



**UNIVERSITY  
OF MALAYA**

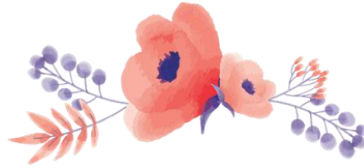
# **FACULTY of MEDICINE**

## **DEPARTMENT of PARASITOLOGY**

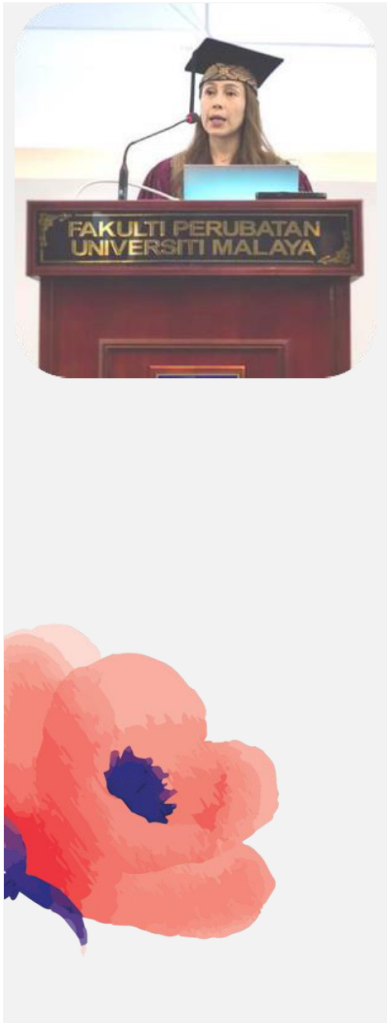
### **NEWSLETTER 2022**



The Department of Parasitology, Faculty of Medicine, Universiti Malaya is a very active department managed by 25 staff members. Among these members, 14 are lecturers (including 2 honorary professors and 1 senior lecturer from TNC office), probably one of the largest parasitology departments in the world. The department play critical roles in teaching, research and diagnostic services. The department has contributed its teaching services to various programs offered by the Faculty of Medicine such as the Bachelor of Medicine, Bachelor of Surgery (MBBS), Bachelor of Nursing Science, Bachelor of Biomedical Science, Master of Pathology (MPath), Master of Public Health (MPH), as well as external elective course for students from other faculties in the university. Besides, the department has provided teaching service via laboratory postings for Diploma program in Medical Laboratory Technology by University Malaya Medical Centre (UMMC). In addition, the department has launched a new one-year master program by coursework (Master of Medical Parasitology and Entomology) that was officially launched in September 2022. On top of that, the department has groomed many scientists via its MSc and PhD programs (research mode), as well as various workshops organized by the department. To date, this department has produced numerous local and overseas talents. In line with the vision of Universiti Malaya, the department strives to be the centre of excellence for research, innovation, publication and teaching in medical parasitology and entomology.



## *Prof. Dr. Lau Yee Ling* *Head of Department*



### *Foreword*

First and foremost, I would like to express my gratitude to Dr. Lee Wenn Chyau and his team members for the preparation of this year's newsletter. The Department of Parasitology, Faculty of Medicine, Universiti Malaya is committed to provide excellent education to our undergraduate and postgraduate students and conduct research that will benefit our patients and the communities. Through the years, the department has groomed hundreds of talents for the fields of healthcare, life science, academia, and other related industries. The department has been consistently ranked among the top five departments in the faculty for research and innovation performance. Despite the various challenges faced by the team after the COVID19 lockdown, members within the department have tried their best to contribute to the academia and the community. Notably, our students and academic staff have won multiple local and international research awards for their remarkable work. In addition, we have launched our new master program - Master in Medical Parasitology and Entomology, which is offered to local and international students intending to deepen their knowledge and research skills in modern tropical medicine. Currently, we have five professors (including two honorary professors), three associate professors, five senior lecturers and one lecturer. Our research activities cover various aspects of Parasitology such as protozoa, nematodes, medically important arthropods, and vector control, with emphasis on both modern and traditional tropical medicine. In year 2022, the department produced the third highest number of publications among all departments (pre/para-clinical) in the Faculty of Medicine, UM.





