

MSPP NEWSLETTER

August 2021



Editorial Message

Dear MSPP members,

I am delighted to present to you our August 2021 Newsletter, the 2nd issue for this 2020/2022 term.

The highlight of this issue is of course the 34th Scientific Meeting 2021 which was successfully held virtually from 15th to 17th July 2021. On behalf of the MSPP Exco, we would like to congratulate the organizing committee, led by Assoc. Prof. Dr. Mohd Farooq Shaikh from Monash University Malaysia for such an amazing job in orchestrating the virtual conference. One might think that conducting a virtual event is less of a burden compared to organizing a physical one, but that is far from the truth! As part of the committee member, I can vouch for the hard work and dedication put forth by the entire organizing committee to ensure that the conference went on smoothly. The many sleepless nights leading up to the event were totally worth it however, as we received highly positive feedback on the program; with many praising the scientific content and interesting talks, as well as the initiative to waive the participants' registration fee. In all, the conference truly celebrated the success of pharmacologists and physiologists nationally and internationally. Congratulations once again and thank you to all participants for the support!

Our yearly signature events, namely the MSPP Young Investigator and Young Teacher's Award are also back this year albeit on a different platform. We are extremely proud and excited to see young talents emerging in the field of pharmacology and physiology, especially towards embracing the new norms of technology, both in research and teaching. We are also proud to introduce the well-received Global Lecture Series and Community Outreach Programs.

Despite the many obstacles we have faced due to Covid-19, MSPP will soldier on with more projects and plans for 2021/2022. Scroll through this newsletter to find out what has happened and what is to come. Take care and stay safe everyone!

Dr. Izuddin Fahmy Abu
MSPP Newsletter Editor
izuddin@unikl.edu.my



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 [Malaysian Society of Pharmacology & Physiology](#)

 [mspp.secretariat](#)

“ The important thing is to never stop questioning. ”

Quote of the issue...

Albert Einstein



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Send your articles/write-up to us at:
mspp.secretariat@gmail.com

34th MSPP Scientific Meeting 2021

Jeffrey Cheah School of Medicine and Health Sciences, Monash University Malaysia and the Malaysian Society of Pharmacology & Physiology successfully organized the 34th MSPP Scientific Meeting 2021 virtually through Zoom Webinar, from 15th to 17th July 2021.

The scientific meeting was inaugurated by the event convener and President of MSPP, Prof. Dr. Nafeeza Hj Mohd Ismail from International Medical University, as well as Prof. Dr. Shajahan Yasin, Head of Jeffrey Cheah School of Medicine and Health Science, Monash University Malaysia.

This meeting was initially planned to be held in 2020, but due to the ongoing Covid-19 pandemic, this meeting was postponed to 2021 with its format converted into a virtual event. Nevertheless, the delay did not dampen the interest of the participants nor the members. In fact, it made them more eager and enthusiastic as it gave them more time to refine their research. In addition, the MSPP decided to waive the registration fee as an act of kindness and goodwill towards the registrants, some of whom may be financially burdened by the pandemic.



This three-day event was the first virtual scientific meeting for MSPP, but it witnessed a strong turnout of nearly 700 registrants with 194 abstract submissions overall. Abstract submissions received were not only from Malaysia, but globally from Pakistan, India, Brunei, Bangladesh, Saudi Arabia, Oman, Sudan, Mauritius, Nigeria and UK. The theme of the scientific meeting was 'Trailblazing The Translational Research'. The abstracts were divided into oral and poster presentations under 6 distinct topics relating to the theme of the event which are Cancer, Cardiovascular Diseases, Neurological Diseases, Metabolic Diseases, Natural Products & Integrative Medicine, and Medical Education & Clinical Practice. At the end of the event, cash prizes were given to top 10 oral and poster presenters, respectively.

This event also witnessed distinguished speakers from USA (Prof. Dr. Gordon H. Williams, Harvard University), Australia (Prof. Dr. Michael Fenech, University of South Australia; Assoc. Prof Dr. Elizabeth Davis and Prof. Dr. Wayne Hodgson, Monash University Australia) and Malaysia (IMU, UKM, USM, UM and Monash University Malaysia) sharing their interesting and insightful research findings.

This 34th MSPP Scientific Meeting was praised by the attendees and speakers, which was a sign that this meeting was held successfully.

By Assoc. Prof. Dr. Mohd Farooq Shaikh
Chair, 34th MSPP Scientific Meeting 2021



Day 1 of the 34th MSPP Scientific Meeting 2021

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34th MSPP Scientific Meeting 2021

Pharmacokinetics Moodle Lesson

Lesson menu

- Drugs & Therapy workshop
- Explaining concepts
- Pharmacokinetic case studies
- Kahoot Challenge

Explaining: How are dosing regimens developed?

For each of the pharmacokinetic concepts given below show a diagram that clearly explains the concept (do not just copy it as-is). The questions to which you should help solve your questions. Provide a brief discussion on appropriate units.

