharmani Devi Murugan  
Department of Pharmacology, Faculty of Medicine, Universiti Malaya.  
E-mail: [dharmani79@um.edu.my](mailto:dharmani79@um.edu.my) / [mspp.secretariat@gmail.com](mailto:mspp.secretariat@gmail.com)

**37<sup>th</sup> MSPP Scientific Meeting 2024.** (<https://iiumedic.net/mrs/>)

# MSPP NEWSLETTER

April 2024



## MSPP Young Teacher's Award 2024 Announcement

MSPP is pleased to invite young lecturers out there to join the MSPP Young Teacher's Awards 2024. The competition is exclusive for MSPP members only, hence no entry fee for participation is charged. Those who are interested to join, kindly scan the QR code in the poster to register, and stand a chance to win cash prizes. The competition will be held on 9<sup>th</sup> July 2024, and the deadline to register is 14<sup>th</sup> June 2024. Hurry up and don't miss this opportunity!

**ORGANISED BY**  
 **MALAYSIAN SOCIETY OF PHARMACOLOGY AND PHYSIOLOGY (MSPP)**

**CO-HOST BY**  
 **UPM**  
UNIVERSITI PUTRA MALAYSIA  
BERSEKUTU BERSAMA



# MSPP

## YOUNG TEACHER'S AWARD 2024

 **Date**  
Tue, 9th July 2024

 **Program Tentative**  
10.00am - 12.00pm

 **Venue**  
Faculty of Medicine & Health Sciences, UPM

**PHYSIOLOGY**  
Regulation of Menstrual cycle

**PHARMACOLOGY**  
Hormonal contraceptives

| AIM  | CRITERIA   | FORMAT  |
|--|--|---|
| <ul style="list-style-type: none"><li>To promote excellence in Pharmacology and Physiology teaching amongst young MSPP members</li></ul> | <ul style="list-style-type: none"><li>MSPP member with a PhD holder</li><li>Not more than 5 years teaching experience</li><li>Currently domiciled and teaching in Malaysia</li></ul> | <ul style="list-style-type: none"><li>Face-to-face 20 mins presentation &amp; 10 mins Q&amp;A</li></ul> |

**REGISTRATION FEE**  
 **SCAN ME**  


**DEADLINE**  
**14th JUNE 2024**

**For further enquiries**  
 017-4700395  
 noorazlina@unisza.edu.my

Winners will be announced at the end of the competition. Prize-giving ceremony will be done during the closing ceremony of the 37th MSPP Annual Scientific Meeting 2024

### MSPP Membership

MSPP is now 227-members strong, with 68 Life Members.  
We wish to congratulate our newest Life Members of MSPP as follows:



**Assistant Prof. Dr Azmir Ahmad**  
Kuliyyah of Nursing,  
IIUM



**Assoc. Prof. Dr Bedanta Roy**  
Faculty of Medicine,  
Quest International University



**Assoc. Prof. Ts. Dr Lee Siew Keah**  
Faculty of Medicine and Health Sciences,  
UTAR



**Dr Norhafiza Razali**  
Faculty of Medicine,  
UiTM



**Dr Nurul 'Izzah Ibrahim**  
Faculty of Medicine,  
UKM



**Prof. Dr Gan Siew Hua**  
School of Pharmacy,  
Monash University



**Assoc. Prof. Ts. Azlini Ismail**  
Kuliyyah of Dentistry  
IIUM

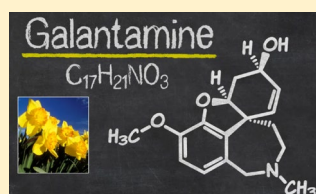
### Research News: Alzheimer's Drug Fermented with Help from AI and Bacteria

Galantamine is a common medication used by people with Alzheimer's disease to treat their symptoms. Unfortunately, synthesizing the active compounds in a lab at the scale needed isn't commercially viable. The active ingredient is extracted from daffodils through a time-consuming process, and unpredictable factors, such as weather and crop yields, can affect supply and price of the drug. Researchers at The University of Texas (UT) developed an artificial intelligence system to harness microbes that will do all the work instead.

The researchers outlined a process using genetically modified bacteria to create a chemical precursor of galantamine as a byproduct of the microbe's normal cellular metabolism. Essentially, the bacteria are programmed to convert food into medicinal compounds. "The goal is to eventually ferment medicines like this in large quantities," said Prof. Dr. Andrew Ellington, author of the study. "This method creates a reliable supply that is much less expensive to produce. It doesn't have a growing season, and it can't be impacted by weather."

Danny Diaz, from UT's Institute for Foundations of Machine Learning developed an AI system called MutComputeX that is key to the process. It identifies how to mutate proteins inside the bacteria to improve their efficiency and operating temperature in order to maximize production of a needed medicinal chemical.

"This system helped identify mutations that would make the bacteria more efficient at producing the target molecule, sometimes up to three times as efficient as the natural system found in daffodils," Diaz said. The research team genetically modified *E. coli* to produce 4-O-Methyl-norbelladine, a chemical building block of galantamine. The complex molecule is in a family of compounds extracted from daffodils that have medicinal uses in treating conditions such as cancer, fungal infections and viral infections, but using microbial fermentation to create a chemical in this family is new.



The process of harnessing microbes to produce useful byproducts is nothing new. Microbial fermentation is currently used to make certain types of insulin for diabetes treatment, hormones and recombinant proteins used in several drugs such as autoimmune treatments and vaccines. But applying AI in the process is relatively new and expands what is possible with microbial fermentation.

Source: ScienceDaily®, 14<sup>th</sup> March 2024.

<https://www.sciencedaily.com/releases/2024/03/240314122118.htm>

Journal Reference: Simon d'Oelsnitz et. al. *Nature Communications*, 2024; 15 (1) DOI: [10.1038/s41467-024-46356-y](https://doi.org/10.1038/s41467-024-46356-y)