## ACADEMIC STAFF

### PROF DR. LAU YEE LING



Professor Dr Lau Yee Ling is at present the Head of the Department of Parasitology, Faculty of Medicine at Universiti Malaya (UM). She started her academic career as a lecturer at Monash University Sunway Campus while waiting for her PhD viva in 2008. During her time as a lecturer in Monash University, she was awarded two Monash University Research Grants in which enabled her to continue her research in the field of molecular parasitology. She then returned to her alma mater, University of Malaya, as a Senior Lecturer in 2009. She was granted tenure in 2010 and promoted to Associate Professor in 2013, and Professor in 2019. Professor Lau's scientific career has been dedicated to the study of protozoan parasites, including *Plasmodium* knowlesi and *Toxoplasma gondii*, the causative agents of malaria and toxoplasmosis, respectively. These parasitic diseases exact enormous social and economic burdens. Her research interest mainly focuses on using molecular methods for the detection and characterization of these parasites infecting humans and animals. She has collaborated with local and international researchers, leading to publication of more than 200 ISI journals, with total citations index of 2598 and H-index of 27. This research excellence has enabled her to acquire and be a part of many international and local research grants, i.e., Hubert Curien Partnership-Hibiscus (PHC-Hibiscus), ASEAN-India Collaborative R&D scheme, GCRF Global Impact Acceleration Account (GIAA) Impact Fund, High Impact Research Grant, University of Malaya Research Grant, FRGS, E-science, LRGS and others, with cumulative research funding amounting to at least RM5 million. These were followed by several intellectual property rights under her belt on rapid molecular diagnosis of dengue, malaria and COVID-19. Since 2009, 13 Masters and 17 PhDs have completed their studies with success under her guidance. Currently, there are 4 Masters and 8 PhDs under her supervision. With her experience in grant management, she had held numerous administrative posts such as the Head of Grant Management Unit, of Health and Translational Medicine Cluster and Faculty of Medicine, besides being a committee member in evaluating applications for FRGS, LRGR and TRGS at the national and international levels. She established the Science Café in 2017, which continues to be the main channel of research communication between clinicians and scientists at the Faculty of Medicine. She was also a committee member of the University of Malaya Institutional Biosafety and Biosecurity Committee (IBBC), Animal Experimental Unit, Faculty of Medicine Risk and Quality Management and an internal auditor of Faculty of Medicine. Currently, she is the editor-in-chief for the Journal of Health and Translational Medicine (JUMMEC) for Universiti Malaya, editor of Asia Pacific Journal of Molecular Biology & Biotechnology and associate editor of BMC Infectious Diseases. Through her contribution to the field of science, she is a regular reviewer for a few international journals such as Nature Scientific report, Lancet, PLOS One, Parasites & Vectors, Malaria Journal, International Journal of Tropical Disease & Health and others. With her extensive experience and reputation in the field of molecular parasitology, Professor Lau has been much sought after as speaker and consultant both locally and internationally. Professor Lau has been an active member of the Malaysian Society of Parasitology and Tropical Medicine (MSPTM). She was a council member of the MSPTM in year 2018-2019. She is also active in the Malaysian Society for Biochemistry and Molecular Biology (MSBMB). She was the Honorary Secretary of the MSBMB in 2017-2019 and the current President. Professor Lau's passion for research can only be matched with her passion for teaching and education. When conducting classes, besides ensuring her lectures are easy to follow, she makes all attempts to infuse interest and solicit students' participation by incorporating more recent articles and real life scenarios in order to illustrate the day-to-day relevance of the teaching subject matter. And because of her enthusiasm for education, she has volunteered to be the Problem-Based Learning (PBL) Phase II coordinator in 2011 then became the PBL main coordinator in 2018. Recently, she has been actively participating in organizing PBL training workshops for UMMP program. Professor Lau has been awarded University of Malaya Excellent Service Award three times in 2011, 2013 and 2015. She was awarded MSPTM Nadehadtram Medal in 2014. She has also been awarded a few times for her innovation in research including the Grand Prize in National Exclusive Innovation Challenge Award 2018, and bronze medal in the PECIPTA2022 Pecipta UMK Universiti Malaysia Kelantan.