- Volume of distribution: what is it? How does it affect drug distribution?
- Plasma clearance: what does it measure? What factors influence it?
- How does the elimination half-life of a drug affect its dosing? What are the implications for the clinician?
- Pharmacokinetic parameters: what are they? How do they affect drug distribution, distribution and elimination?
- Pharmacokinetics: what are they? What is their relevance for drug distribution, distribution and elimination?
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MALYSIAN SOCIETY OF PHARMACOLOGY & PHYSIOLOGY (MSPP) 34th SCIENTIFIC MEETING 2021

Trailblazing The Translational Research July 15-17, 2021

PNPIM-24
Cornelia Wilson
(Canterbury Christ Church University)

PNPIM-29
Leong Sui Sien
(Universiti Putra Malaysia Campus Bintulu)

PNPIM-38
Meena Selvanayagam
(Universiti Putra Malaysia)

Atrophic Vaginitis by Gelatin Honey in Sprague Dawley Rats: Pilot Study of Potential Apitherapy for Managing Comorbidity Syndrome

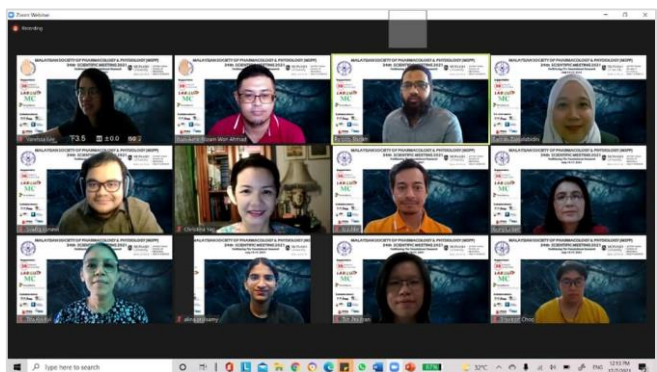
MALYSIAN SOCIETY OF PHARMACOLOGY & PHYSIOLOGY (MSPP) 34th SCIENTIFIC MEETING 2021

Day 2 of the 34th MSPP Scientific Meeting 2021

NUTRIGENETICS

'ETICS' & 'OMICS' FOR PERSONALISED NUTRITION

MSPP 35th Scientific Meeting



Day 3 of the 34th MSPP Scientific Meeting 2021

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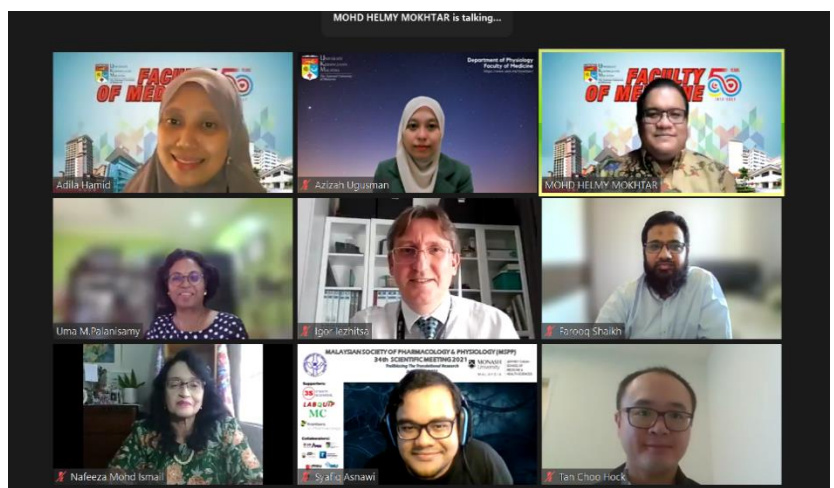
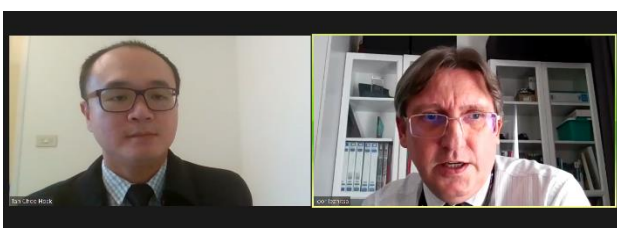
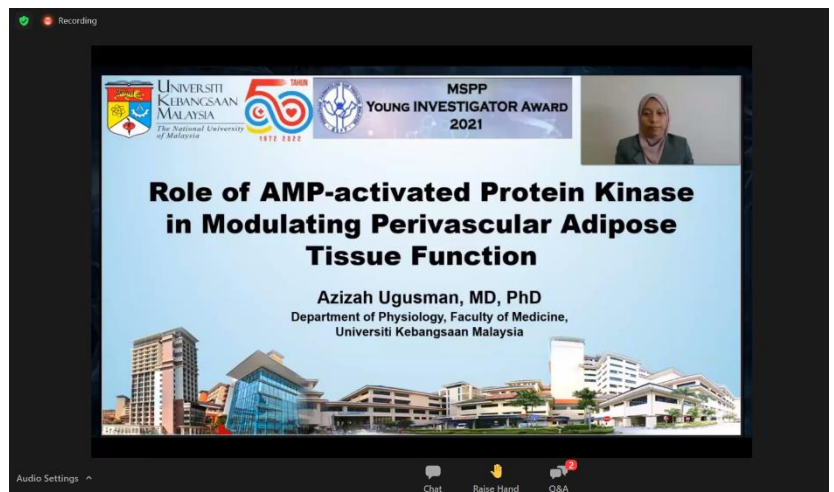
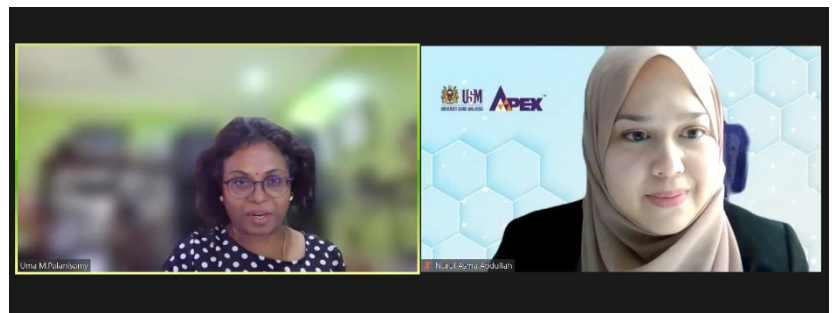
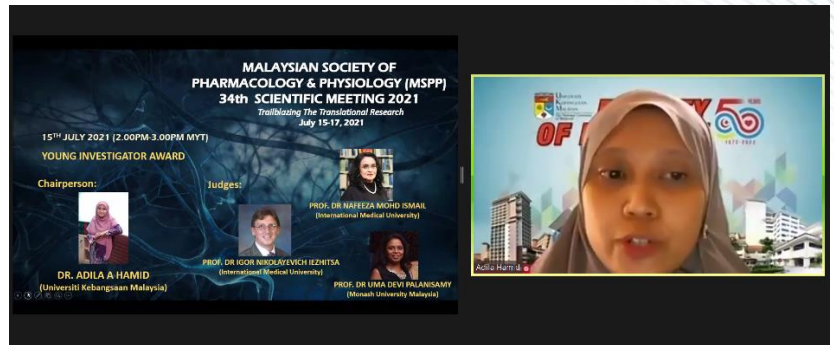
MSPP Young Investigator Award 2021

