

MALAYSIAN JOURNAL OF  
Medicine and Health Sciences  
Vol. 20 SUPP 6, August 2024

MALAYSIAN JOURNAL OF

# Medicine and Health Sciences

Vol. 20 SUPP 6 / August 2024

"The 4th International  
Symposium on  
Congenital Anomaly and  
Developmental Biology  
2023 (ISCADB-2023)"

Malaysian Journal of Medicine and Health Sciences Vol. 20 SUPP 6, August 2024



Faculty of Medicine and Health Sciences  
Universiti Putra Malaysia  
43400 UPM Serdang  
Selangor Darul Ehsan  
Malaysia  
<http://medic.upm.edu.my/>

UPM Press  
Universiti Putra Malaysia  
43400 UPM Serdang  
Selangor Darul Ehsan  
Malaysia  
<http://penerbit.upm.edu.my>

PENERBIT  
UPM  
UNIVERSITI PUTRA MALAYSIA  
PRESS



A scientific journal published by Universiti Putra Malaysia Press

## About the Journal

The Malaysian Journal of Medicine and Health Sciences (MJMHS) is published by the Faculty of Medicine and Health Sciences, Universiti Putra Malaysia. The main aim of the MJMHS is to be a premier journal on all aspects of medicine and health sciences in Malaysia and internationally. The focus of the MJMHS will be on results of original scientific research and development, emerging issues and policy analyses pertaining to medical, biomedical and clinical sciences. The Malaysian Journal of Medicine and Health Sciences is now indexed in the following data bases: Scopus, EBSCOhost, ISC, and Rubriq.

## Editorial Board

Editor in Chief:

Prof. Dr. Rukman Awang Hamat

Coordinator:

Dr. Tan Kit Aun

Members:

Prof. Dr. Normala Ibrahim

Prof. Dr. Christopher Lim Thiam Seon

Prof. Dr. Ching Siew Mooi

Prof. Dr. Sharmili Vidyadaran

Prof. Dr. Loh Su Peng

Prof. Dr. Andee Dzulkarnaen Zakaria

Assoc. Prof. Dr. Rajesh Ramasamy

Assoc. Prof. Dr. Sethu Thakachy Subha

Assoc. Prof. Dr. Nor Afiah Mohd Zulkefli

Assoc. Prof. Dr. Wan Aliaa Wan Sulaiman

Assoc. Prof. Dr. Ling King Hwa

Assoc. Prof. Dr. Habibah Abdul Hamid

Assoc. Prof. Dr. Zubaidah Nor Hanipah

Assoc. Prof. Dr. Intan Hakimah Ismail

Assoc. Prof. Dr. Ho Yu Bin

Assoc. Prof. Dr. Karmegam Karuppiah

Assoc. Prof. Dr. Omar Ahmed Fahmy Ahmed Assoc.

Prof. Dr. Rafee Baharudin

Assoc. Prof. Dr. Sarva Mangala Praveena

Dr. Navin Kumar A/L Devaraj

Dr. Raymond Yeak Dieu Kiat

Dr. Razif Abas@Buang

Dr. Sandra Maniam

Dr. Ruziana Masiran

Dr. Manraj Singh Cheema

Lead Guest Editor:

Prof. Dr. Gunadi

Head of Committee:

Dr. Junaedy Yunus

Dr. Dwi Aris Agung Nugrahaningsih

## International Editorial Member

Prof. Dr. Hendrik Setia Budi

Assoc. Prof. Dr. Basmaa Hassan Mohammed Elwakil

## International Advisory Board

Prof. Dr. Cecilia A. Essau

Prof. Dr. David Brendan Price

Prof. Dr. S Suresh Kumar

Assoc. Prof. Dr. Sean Semple

Dr. Martin Wong Chi Sang