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- Malaria
- Diagnostic Parasitology
- Molecular cloning & Expression



## ACADEMIC STAFF

### PROF DR. SURESH KUMAR GOVIND (Honorary Professor)



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- **Blastocystis**
- **Drug trials & parasites biology**
- **Diagnostic parasitology**

Professor Dr. Suresh Kumar Govind completed his PhD from the National University of Singapore in 1994. He became a lecturer at the Department of Parasitology, Faculty of Medicine, University of Malaya, and Associate Professor in 2001 and a full Professor in 2006. He also served as the Head of the Department of Parasitology, UM from 2015 to 2019.

His special focused dedication was on *Blastocystis* and for the past 25 years have generated more than 140 scientific papers, presented more than 270 conference papers, and written several chapters in publications by the WHO. He has supervised more than 100 elective, diploma, graduate and post-graduate students including at doctorate level. His expertise in *Blastocystis* has enabled him to be appointed as reviewer for internationally refereed journals and is responsible for placing the organism for the first time in the fact list of the WHO publication on the drinking water guidelines. He was the winner of the National Young Scientist Award, Malaysian Toray Grant Award, Commonwealth Scholarship Award, ITEX Gold Innovative Award (National), ITEX gold medal (International), Malaysian Society of Parasitology and Tropical Medicine Silver Medal, the Prime Minister's Productivity Award, the prestigious Malaysian Toray Science Award as well as winning a few times the University Malaya excellence award. He was conferred the global Malayalee Award, National Educators Award from the Association of Private Institutions for research and Fellow to the Malaysian Academy of Science in 2015. He won the Parija Oration Award from the Indian Academy of Tropical Parasitology and Sandosham Medal Award from MSPTM in 2016 and 2017, respectively, for his outstanding contribution to the field of Parasitology.

He has served as an expert member for the Drinking Water guidelines committee for the World Health Organization since 2004. He has also served as an International Consultant for Indian Ocean Center for Education in Human Values, Mauritius. He has been appointed by the Prime Minister of Malaysia to be a member of the National Unity Consultative Council (NUCC) and the committee for inter-faith promotion (JKMPKA) a board member to IKLIN and currently the Chairman of Board of Trustees for the Yayasan Perpaduan Malaysia. Prof Dr Suresh Govind was the former President of the Sathya Sai International Organization, Malaysia, an organization dedicated to the promotion of human values, service and national unity. He is currently the International coordinator for community engagement for 120 countries for the World Sathya Sai International Organization as well as the Coordinator for the Friendship Group of Inter Religious Service, consisting of members from all the major religious groups in Malaysia.





## ACADEMIC STAFF

### PROF DR. FONG MUN YIK



Professor Dr. Fong Mun Yik obtained his PhD degree from the University of Malaya (UM) in 1996. He joined the Department of Parasitology, Faculty of Medicine, UM in 1998 as a junior lecturer. He was promoted to the position of Associate Professor in 2003, and to full Professor in 2008.

As an academician in the university, he teaches Medical Parasitology at various levels such as Masters of Pathology, MBBS, Pharmacy, Biomedical Science and Nursing Science degrees. He was a guest lecturer and external examiner for the Southeast Asian Ministers of Education Tropical Medicine Network (SEAMEO-TROPMED) Advanced Diploma of Applied Parasitology and Entomology programme at the Institute for Medical Research, Kuala Lumpur.

Professor Fong's main research interest is in molecular parasitology, particularly in the areas of molecular epidemiology and development of recombinant antigens for serodiagnosis of parasitic infections. His main focus now is on the zoonotic malaria parasite *Plasmodium knowlesi*.

Professor Fong has received numerous research grants from various external funding bodies including China Medical Board, Academy of Science Malaysia, Malaysian Toray Science Foundation, the Ministry of Science's Intensified Research Priority Area (IRPA) and ScienceFund, Ministry of Higher Education's High Impact Research Grant, Long-Term Research Grant and Fundamental Research Grant Schemes.