Continuing its tradition to encourage and recognise young local researchers in pharmacology and physiology, the Annual Young Investigator Award 2021 was held in conjunction with the 34th MSPP Scientific Meeting on 15th July 2021.

Out of six applications, three young researchers were shortlisted. They are Dr. Azizah Ugusman (Universiti Kebangsaan Malaysia), Dr. Tan Choo Hock (University of Malaya) and Dr. Nurul Asma Abdullah (Universiti Sains Malaysia). They were required to showcase their research work and achievements during the 34th MSPP Scientific Meeting and were judged on various criteria. The judges tasked to assess the presenters were Prof. Dr. Nafeeza Hj Mohd Ismail and Prof. Dr. Igor Iezhitsa from International Medical University, and Prof. Dr. Uma Devi A/P M Palanisamy from Monash University Malaysia.

It was a tough decision to make as all the presenters did a remarkable job showcasing their work. Ultimately there can only be one winner, and the MSPP Young Investigator Award 2021 was conferred to Dr. Tan Choo Hock. Congratulations to the winner and all participants for a job well done!

By **Dr. Mohd Helmy Mokhtar**
Chair, MSPP Young Investigator Award
2021



MSPP Young Teacher's Award 2021

This year's MSPP Young Teacher's Award competition was held virtually on 3rd June 2021 via Zoom platform, and attracted an audience of more than 30 attendees. The topic for Pharmacology was 'Use of Calcium Channel Blocker in Hypertension', whereas the topic for Physiology was 'Blood Pressure Regulation in Shock'. The following contestants participated in this year's event:

Pharmacology Category

- Dr. Norasikin Ab Azis (UiTM)
- Dr. Siti Norsyafika Kamarudin (UiTM)
- Asooc. Prof. Dr Vetriselvan Subramaniyan (MAHSA)
- Dr. Irma Izani binti Mohamad Isa (Perdana University)
- Dr. Athirah Bakhtiar (Monash University Malaysia)

Physiology Category

- Dr Huma Shazad (IMU)
- Dr Mohd Kaisan Mahadi (UKM)
- Dr Tan Kok Keong (Newcastle University Medicine Malaysia)

MALAYSIAN SOCIETY OF PHARMACOLOGY & PHYSIOLOGY (MSPP)
34th SCIENTIFIC MEETING 2021
Trailblazing The Translational Research
July 15-17, 2021

Young Teacher's Award
PHARMACOLOGY

DR. NORASIKIN AB AZIS
(Universiti Teknologi MARA)

Organized by: MONASH University MALAYSIA, JEFFREY CHEAH SCHOOL OF MEDICINE & HEALTH SCIENCES
Sponsored by: 3S STRAITS SCIENTIFIC, LABQUIP, MC
Publishing Partner: frontiers in Pharmacology

MALAYSIAN SOCIETY OF PHARMACOLOGY & PHYSIOLOGY (MSPP)
34th SCIENTIFIC MEETING 2021
Trailblazing The Translational Research
July 15-17, 2021

Young Teacher's Award
PHYSIOLOGY

DR. TAN KOK KEONG
(NEWCASTLE UNIVERSITY MEDICINE MALAYSIA)

Organized by: MONASH University MALAYSIA, JEFFREY CHEAH SCHOOL OF MEDICINE & HEALTH SCIENCES
Sponsored by: 3S STRAITS SCIENTIFIC, LABQUIP, MC
Publishing Partner: frontiers in Pharmacology

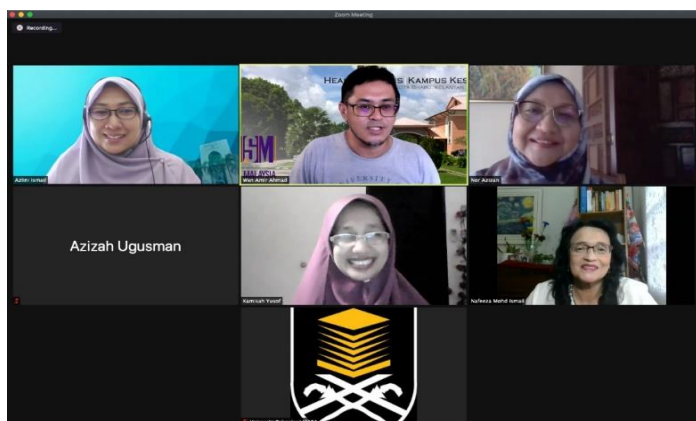
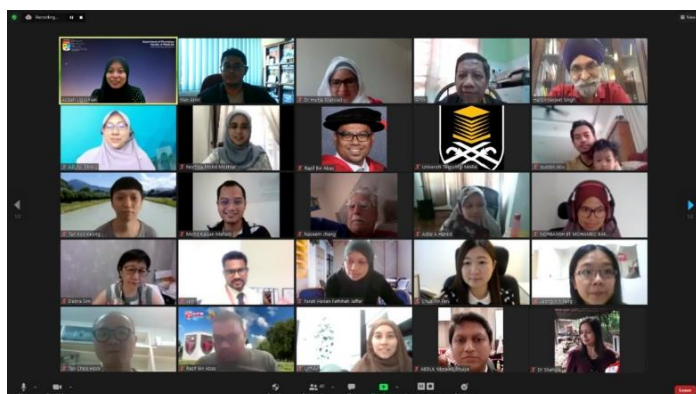
Winners of MSPP Young Teacher's Award 2021

