MSPP NEWSLETTER

January 2020

Editorial Message

It is with great pleasure to wish all members a very Happy New Year 2020. In 1991, Wawasan 2020 (Vision 2020) was introduced. I was doing my matriculation then. 2020 seemed very far away at that time and I wondered whether I will see the lights of 2020.

Now, 2020 is upon us and so many things have happened between then and now. As a society, MSPP has flourished over the years. To date, MSPP has 52 life members and 169 active ordinary members. The MSPP Exco members are enthusiastic to bring MSPP to a greater height. But with every development, there will be challenges. With every few steps taken forward, there will be hurdles. Let's work together as a society and face each challenge and hurdle that the new year brings with wisdom and perseverance.

I wish every member a productive year ahead and may we have a 20/20 vision on what we aimed to achieve. Don't forget to look out for this year's line-up of MSPP activities.

~Norazlina Mohamed~

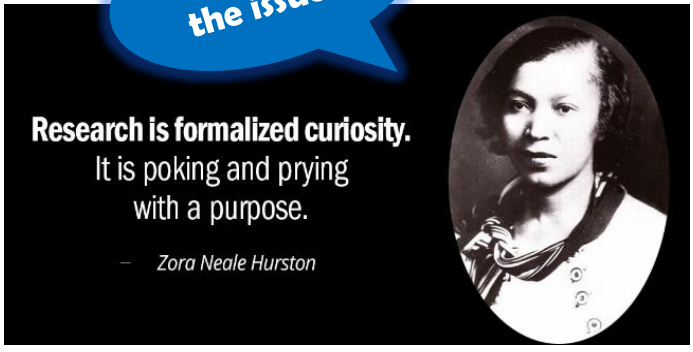
Upcoming Events

- **MSPP Community Outreach program**
  - Health screening during Physiology Fun Run 2.0
  - Date: 29 February 2020
  - Venue: Perdana Botanical Garden

- **34th MSPP Scientific Meeting**
  - Theme: Drug Discovery and Disease Mechanisms Trailblazing the Translational Research
  - Date: 12-13 July 2020
  - Venue: PJ Hilton

Check out MSPP website http://mspp.com.my/ for more details.

Quote of the issue...



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mspp.secretariat@gmail.com

MSPP NEWSLETTER
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33rd MSPP Scientific Meeting 2019

The Departments of Pharmacology and Physiology, University of Malaya successfully hosted the 33rd MSPP Scientific Meeting at The Everly Hotel, Putrajaya, on 15th - 16th July 2019. They were joined by Controlled Release Society, The Malaysia Local Chapter (MyCRS) as co-organizer.

The event was officiated by the Minister of Health, Y.B. Datuk Seri Dr. Dzulkefly Ahmad, witnessed by Datuk (Ir) Dr Abdul Rahim Hashim, Vice Chancellor of UM and Dato Prof. Dr. Adeeba Kamarulzaman, Dean of Faculty of Medicine, UM.

This two-day scientific meeting was attended by 148 participants from both public and private institutes of higher education in Malaysia and overseas. The event featured 1 keynote, 4 plenaries, 12 symposia and 1 lunch talk.

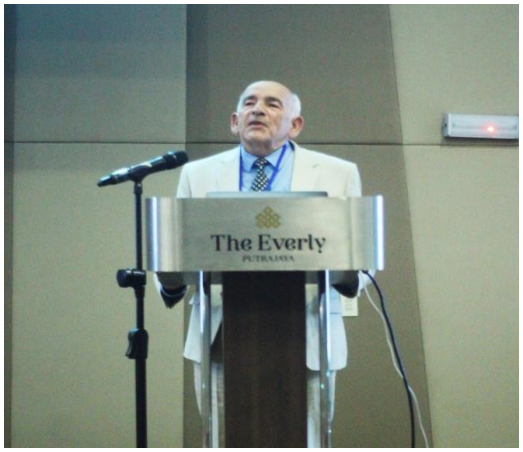
Many prominent experts, from the academia and industries, shared their research and knowledge of advances in pharmacology, physiology, drug discovery, nanotechnology and as well as in medical education. Noteworthily, this event was graced by Professor Roderick J. Flower - one of the authors of the textbook Rang & Dale Pharmacology as the keynote speaker.

The event was also highlighted in the Malaysian reserve (https://themalaysianreserve.com/2019/07/16/minister-scientists-and-researchers-need-higher-pay/).