Professor Fong was elected as the President of the Malaysian Society of Parasitology and Tropical Medicine (MSPTM) in 2006-2007 and 2011-2012. In 2007, he was given the honour to chair the organising committee of the joint MSPTM and Royal Society of Tropical Medicine and Hygiene (London) Centenary Celebration. He was the President of the Malaysian Society of Molecular Biology and Biotechnology in 2007-2009.

Professor Fong has served as research proposals assessor for UM Wellness, UM Biotechnology & Bioproduct clusters, FRGS, MyLab, and ScienceFund grant schemes. He was appointed by the USM Vice Chancellor to serve in the university's Industry and Community Advisory Panel in 2013-2015, and by the USM Senate to be in the Committee of Studies, Master of Biomedicine Programme. He also was an academic assessor for new Master (USM) and Bachelor (UiTM) degree programmes. He also reviews research proposals for the National Science Center, Poland.

Professor Fong serves as the member of the Editorial Board of Tropical Biomedicine, and the Asian-Pacific Journal of Tropical Medicine. He is a regular reviewer of manuscripts for PLoS One, Malaria Journal, Parasites & Vectors, AJTMH, Acta Tropica, Infection, Genetics and Evolution and BMC Infectious Diseases.

Professor Fong joined the UM Quality Management and Enhancement Centre (QMEC) in 2005, appointed QMEC's Head of Documentation Unit in 2009-2016, and Deputy Director in 2016. He is a MOHE-appointed auditor for the Malaysian Research Assessment (MyRA). He is a member of the Board of Governors of the International University of Malaya-Wales (IUMW) since 2013.

Professor Fong has been awarded the UM Excellent Service Award four times – in 2002, 2006, 2009 and 2013. He was awarded the Malaysian Society of Parasitology and Tropical Medicine (MSPTM) Medal in 2007.

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- Genetic diversity and molecular & epidemiology of malaria parasites
- Diagnostic parasitology



## ACADEMIC STAFF

### PROF DR. YVONNE LIM AI LIAN

Dr. Yvonne Lim Ai Lian is a professor at the Department of Parasitology, Faculty of Medicine, Universiti Malaya, Kuala Lumpur. Currently, she is the Associate Vice-Chancellor (Global Engagement), Universiti Malaya and a council member of the Academy of Sciences Malaysia. Prior to this, she has taken on leadership roles as the Deputy Dean (Research) at the Faculty of Medicine and the Director of International Relations Office, Universiti Malaya.

Her research focuses on host-parasite interactions and the epidemiology and control of neglected tropical diseases primarily among the indigenous communities. Her work has been funded by various national and international grants (eg. US NIH grant). Using multidisciplinary approaches and bioinformatics analysis, her team's landmark publication in Science with collaborators from New York University unravelled the mechanisms of how low levels of helminth infection promote growth of probiotic gut microbiota which may lead to the discovery of potential biomarkers and novel interventional strategies towards utilising helminths as a therapeutic approach. Together with researchers at the National Institutes of Health (NIH), USA, her team is further elucidating the role of gut microbiota-helminth association with nutritional status and inflammatory responses.

She has published more than 230 scientific papers, 9 book chapters and 3 books. She has supervised more than 30 PhD and MSc students to completion. She also has a vast network of local and international partnerships. She was a visiting researcher at the Scottish Parasite Diagnostic and Reference Laboratory (formerly SPDL), Glasgow, Scotland, a visiting fellow at the Department of Veterinary Science, University of Melbourne, Australia and a visiting professor at the Department of Molecular Parasitology and Tropical Diseases, Taipei Medical University, Taiwan and the Massachusetts Institute of Technology (MIT), USA.

She is a member of the International Scientific Advisory Committee (SAC) in the Infectious Diseases Data Observatory Schistosomiasis and Soil-Transmitted Helminthiasis Data Treatment Platform. She was also involved in the formulation of the National Policy for the Development of Orang Asli (Indigenous) with the Department of Orang Asli Development (JAKOA), Malaysia.