The competition was judged by Prof. Dr. Nafeeza Hj Mohd Ismail (IMU), Prof. Dr. Nor Azizan Abdullah (UM) and Assoc. Prof. Dr. Kamisah Yusof (UKM) for Pharmacology category, while Prof. Dr. Norfilza Mohd Mokhtar (UKM), Prof. Dr. Aminuddin Abdul Hamid Karim (UPNM) and Prof. Dr. Harbindar Jeet Singh (UiTM) judged for Physiology.

The winner for Pharmacology category was Dr. Norasikin Ab Azis, while Dr. Tan Kok Keong emerged victorious in the Physiology category. The announcement of winners was made during the closing ceremony of the 34th MSPP Scientific Meeting on 17th July 2021.

Congratulations to all the winners.

By Dr. Nurul Alimah Abdul Nasir
Chair, MSPP Young Teacher's Award 2021



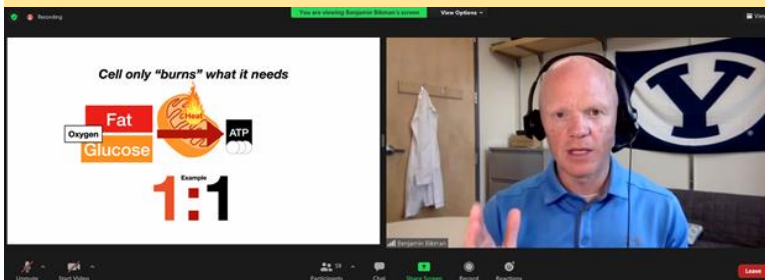
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MSPP Activities & Events

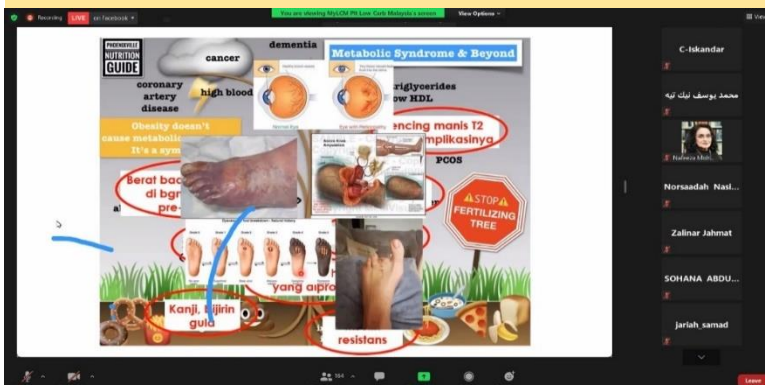
Following the first well-received **GLOBAL LECTURE SERIES** by Prof. Dr. David S. Ludwig from Harvard Medical School in April, MSPP has organized the 2nd series on 31st July 2021 via Zoom platform. A lecture titled 'Ketones: The Metabolic Advantage' was delivered by Assoc. Prof. Dr. Benjamin T. Bikman, from the Department of Cell Biology and Physiology, Brigham Young University, Utah, USA, and attended by 64 participants.



As part of MSPP's ongoing **COMMUNITY OUTREACH** programs, the society collaborated with the Selangor State Government, International Medical University (IMU), Kolej Universiti Islam Selangor (KUIS), My Low Carb Malaysia (MyLCM) and RDO to organize a webinar entitled '**Makanan Sebagai Penawar**' which translates to 'Food as Medicine'. The webinar was attended by 164 participants and featured renowned health professionals who shared interesting tips and knowledge on how to control and manage food intake, as well as maintaining a healthy lifestyle.

The speakers who took part in the webinar were:

- Prof. Dr. Nafeeza Mohd Ismail, International Medical University
Title: *Makanan Sebagai Penawar*
- Ibu Muhaini Musa, Director, MyLow Carb Malaysia (MyLCM)
Title: *Apa Nak Makan?*
- Coach Iskandar Mohamed Yusop, Sports Science Advisor, MyLow Carb Malaysia (MyLCM)
Title: *Faedah Aktiviti Fizikal*





MALAYSIAN SOCIETY OF PHARMACOLOGY AND PHYSIOLOGY (MSPP)



INTERNATIONAL MEDICAL UNIVERSITY

GLOBAL LECTURE SERIES

Date: 31 July 2021, Saturday
Time: 9:00 AM -10:30 AM
<https://imu-edu-my.zoom.us/j/96086556570>

Ketones: The Metabolic Advantage

Ketones have long been overlooked as a fuel. New evidence suggests that ketones have relevant effects on cell metabolism, including fat cells. Our results suggest that ketones provide a metabolic environment that facilitates fat loss by accelerating fat cell metabolism.

SPEAKER



Assoc Prof Dr Benjamin T. Bikman, Ph.D
Department of Cell Biology and Physiology
Brigham Young University, Utah, USA

"Dr Bikman is a renowned researcher in the field of the insulin, obesity and diabetes. He has published numerous papers and written a book titled "Why we get sick?""

