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Welcome to the 34th MSPP Scientific Meeting 2021

The Malaysian Society of Pharmacology and Physiology (MSPP) has been the primary Malaysia learned society of pharmacologists and physiologists for more than 33 years. The Society has been organizing its own Scientific Meetings as a platform for researchers to share their research findings and build networking and collaborations. To date, MSPP is proud to have organized 34 scientific meetings. Due to the pandemic, for the first time the 34th Scientific Meeting of MSPP was held virtually on July 15-17, 2021. The meeting which was organized by Monash University Malaysia together with MSPP in collaboration with several local and private universities in Malaysia had attracted 700 delegates from locally and abroad and received more than 160 abstracts. The scientific programme this year focused on translational research under the theme 'Trailblazing the Translational Research'. The three-day conference provided opportunities for sharing and exchanging evidence-based practices and scientific endeavors among physiologists, pharmacologists, physicians, general practitioners, scientists and allied health professionals.

LIST OF ORGANIZERS

Jeffrey Cheah School of Medicine and Health Science, Monash University Malaysia
Malaysian Society of Pharmacology and Physiology (MSPP)

34th MSPP 2021 Programme **“Trailblazing the Translational Research”**

Day 1: 15th July 2021

Programme

8.30 am – 9.15 am

Opening Ceremony

Speakers

Prof. Dr. Nafeeza Hj Mohd Ismail
(President, MSPP; International Medical University)

Prof. Dr. Shajahan Yasin
(Head, JCSMHS, Monash University Malaysia)

Assoc. Prof. Dr. Mohd. Farooq Shaikh
(Chair, 34th MSPP 2021; Monash University Malaysia)

9.15 am – 10.00 am

Keynote Address

Prof. Dr. Gordon Harold Williams
Professor of Medicine, Harvard Medical School, USA

**Title: Personalized Medicine: The Link
Between People, Animals and Cells**

10.00 am – 10.30 am

Break

10.30 am – 11.00 am

Plenary Lecture 1

Prof. Dr. Wayne Hodgson
Monash University, Australia

**Title: Things That Bite and Sting: The
Pharmacological Characterization of
Animal Venoms and Toxins**

11.00 am – 12.00 pm

Sponsored Seminar

Labquip Sdn. Bhd

12.00 pm – 2.00 pm

Lunch Break

2.00 pm – 3.00 pm

MSPP Young Investigator Award 2021

3.00 pm – 3.30 pm

Break

3.30 pm – 5.30 pm

MSPP Annual General Meeting

Day 2: 16th July 2021

9.00 am – 9.30 am

Plenary Lecture 2

*Assoc. Prof. Dr. Elizabeth Davis
Monash University, Australia*

Title: Developing and Incorporating Learning Resources to Facilitate Active Learning in Pharmacology

9.30 am – 9.35 am

Break

9.35 am – 10.00 am

Symposium 1: Drug Metabolism Research

Invited speaker:

*Prof. Dr. Ong Chin Eng
International Medical University*

Title: Structure-Function Analysis of Cytochrome P450 Enzymes: Kinetic and Computational Modelling for Drug Clearance Prediction

Symposium 2: Natural Products and Integrative Medicine

Invited speaker:

*Assoc. Prof. Dr. Wan Amir Nizam Wan Ahmad
Universiti Sains Malaysia*

Title: Flavonoids and Metainflammation in Diabetes

10.00 am – 10.15 am

Break

10.15 am – 11.15 am	Finalist 1: Oral presentations Finalist 2: Oral presentations
11.15 am – 11.30 am	Break
11.30 am – 12. 30 pm	Finalist 1: Shortlisted Poster presentations Finalist 2: Shortlisted Poster presentations
12.30 pm – 2.00 pm	Lunch Break
2.30 pm – 2.50 pm	Symposium 3: Cardiovascular Research Invited speaker: <i>Assoc. Prof. Dr. Satirah Zainalabidin Universiti Kebangsaan Malaysia</i> Title: The Action of SAC on Cardiac Remodelling in Myocardial Injury
	Symposium 4: Cancer Research Invited speaker: <i>Dr. Alan Yiu Wah Lee</i> <i>Monash University, Malaysia</i> Title: Exploration of the Tumor Suppressor Function of Semaphorin 5A in Brain Cancer Treatment
2.50 pm – 3.00 pm	Break
3.00 pm – 4.00 pm	Finalist 3: Oral presentations Finalist 4: Oral presentations
4.00 pm – 4.15 pm	Break
4.15 pm – 5.15 pm	Finalist 3: Shortlisted Poster presentations Finalist 4: Shortlisted Poster presentations