She has received numerous awards and recognitions, among which were the Royal Society of Tropical Medicine and Hygiene Centenary Scholarship, Malaysian Society of Parasitology and Tropical Medicine Medal for being an outstanding young scientist, the Universiti Malaya Excellence Award for outstanding achievement in the category of Excellent Lecturer (for Sciences) and the Top Research Scientists Malaysia Award. She was also awarded the Malaysian Society of Parasitology and Tropical Medicine Life Membership and was appointed a fellow of the Academy of Sciences Malaysia. She was featured as one of the 10 Science Stars of East Asia in Nature and cited in a study by Stanford University as one of the top 2% scientists for the year 2019. In 2021, she was awarded the Fulbright Scholar Award 2021/2022 for an attachment at the Laboratory of Parasitic Diseases, National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH), USA. Recently, she was appointed the co-chair of the APRU Asia Pacific Women in Leadership (APWiL) Program from 2022-2025.

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- Protozoa & Helminth
- Gut Microbiota
- Indigenous Health
- Molecular Epidemiology
- Waterborne Parasites (*Cryptosporidium*, *Giardia*)



## ACADEMIC STAFF

### PROF DATIN DR. INDRA VYTHILINGAM (Honorary Professor)



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- Medical entomology
- Vectors for malaria, dengue, JE & filariasis

Datin Dr Indra Vythilingam is a Professor at the Department of Parasitology, Faculty of Medicine, University of Malaya (UM). She has been with the Department since September 2011. Prior to that, she was working at the Institute of Medical Research (IMR), Malaysia and Environmental Health Institute, Singapore. At UM she was instrumental in designing and seeing through the establishment of the Arthropod Containment Level 2 Laboratory (ACL2) at Department of Parasitology. This facility is the only one at the university and it allows work on mosquito infection.

Indra has been the key person playing a vital role in spearheading many projects on vectors of malaria and dengue. She was the pioneer to incriminate the vectors of *Plasmodium knowlesi* in the current era and was responsible for establishing that *P. knowlesi* was also found in humans from all states in P. Malaysia. She has also established a new proactive paradigm for dengue surveillance, where infected mosquitoes are detected before cases are reported. A cluster randomised control trial is underway to establish the effectiveness of this paradigm. Along with her fellow colleagues she has obtained an LRGS grant from the Ministry of Education to study the vectors of zoonotic malaria throughout P. Malaysia.

She has published more than 162 scientific papers in peer-reviewed international and local journals, ten book chapters and one book. From 2012 onwards, 9 PhD students and 3 MSc students have graduated under her supervision. Currently she is supervising 1 PhD student and 1 MSc student. In recognition of her outstanding contribution to the field of parasitology and tropical medicine in Malaysia and Southeast Asia, she was awarded by the Malaysia Society of Parasitology and Tropical Medicine the most prestigious award, the Sandosham Medal in 2006. In 2017 she was awarded Malaysia's Research Star Award for outstanding national research in Tropical Diseases by the Ministry of Higher Education. She was the president of the Malaysian Society of Parasitology and Tropical Medicine in 1998 and 2004.

She was appointed a WHO malaria consultant for Lao PDR from 1999 to 2002. During this time (in 2000), her team conducted studies on the bionomics of malaria vectors in southern part of Lao PDR and the epidemiology of malaria resulting in the incrimination of *An. dirus* for the first time as vector of malaria in Lao PDR.

Indra has been appointed a member of the WHO Expert Advisory Panel on Vector Biology and Control since 1998 (till 2021). She has been appointed as temporary adviser, WHO on many occasions. In 2013 until 2016, she was appointed as member of the WHO Vector Control Advisory Group (VCAG) on New Tools for vector control.

She was the Editor of Tropical Biomedicine from 2006-2014 and was responsible for obtaining the ISI status from Thompson Web of Science. It is the first local medical journal to obtain impact factor in the country. She was the subject Editor for *Parasites and Vectors* - a tier 1 journal, from 2016- 2020.