MODERATOR



Prof Dr Nafeeza Mohd Ismail
Immediate Past Dean
Founder Global Lecture Series,
School of Medicine, IMU
President, Malaysian Society of
Pharmacology & Physiology
Consultant Lifestyle Medicine on Metabolic Health, UPSC



PROGRAM SEKTOR KOMUNITI, BANDAR ILMU PUTRA MAHKOTA & JAWATANKUASA TETAP PENDIDIKAN NEGERI SELANGOR

WEBINAR: Makanan Sebagai Penawar?

10 JULAI 2021
SABTU | 10 - 11.30AM



YAB Dato' Seri Amirudin Bin Shari
Dato' Menteri Besar Selangor
merangkap Pengerusi Jawatankuasa Tetap Pendidikan Negeri Selangor

Ekklusif :
Pengenalan Bandar Ilmu
IMU
Prof Madya Dr Mokmin Basri
Timbalan Rektor Penyelidikan, Jaringan Komuniti & Industri Kolej Universiti Islam Antarabangsa Selangor (KUIS)



PENCERAMAH:



Makanan Sebagai Penawar
Prof Dr Nafeeza Mohd Ismail
Professor Perubatan
International Medical University Malaysia (IMU)



Apa nak makan?
Ibu Muhaini Musa
Pengaruh
My Low Carb Malaysia (MyLCM)



Faedah Aktiviti Fizikal
Coach Iskandar Mohamed Yusop
Penasihat Sains Sukan
My Low Carb Malaysia (MyLCM)



Perkongsiannya Menarik Kisah Kejayaan Puan Rose Omar
Beliau telah mengidap penyakit diabetes selama lebih dari 10 tahun dan telah mengalami obesiti selama 5 tahun. Setelah menukar kepada gaya hidup sehat menerusi cara pemakanan 'Tilapia Gula dan Rendah Karbohidrat' selama 2 tahun, kini beliau telah berjaya menangani penyakit diabetes

Penyertaan percuma! Daftar sekarang: <https://mylcm.com.my>
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Hubungi:
Puan Sohana: 019-232 9423
Encik Syamim: 019-6699 177

MSPP Member's Corner

Happy hypoxia: What do we know (and don't know)

I first came across the term 'happy hypoxia' (also called silent hypoxemia) on CNA news where Temasek Foundation provided pulse oximeters (a device that detects blood oxygen saturation level) for free to every Singapore household. On 26 June 2021, New Straits Times reported that enquiries on pulse oximeter have increased in Malaysia according to Malaysian Pharmacist Society^[1]. The Ministry of Health Malaysia (KKM) published on their social media that 'happy hypoxia could be a silent killer for COVID patients'. Hypoxia refers to a decrease in oxygen delivery to tissues, usually with blood oxygen saturation of <90%. 'Happy' describes patients who have hypoxia but do not report dyspnea until the oxygen level becomes extremely low.

Normally, individuals experience dyspnea when blood oxygen level is low. So, it is puzzling when COVID patients are hypoxic, but appear clinically well until the blood oxygen level is dangerously low. When tissue oxygen supply falls low enough, organs may shut down. Since patients do not have respiratory distress, monitoring the blood oxygen saturation is the only way to detect happy hypoxia. Home-quarantined patients are of concern especially if they have no means to detect their oxygen level. It may be too late for these home-quarantined patients by the time dyspnea is felt. Therefore, self-monitoring using pulse oximeter to detect potential happy hypoxia at home is essential.

As someone who teaches physiology, I find happy hypoxia intriguing. Dyspnea is a subjective feeling of breathing discomfort. Since it is subjective, individuals with different conditions (e.g. COPD, congestive heart failure, pregnancy etc.) may describe the feeling differently (e.g. chest tightness, feeling of suffocation etc.)^[2]. Dyspnea is a feeling that is generated as a result of mismatch between afferent signals from certain receptors (e.g. chemoreceptor, lung stretch receptor), and efferent activity such as breathing^[2].

Hypoxia and hypercapnia are detected by peripheral and central chemoreceptors where breathing is reflexively stimulated by the medullary respiratory centre. On top of that, carbon dioxide potentiates the ventilatory response of hypoxia, increasing ventilation further. This reflex aims to raise blood oxygen level and remove carbon dioxide through mechanical breathing. When the need (for oxygen supply or carbon dioxide removal) is not met by the mechanical breathing, patients feel dyspneic.

Clinically, supplemental oxygen is initiated when oxygen saturation is <95%. At oxygen saturation of <90% (P_{O_2} of ~60mmHg), we are looking at the steeper part of the oxygen dissociation curve, meaning a slight decrease in P_{O_2} will cause a drastic desaturation of hemoglobin.

Presumably, COVID patients who have hypoxia, where P_{O_2} drops to <60mmHg and oxygen saturation is <90%, dyspnea is expected. This is because desaturation may happen rapidly, and ventilation could not keep up with the worsening hypoxia. Tobin et al. reported three cases where arterial blood gas of the patient showed arterial P_{O_2} of 36-45 mmHg, P_{CO_2} of 34-41mmHg and oxygen saturation of 69-76%, but all of them denied having dyspnea^[3].

So, why don't we see the mismatch in afferent and efferent signals which engenders dyspnea since P_{O_2} is < 60mmHg? The ventilatory response to hypoxia is known to be less apparent in elderly patients and individuals with diabetes, which might explain the happy hypoxia seen in this population of patients^[3]. How about in young patients? Young COVID patients with happy hypoxia contributes to Category 4 (with pneumonia, requiring oxygen therapy) and 5 (critical and requiring assisted ventilation) patient pools in Malaysia since early May according to KKM^[4]. Concrete explanation is yet to be available, but the existing principles of respiratory physiology may be a good place to begin. One theory, among others, is that SARS-CoV-2 attack the oxygen sensing system of the body via ACE2 receptors, explaining the insensitivity of the body toward hypoxia and the lack of ventilatory response^[3]. Another possibility is that the oxygen sensing system remains sensitive, but a right shift in oxygen dissociation curve due to fever desaturates the hemoglobin even at P_{O_2} >60mmHg. This P_{O_2} level is insufficient to activate the peripheral chemoreceptors to produce dyspnea but patients will have abnormally low oxygen saturation level^[3].