Assoc. Prof. Dr. Dharmani Devi A/P Murugan
Chairperson
33rd MSPP Scientific Meeting 2019

Officiating ceremony of 33rd MSPP

Organizing committee of 33rd MSPP



Prof. Dr. Roderick J. Flower
Keynote Speaker of 33rd MSPP

MSPP NEWSLETTER
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MSPP Young Researcher Award 2019

Continuing its tradition to encourage and recognise young local researchers in pharmacology and physiology, the Annual Young Researcher Award 2019 was held in conjunction with 33rd Annual MSPP Scientific Meeting on 15th -16th July 2019 (MSPP2019).

Out of many applications, three young researchers' were shortlisted. They are: Dr Mohmad Farooq Shaikh (Monash University of Malaysia), Dr Che Azurahanim Che Abdullah (UPM) and Dr Giribabu Nelli (UM). They were required to showcase their research work and achievements during MSPP2019 and were judged on various categories. Among the judges was Professor Roderick J. Flower from United Kingdom, a world-renowned physiologist and a co-author of Pharmacology Rang and Dale textbook.

With a unanimous decision from all the judges, The MSPP Young Researcher Award 2019 was awarded to Dr Mohmad Farooq Shaikh from Monash University of Malaysia. Congratulations to the winner and all the participants.

Dr Wan Amir Wan Nizam Wan Ahmad
Coordinator, Young Researcher Award 2019

Q: Why did the duck get arrested?

A: Because he was selling quack.

MSPP NEWSLETTER
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MSPP Teachers' Refresher Course

The Teachers' Refresher Course this year was jointly organised by UTAR, UM and MSPP. It was held on Wednesday, 13th November, 2019 at the Faculty of Medicine, UM. Twenty-five members and non-members together with postgraduate students attended the event.

The subject of discourse was the Central Nervous System, a daunting system even to the best of educators around. But it was handled with aplomb by two seasoned and excellent teachers in their fields, Dr Kumar Seluakumaran from Physiology, UM and Prof Debra Sim Si Mui from Pharmacology, UM.

In addition, in order to be in-tuned with education in the Fourth Industrial Revolution, three experts in innovative teaching methods from UTAR (Drs Lee Poh Foong, Carmen Nge Siew Mun and Bong Mei Fern) were also invited to help participants glimpse at medical education in the 21st century and beyond.

Their hands-on demonstrations of applications in breathing techniques and virtual (VR) and augmented (AR) realities were the highlights of the Course and provided the most enjoyable experience for all.

Prof Dr Lam Sau Kuen
Coordinator, Teacher's Refresher Course 2019

World's Pharmacology/Physiology News

Pharmacology News: Metformin promotes healthy aging

Humans first started using metformin as a glucose-lowering drug more than 60 years ago. Researchers have shown that the treatment reduces premature deaths among people with type 2 diabetes. Recently it was suggested that metformin may have anti-aging effects and an ability to protect bone, especially during the early phases of rheumatoid arthritis.
Until the new study, scientists' understanding of the biochemical effects of metformin was limited to knowing that the drug activates a signaling pathway called AMPK. This pathway plays a key role in balancing energy levels in cells.

Researchers also found hundreds of kinases whose switching activity responds rapidly to metformin with potential impact on healthy aging. Many of the signaling pathways work independently of AMPK. Scientists were already aware of two of the pathways — protein kinase D and MAPKAPK2 — and that they concern cellular stress. This could explain the link with healthy aging and the impacts on extending life span and health span.

Excerpt from an article published in Medical News Today. "Study reveals how diabetes drug promotes healthy aging", 5 December 2019. https://www.medicalnewstoday.com/articles/

Physiology News: Brain circuit that controls food impulsivity

You're on a diet, but the aroma of popcorn in the movie theater lobby triggers a seemingly irresistible craving. Within seconds, you've ordered a tub and have eaten several handfuls. Impulsivity, or responding without thinking about the consequences of an action, has been linked to excessive food intake, binge eating, weight gain and obesity, along with several psychiatric disorders including drug addiction and excessive gambling.

A team of researchers that includes a faculty member at the University of Georgia, Dr Emily Noble, has now identified a specific circuit in the brain that alters food impulsivity. Using a rat model, researchers focused on a subset of brain cells that produce a type of transmitter in the hypothalamus called melanin concentrating hormone (MCH).While previous research has shown that elevating MCH levels in the brain can increase food intake, this study is the first to show that MCH also plays a role in impulsive behavior, Noble said.

"We found that when we activate the cells in the brain that produce MCH, animals become more impulsive in their behavior around food," Noble said. "Understanding this circuit, opens the door to the possibility that one day we might be able to develop therapeutics for overeating."

Excerpt from an article published in News Medical Life Sciences. "Specific brain circuit linked to food impulsivity discovered", 12 Dec 2019.
https://www.news-medical.net/news/20191211/Specific-brain-circuit-linked-to-food-impulsivity-discovered.aspx