## ACADEMIC STAFF

### ASSOC. PROF. DR. ZURAINEE MOHAMED NOR



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- Plant extract
- Entomology
- Drinking water quality (*Giardiasis*, & *Cryptosporidiosis*)
- Humoral immunology

Associate Professor Dr. Zurainee Mohamed Nor has been with the Department of Parasitology, Faculty of Medicine since 1991. She joined the department as a tutor and then as a lecturer after she completed her PhD at the University of Strathclyde, Scotland, United Kingdom in 1995. Apart from teaching, researching and supervising students, she has been participating in many activities at the department, faculty and university levels. She was among the key persons responsible for the development of Para:SEAD Lab, the diagnostic laboratory for parasitic infection under University Malaya Medical Centre (UMMC). In relation to that, she was invited by Prof. Hue Smith to visit the Scottish Parasite Diagnostic Lab (SPDL) in order to study the running of an accredited diagnostic laboratory. She was also one of the Japanese Society for the Promotional of Science (JSPS) scholarship recipient that provided her the opportunity to visit Chiba University, Japan and worked under the supervision of Prof. Yano.

At the department level, she was appointed as Program Coordinator, Quality Manager (DQM), and Internal Auditor for many years. At the faculty level she was appointed as Academic Advisor for second year medical students and as Advisor to the Medical Society (MedSoc). She involved heavily in the New Integrated Curriculum Program (NIC) as Phase 2 Coordinator, a committee member of Faculty Quality Management System Unit, as Faculty Internal Auditor and involved as co-researcher in a study conducted by the faculty entitled "The Migrant Workers and Diseases". At the university level she served the university as Principal to several UM residential colleges (4th, 5th 6th and 8th RC). As the Principal of residential college, she was responsible for ensuring the welfare of students and shaping soft skills among students staying at those colleges. She was also appointed as the Head of SERU (UM Student Empowerment & Research Unit) and as University Internal Auditor. She is also one of the consultants appointed by the Vice Chancellor for the analysis of waterborne parasites involving samples from government and private agencies.

As a researcher, her study of interest includes filaria, *Toxoplasma*, malaria, waterborne parasites and plant extract. She has supervised numbers of local and international undergraduate, Master and PhD students. As a lecturer she received invitations from other public and private universities like University Putra Malaysia (UPM), and MAHSA University to give lecture/practical classes and as External Examiner for DAP&E, Master and PhD candidates from Institute of Medical Research (IMR), Universiti Sains Malaysia (USM) and Universiti Sains Islam Malaysia (USIM). She is also invited as External Examiner for Second Professional Examination 2018/2019 by USIM.

As far as her involvement in scientific society she was a member of the Malaysian Society for Parasite and Tropical Medicine (MSPTM) and once held the Treasurer post. She is a member to the Malaysian Scientific Association (MSA) and was one of the council members for several terms and once held the Secretary post. She was heavily involved as the Chairperson for several yearly programs organized by MSA and state governments, designed for secondary school students in relation to Science & Technology.

As a Certified Auditor, she was frequently invited by private accreditation bodies to audit selected government hospitals and academic institutions.



## ACADEMIC STAFF

### ASSOC.PROF.DR. WAN YUSOFF WAN SULAIMAN



Dr. Wan Yusoff obtained his PhD from Keele University, UK in 1999. He is life member of British Society for Parasitology since 1995, member of Malaysian Society of Parasitology and Tropical Medicine.

He has been appointed as consultant for many projects/companies such as Putrajaya Lake and Wetland Water Quality and Biological Monitoring Services for Perbadanan Putrajaya, Evaluation of Insecticides product from CUBA, Water-borne vector and mosquito.

Dr. Wan Yusoff has received University Malaya Excellent Award – Consultancy in 2018, and numerous certificates of excellent service from UM. Currently, he is the Deputy Dean of Development, Faculty of Medicine, University of Malaya. He has published numerous papers and chapters in book. He has received grants from various funding bodies including UM internal RU grant, UMRG, FRGS, and international funding. His research interests focus on the mosquito geospatial and temporal distribution monitoring, insect immunology, and vector-borne diseases.