Of note, hypoxia without dyspnea is not new; but it was not given enough attention before it became common in COVID patients. Further investigations are needed, but I look forward to learning more about it, and we can probably 'stimulate' our students with happy hypoxia in respiratory physiology teaching in the future.

By Dr. Tan Kok Keong
Newcastle University Medicine Malaysia



References: [1] Arumugam, T. Pulse oximeters selling out but experts say it's unnecessary. New Straits Times. 26/6/21. [2] Epstein FH et al., Pathophysiology of dyspnea. Epstein FH, editor. N Engl J Med. 1995;1547-53 Massachusetts Medical Society. [3] Tobin, M.J. et al., Why COVID-19 silent hypoxemia is baffling to physicians. Am J Respir Crit Care Med. 2020;202(3):356-60. [4] Lim, I. Health Ministry: 'Happy hypoxia' among Malaysia's young Covid-19 patients contributed to 35pc increase in Category 4, 5 hospital admissions. Malay Mail. 18/6/21

COVID-19 Variants of Concern

B.1.1.7 B.1.351 P.1 B.1.617.2 ?

Vaccines are working...we are tired of mutating Lets... "The End"

Let's defeat COVID-19: Mask + Vaccination + Social distancing

End this pandemic!

Infographic by Dr. Bedanta Roy
Quest International University

MSPP Network Initiative

This networking initiative is one of the society's efforts to encourage collaboration and networking among pharmacologists and physiologists among the members. If you missed the previous opening but are still interested to participate, please scan the QR code to fill in your information details in our Google Form. We will publish newer members of the initiative in our upcoming issue. Let's collaborate and scan now!

By *Dr. Azlini Ismail*
Coordinator, MSPP Network Initiative



SCAN ME

Pharmacology



- Prof. Dr. Norazlina Mohamed
- azlina@ppukm.ukm.edu.my
- Universiti Kebangsaan Malaysia
- WOS Researcher ID: M-7306-2017
- ORCID ID: 0000-0003-2480-0224
- Research area: Bone health, role of natural products on bone disorders and wound healing.



- Assoc. Prof. Dr. William K Lim
- kslim@unimas.my
- Universiti Malaysia Sarawak
- WOS Researcher ID: E-4232-2012
- ORCID ID: 0000-0003-3829-537X
- Research area: Molecular pharmacology, cellular signaling, neuroscience drug discovery



- Prof. Dr. Gan Siew Hua
- gan.siewhua@monash.edu
- Monash University Malaysia
- WOS Researcher ID: A-6266-2011
- ORCID ID: 0000-0001-6470-3651
- Research area: Natural products, honey, propolis, stingless bee, HPLC, analytical drug method development



- Dr. Wong Sok Kuan
- jocylnwsk@gmail.com
- Universiti Kebangsaan Malaysia
- WOS Researcher ID: I-1243-2016
- ORCID ID: 0000-0003-1184-4551
- Research area: Bone metabolism, osteoporosis, metabolic syndrome, natural products, vitamin E/tocotrienol, cell signaling



- Nor Azeera Mohd Ali
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- Research area: Anti-cataractogenesis, cataract animal models, therapeutic agents, anterior eye disease



- Dr. Amy Saik Yi Hsan
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- Universiti Tunku Abdul Rahman
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- ORCID ID: 0000-0002-9831-4395
- Research area: Induced pluripotent stem cell (iPSC) as disease model for drug screening; drug synthesis, bioactive compound modification, structural characterization, anticancer properties

MSPP Network Initiative

Pharmacology



- Assoc. Prof. Dr. Marwan Saad Azzubadi
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- Universiti Sultan Zainal Abidin
- WOS Researcher ID: AAG-1627-2021
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- Research area: Neuropharmacology, antihypertensive drug discovery, medicinal plant pharmacology, antidiabetic drug development, age-related neurodegenerative disease treatment



- Dr. Azlini binti Ismail
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- International Islamic University Malaysia (IIUM)
- WOS Researcher ID: AAW-1640-2020
- ORCID ID: 0000-0002-8941-540X
- Research area: Cardiovascular pharmacology (antihypertensive in vivo and in vitro assay, vasorelaxation study), natural product (bioassay-guided fractionation), pharmacognosy



- Assoc. Prof. Dr. Dharmani Devi Murugan
- dharmani79@um.edu.my
- University of Malaya
- WOS Researcher ID: B-8436-2010
- ORCID ID: 0000-0002-1345-0292
- Research area: Oxidative stress and endothelial dysfunction, natural product-based therapeutics for metabolic diseases, cellular and molecular mechanism of drug action



- Assoc. Prof. Dr. Mohamad Farooq Shaikh
- farooq.shaikh@monash.edu
- Monash University Malaysia
- WOS Researcher ID: H-6029-2019
- ORCID ID: 0000-0001-9865-6224
- Research area: Neuropharmacology, epilepsy, neurodegeneration, and cognition



- Assoc. Prof. Dr. Nurul Asma Abdullah
- nurulasma5588@gmail.com
- Universiti Sains Malaysia
- WOS Researcher ID: E-3946-2015
- ORCID ID: 0000-0003-1180-8809
- Research area: Regenerative medicine; tissue engineering; inflammation; immunomodulation



- Dr. Izuddin Fahmy Abu
- izuddin@unikl.edu.my
- Universiti Kuala Lumpur
- WOS Researcher ID: D-1610-2017
- ORCID ID: 0000-0001-6205-001X
- Research area: Neuroscience, drug discovery for neurodegenerative diseases (Alzheimer's disease, glaucoma etc), natural products