Day 3: 17th July 2021

9.00 am – 9.30 am

Plenary Talk 3:

*Prof. Dr. Michael Fenech
University of South Australia, Australia*

Title: Nutrigenomics from Laboratory to Clinical Practice

9.30 am – 9.50 am

Symposium 5: Neurological Diseases

Invited speaker:

*Prof. Dr. Renu Agarwal
International Medical University*

Title: Glaucoma and Neuroinflammation: Role of Magnesium-Based Compounds as Therapeutic Instruments

Symposium 6: Metabolic Diseases

Invited speaker:

Assoc. Prof. Dr. Naguib Salleh University of Malaya

Title: Ion channels in Endometrium: Their Roles in Uterine Fluid Regulation and Embryo Implantation

9.50 am – 10:30 am

Finalist 5: Oral presentations

Finalist 6: Oral presentations

10.30 am – 11.30 pm

Break

11.30 pm – 12.00 pm

Awards Presentation

Closing ceremony and remarks

ONPIM-01

Phytochemical composition and antioxidant properties on bark of *Litsea garciae*

Siti Zaleha Raduan^{1,4*}, Qamar Uddin Ahmed², Abdul Razak Kasmuri¹, Wan Mohd Azizi Wan Sulaiman³, Muhammad Hamdi Mahmood⁴, Muhamad Rusdi Ahmad Rusmili¹, Md. Abdur Rashid Mia⁵, Mohd Farooq Shaikh⁶

¹Department of Basic Medical Sciences, Kulliyah of Pharmacy, IIUM, Kuantan, Pahang, Malaysia

²Department of Pharmaceutical Chemistry, Kulliyah of Pharmacy, IIUM, Kuantan, Pahang, Malaysia

³Faculty of Health Sciences, PICOMS International University College, Batu Caves, Kuala Lumpur, Malaysia

⁴Department of Preclinical Sciences, UNIMAS, Kota Samarahan, Sarawak, Malaysia

⁵Department of Pharmaceutical Technology, Kulliyah of Pharmacy, IIUM, Kuantan, Pahang, Malaysia

⁶Jeffrey Cheah School of Medicine and Health Sciences, Monash University Malaysia, Subang Jaya, Selangor, Malaysia

*rszaleha@unimas.my

The plants of the *Litsea* genus are widely explored concerning their nutritional and medicinal purposes. The recent study investigated the antioxidant capabilities and phytochemical composition of *Litsea garciae* (LG) bark's hexane, chloroform, methanol, and aqueous extracts. Antioxidant measurements were performed by determining the total phenolic content (TPC) and the total flavonoid content (TFC). Antioxidant capacities were assessed employing free radical scavenging (DPPH assay) and ferric reducing power (FRAP assay). The secondary metabolites composition was evaluated by Ultra-High-Performance Liquid Chromatography-Mass Spectrometry (UHPLC-MS) method. As a result, methanol extract was recorded to have the highest TPC value aligned with its positive appearance in phytochemical screening. Its antioxidant capacity indicated the least IC₅₀. Results showed that the significant free radical scavenging activity was related to the presence of high phenolic content in the methanolic extract. UHPLC-MS analysis revealed significant variation in the secondary metabolites present in the methanol extract. The major phenolic compounds were found including N-trans-feruloyl-4-O-methyldopamine, N-cis-feruloyltyramine, epicatechin-(4β->6)-epicatechin-(2β->7,4β->8)-epicatechin, 7-Hydroxy-3-(4-methoxyphenyl)-4-propyl-2H-1-benzopyran-2-one and 9-O-Methylneodunol. Overall, results have suggested LG bark to be a lead source for novel natural products possessing antioxidative potential.

Keywords: Hexane, Chloroform, Methanol, Aqueous, *Litsea garciae* (LG) bark, Antioxidant, Phenolic compounds

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