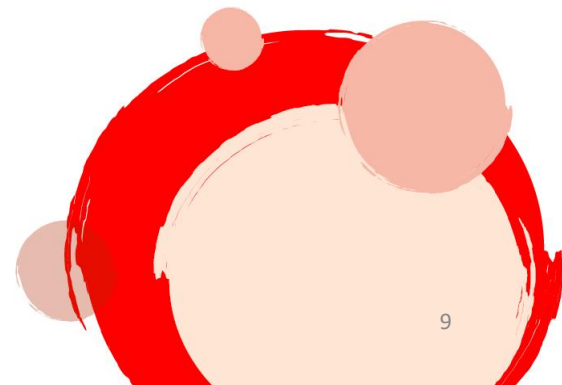
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- Medical Parasitology
- Medical Entomology
- Forensic Entomology



## ACADEMIC STAFF

### ASSOC. PROF. DR. ROMANO NGUI

Dr. Romano Ngui obtained his degree in Bachelor of Biomedical Science (2008), Master of Medical Science (2010) and Doctor of Philosophy (PhD) (2013) from the University of Malaya. His PhD thesis has been awarded distinction by the University of Malaya. Currently, he is a Senior Lecturer at the Department of Parasitology, Faculty of Medicine, University of Malaya.

To date, he has published over 60 journals (ISI Cited Publication) and 2 book chapters. According to the latest Thomson Reuters record, he has 13 h-index. Likewise, he has 17 h-index with 1012 citations based on the Google Scholars Citation record. Currently, he supervised 4 PhD and 2 Master candidates with 2 already completed. He is also actively supervising undergraduate final year research project including international internship students. His research interest is the epidemiological distribution of infectious diseases particularly Parasitology and Tropical Medicine that to developed and applied molecular and statistical models/tools to support operational research activities relating to infectious diseases control.

He has won several awards including University of Malaya Excellent Award under the category 'PhD Candidates with Highest Impact Publication' and 'PhD Candidates Completed Less Than 3 Years' (2013), 'Gold Medal Award' and 'Most Powerful Innovation Award' in the BioMalaysia Research Exhibition, Ministry of Science, Technology, and Innovation (MOSTI) and Malaysian Biotechnology Cooperation (2013) and the University of Malaya Excellent Service Award (Anugerah Perkhidmatan Cemerlang, APC) (2017).

He has attended intensive research training at the London School of Hygiene and Tropical Medicine (LSHTM), United Kingdom in the field of Spatial Epidemiology in Public Health (2011).

He has also been successfully selected to attend several international workshops including Introduction to Modeling of Infectious Diseases Workshop organized by Hong Kong University-Pasteur Research Pole (2016), Ungku Omar-Newton Fund Epidemiological Modeling Workshop organized by the University of Malaya and Imperial College London (2017) and Southeast Asian Scholars for Higher Education Leadership (SEASHEL) (2018) organized by the Ministry of Higher Education, Malaysia.

Apart from his academic position, he is also actively involved in various co-curriculum student activities includes sport, community and volunteerism work through his roles as a Fellow of the First Residential College, University of Malaya. Some of these activities have gained media coverage in major newspapers and mass media stream including RTM 1, Berita Harian, Harian Metro, Sinar Harian, and Utusan Borneo. He is also an active member of the Malaysian Society of Parasitology and Tropical Medicine (MSPTM) since 2008. He has served as Assistant Honorary Secretary and Council Member to the society).



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- **Geographical information system (Spatio-Temporal Analysis)**
- **Molecular epidemiology & public health**
- **Medical parasitology**





## ACADEMIC STAFF

### DR. AMIRAH AMIR



Dr. Amirah Amir obtained her MBBS from University of Malaya in 2008. After completing her compulsory service under Ministry of Health, she pursued her PhD in Medical Parasitology (UM) and currently holds the post of Medical Lecturer in Faculty of Medicine, University of Malaya. She recently obtained her Diploma in Tropical Medicine and Hygiene (DTM&H Glasgow, 2022) and is an affiliate researcher with the School of Infection and Immunity, University of Glasgow (UofG). She has published 30 research papers in peer-reviewed journals with H-index of 10 and a total of 255 citations. Her topic of interest is malaria, zoonotic malaria and medical parasitology. She has also contributed several book chapters on Problem Based Learning and has published a textbook with Springer titled 'Medical Parasitology – A Textbook'.

Dr. Amirah has been the recipient/co-reipient of several research grant including the UM Research Fund Assistance (BKP), Hubert Curien Partnership (PHC-Hibiscus) Grant, Fundamental Research Grant Scheme (FRGS), and Long-Term Research Grant Scheme (LRGS).