- Dr. Wan Ezumi Mohd Fuad
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- Universiti Sains Malaysia
- WOS Researcher ID: C-9329-2016
- ORCID ID: 0000-0002-2802-8430
- Research area: General and reproductive toxicology

- Dr. Fazlina Mustaffa
- fazlina_harris@yahoo.com
- Research area: Natural product, drug addiction, behaviour

- Dr. Athirah Bakhtiar
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- Monash University Malaysia
- WOS Researcher ID: I-7376-2016
- ORCID ID: 0000-0003-2752-9783
- Research area: Nanotechnology

MSPP Network Initiative

Physiology



- Dr. Wan Hafizah W. Jusof
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- WOS Researcher ID: AAJ-8462-2021
- ORCID ID: 0000-0001-5083-0705
- Research area: Reproductive physiology, assisted reproductive technology



- Assoc. Prof. Dr. Satirah Zainalabidin
- satirah@ukm.edu.my
- Universiti Kebangsaan Malaysia
- WOS Researcher ID: AAH-6677-2019
- ORCID ID: 0000-0001-8559-9224
- Research area: Mechanism of cardiovascular injury using isoprenaline- and nicotine-induced animal model; medicinal plants/ bioactive compounds (roselle, Cerbera odollum and S-allylcysteine in garlic).



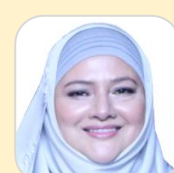
- Assoc. Prof. Hassaan Anwer Rathore
- hassaan23@yahoo.com
- Qatar University
- WOS Researcher ID: A-6016-2012
- ORCID ID: 0000-0002-1154-9395
- Research area: Neurohumoral control of cardiovascular and renal function, hydrogen sulphide, nitric oxide and anti-oxidant research, nutraceuticals



- Dr. Tan Kok Keong
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- Newcastle University Medicine Malaysia
- Research area: Pedagogy in medical education (pre-clinical). Specifically, using quantitative-based research to investigate the impact of introducing the science of learning on pre-clinical students.



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- International Islamic University Malaysia (IIUM)
- WOS Researcher ID: ABG-3119-2020
- ORCID ID: 0000-0003-3049-5254
- Research area: Molecular mechanisms of cardiovascular disease particularly hypertension and acute myocardial infarction in young adults.



- Prof. Dr. Nor Ashikin Mohamed Noor Khan
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- Universiti Teknologi MARA
- WOS Researcher ID: AAG-3988-2020
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- Research area: Embryology, developmental and reproductive biology, assisted reproductive technology



- Dr. Faizatul Isyraqiah
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- Manipal University College Malaysia
- WOS Researcher ID: AAJ-5323-2021
- ORCID ID: 0000-0002-7772-6534
- Research area: Leptin, gastric cancer, Garcinia parvifolia



- Dr. Nurul Hayati Mohamad Zainal
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- Universiti Putra Malaysia
- ORCID ID: 0000-0003-1858-5396
- Research area: Reproductive physiology, proteomics, paediatrics, allergy and immunology and molecular biology.

MSPP NEWSLETTER

August 2021



MSPP in Pharmacology International!

We are delighted to share that MSPP has been featured in the International Union of Basic and Clinical Pharmacology (IUPHAR) newsletter, Pharmacology International Issue 97 August 2021, in celebration of our 15 years as a member society of IUPHAR!

Issue 97 | August 2021

MILESTONE ANNIVERSARIES

THE MALAYSIAN PHARMACOLOGY SOCIETY CELEBRATES 15 YEARS

Since the establishment of Malaysian Society of Pharmacology and Physiology (MSPP) in 1974, our society is continually committed in conducting various activities tailored to the need of its members. The society is now led by Prof. Dr. Nafeeza Mohd Ismail as the President, and Assoc. Prof. Dr. Wan Amir Nizam Wan Ahmad as the Vice President. Currently, MSPP has 174 Ordinary members and 57 Lifetime members which comprises of senior and junior academicians, researchers, and students from various public and private higher institutions. This year, our 34th MSPP Scientific Meeting was jointly organized with Monash University, and the event will be held from 15 to 17 July 2021. Due to the COVID-19 pandemic, the meeting will be conducted using virtual platform for the first time. This year, we are delighted to receive an overwhelming number of local and international participants, totaling to 673. Besides the annual scientific meeting, we managed to organize two annual competitions to celebrate the early-career members in the society; the MSPP Young Teacher Award (YTA) and MSPP Young Investigator Award (YIA). For MSPP YTA Competition, eight early career members with two to five years of teaching experience have joined this competition. While for YIA awards, six investigators aged less than 40 years old submitted their applications, and three shortlisted candidates will be competing for the title, "MSPP Young Investigator Award" during the coming 34th Scientific Meeting. Despite the curb of the face-to-face programs, the society has now fully utilized the virtual platform for all of our society programs. One of the society's initiatives was by organizing online Global Lecture Series, a joint collaboration program with International Medical University. The first lecture was held on 20th April 2021 via Zoom, and the society was honored to have Prof. Dr. David S. Ludwig from Harvard Medical School to give a lecture on 'The Carbohydrate - Insulin Model of Obesity'. The session was moderated by our President, Prof. Dr. Nafeeza Mohd Ismail and was attended by more than 80 participants. The second Global Lecture Series is scheduled soon on 31st July 2021 with the title, 'Ketones: The Metabolic Advantage', to be delivered by Assoc. Prof. Dr. Benjamin Bikman, from Brigham Young University, Utah. The society now is geared for more interactive engagement with our members and public community using social media platforms. We currently have our official Facebook and Instagram pages. Few future programs are currently in plan such as the MSPP Refresher Course, a program which is aimed at refreshing knowledge in pharmacology and physiology topics. Apart of that, we also plan to have 'Meet-the-Member' series as a networking platform for the members of the society. Besides targeting our society members, we are also anticipating to have the community engagement project in near future with some local communities in Malaysia. We hope for many excellent years ahead for MSPP.



MALAYSIAN SOCIETY OF PHARMACOLOGY AND PHYSIOLOGY (MSPP)



Ordinary Membership
RM10 registration fee
RM75 annual fee

Student Membership
RM10 registration fee
RM20 annual fee

Life Membership
8 years or more: RM300
Immediate: RM900

Current Active Membership Status

Ordinary & Student Membership
174

Life Membership
57

Total Membership
231

In this newsletter

- The President explains IUPHAR's governance changes
- Town Hall and regional meetings
- Update on NC-IUPHAR
- Update on education
- Pharmacology and COVID, progress and failures, why?

MSPP Upcoming Event



MALAYSIAN SOCIETY OF PHARMACOLOGY AND PHYSIOLOGY (MSPP)



GLOBAL LECTURE SERIES

Date: 20 August 2021, Friday

Time: 6:00 PM – 7:30 PM (Malaysian Time)

<https://imu-edu-my.zoom.us/j/91394244872>

Type 1 Diabetes: A Personal Story

The talk will compare the data from usual care high carb diets with keto diets and would address the metabolic rationale for keto diets in type 1 diabetes. It will also include a practical demonstration of the theory with a short talk on the zero five 100 project.

SPEAKER



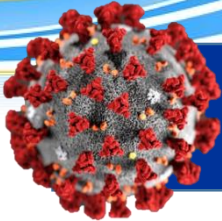
Dr. Ian Lake is a GP in the UK. He has had a long term interest in preventive medicine, in particular role of low carb diet in the management of diabetes. He is a founder member of the Public Health Collaboration in UK. He despite having type 1 diabetes, completed a 5 week solo and unsupported run of 700 miles on just 9% carbohydrate. Last year he took it to a whole new level by organising a 100 mile team run over five days fully fasted. He will discuss this project and also ketogenic diets in Type 1 diabetes in his presentation.

MODERATOR

Prof Dr Nafeeza Mohd Ismail
Immediate Past Dean
Founder Global Lecture Series,
School of Medicine, IMU
President, Malaysian Society of
Pharmacology & Physiology
Consultant Lifestyle Medicine on Metabolic Health, UPSC



News: Let's Get to Know the Vaccines in Malaysia's National Covid-19 Immunisation Program



On 16th February 2021, Malaysia's National Covid-19 Immunisation Programme Handbook (which can be downloaded at www.vaksinovid.gov.my) was launched by the Prime Minister, Tan Sri Muhyiddin Yassin. The handbook, which was published by the Covid-19 Vaccine Supply Access Guarantee Special Committee (JKJAV) offers key information about the government's Covid-19 immunisation strategy and what the public should know about the Covid-19 vaccines.

The government aims for at least 80% of Malaysia's adult population to be vaccinated by February 2022. Out of the 20.3 million Malaysians who have registered to be vaccinated, 16.3 million have so far received their first dose, and 9.5 million have completed their vaccination as of 12th August 2021 according to the statistics by JKJAV.

From the dosage, mechanism to efficacy rates, here are some highlights on the different types of Covid-19 vaccines.



AstraZeneca

The AstraZeneca vaccine is a viral vector vaccine, jointly produced by UK-based pharmaceutical company AstraZeneca and Oxford University.

It uses a modified virus to deliver a small portion of the virus' genetic code to the body's cells, teaching them to produce the spike protein found in the coronavirus and build an immune response to it. This vaccine must be administered in two doses and has an efficacy rate of 62-90%.



Pfizer-BioNTech

Originating from the US, Pfizer-BioNTech is a messenger RNA or mRNA vaccine which instructs the body's cells to produce a protein that triggers an immune response. A Covid-19 mRNA vaccine teaches our cells to produce a 'spike protein' which is found on the surface of the coronavirus.

The body's immune system then recognises this protein and develops an antibody to protect against it. Unlike traditional vaccines, this type contains only synthetic components, not a live virus. Pfizer-BioNTech boasts an efficacy of 95% and administered in two doses. The Pfizer-BioNTech vaccine has been approved by Malaysia's Drug Control Authority for use on those aged 12 years old and above.

Sinovac

China is the country of origin for Sinovac. It is an inactivated vaccine, which means it uses killed virus particles to trigger the body's immune response to a virus.

Suitable for those with weak immune systems, Sinovac's vaccine has an efficacy of 50.4-91.25%.



CanSino Biologics

Chinese pharmaceutical company CanSino Biologics co-developed this vaccine with the Beijing Institute of Biotechnology and the Academy of Military Medical Sciences.

It's currently in use in China, Mexico and Pakistan. The CanSinoBio vaccine is also a viral vector vaccine and can be administered in one shot. It has a 65.7% efficacy rate.



Johnson & Johnson

Known as the Janssen Ad26.CoV2.S vaccine, this single-dose viral vector vaccine recently received conditional approval for emergency use by the Malaysian government.

This vaccine was found to have 85.4% efficacy rate against hospitalisation and severe symptoms of Covid-19 approximately 28 days after inoculation.



Sputnik V

A viral vector vaccine by Russia's Gamaleya Research Institute, the Sputnik V shot is administered in two doses around 21 days apart. It boasts an efficacy of 91.6 per cent and is being used in Russia, South Korea, Brazil, Argentina and Belarus.

Source:

1. Malaysia Tatler, <https://tinyurl.com/asiatatler>
2. National Covid-19 Immunisation Plan, <https://www.vaksinovid.gov.my/penerbitan/>