Dr. Amirah is currently the coordinator of the Parasitology Diagnostic Unit in UMMC where she provides lab test validation and clinical consultation. She also serves as the advisory committee chair and coordinator for the malaria screening program under Laboratory Quality Assurance Scheme (LABQAS). During the COVID pandemic, Dr Amirah volunteered as the clinician on-call for the COVID symptom monitoring system (COSMOS).

Dr. Amirah is passionate about teaching and has held numerous coordinator roles including the department's coordinator for Master of Pathology (MPath), University Malaya Medical Programme (UMMP), Biomedical Science (MIC1006, MIC2014, MIC3012), Medical Protozoology (MQG7004) for Master of Medical Parasitology and Entomology and is part of the faculty's Problem Based Learning (PBL) team. She is also collaborating with UofG to provide teaching services for the study course DTM&H. She has been active in training medical students since 2017 for various international intervarsity quizzes that led to several podium achievements. She has supervised numerous undergraduate and postgraduate students. Two postgraduate students under her supervision have graduated and she is currently supervising 4 PhD students.

Dr. Amirah is currently an Editor for the Journal of Health and Translational Medicine (JUMMEC) and Associate Editor for Asia Pacific Journal of Molecular Biology and Biotechnology (APJMBB). She is also the Honorary Treasurer for Malaysian Society for Molecular Biology and Biotechnology. She is a member of Malaysian Society of Parasitology and Tropical Medicine and life member of Malaysian Medical Association.

Dr. Amirah was the chairperson of the 4<sup>th</sup> International Conference on Molecular Biology and Biotechnology (ICMBB) 2021. She has been an integral team member in organizing the 3<sup>rd</sup>, 5<sup>th</sup>, and 6<sup>th</sup> ICMBB and other workshops including PBL Tutor Training Workshop, PBL Student Training Workshop, Malaria Workshop and Basic and Clinical Immunology Course.

Dr. Amirah has been awarded twice for both the UM Excellent Service Award (2018 & 2021) and Certificate of Excellent Service (2017 and 2020). She also won the Bronze medal in Knovasi: Kongress & Pertandingan Inovasi Pengajaran & Pembelajaran, UKM, 2020 for her contribution in generating solutions for problem-based learning (PBL) beginners.

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- Malaria
- Non-human primate malaria
- *Anopheles* colonization
- Medical parasitology

## ACADEMIC STAFF

### DR. NORAISHAH MYDIN ABDUL - AZIZ

It has been 10 years since I published my first paper (Abdul-Aziz NM, Turmaine M, Greene ND, & Copp AJ. 2009. EphrinA-EphA receptor interactions in mouse spinal neurulation: implications for neural fold fusion. *Int J Dev Biol*, 53(4), 559-68) and 11 years since I first joined the ever-joyful Department of Parasitology which has been my home away from home. Due to my interesting personality and curriculum vitae among others, I have come to the humble realisation that happiness exists in great bounty when pleasure is derived from nurturing young minds in the ever-challenging premise known as life. I am humbled by students continuously requesting positions in my laboratory despite the current tenuous scenario in procuring research grants. I am humbled too by the patient group which I support known as MALAYSIA NTD. Neural tube defects (NTDs) is a devastating condition and is in fact the leading central nervous system malformation in humans with an occurrence of 1-10 in 1000 births worldwide (Mohd-Zin S W, Marwan AI, Abou Chaar MK, Ahmad-Annuar A, & Abdul-Aziz NM. 2017. Spina Bifida: Pathogenesis, Mechanisms, and Genes in Mice and Humans. *Scientifica (Cairo)*, 2017, 5364827). I should know as I have it. I have suffered the consequences of spina bifida occulta with neurological deficits since birth with an L3 lesion.

I am perhaps the oldest surviving person in Malaysia with spina bifida and a permanent ileal conduit which I have had since the age of 3. I understand the difficulties and anxieties of this condition so very acutely which is how I have built a network between individuals with spina bifida, their families, their care-givers and have tried to a certain extent to get government bodies in Malaysia to be vested in the interests of individuals with spina bifida which I hope to continue pursuing comfortable ensconced in the great working environment which is Department of Parasitology, FOM.

The peaceful environment of the Department of Parasitology has enabled me to build a mouse model with spina bifida occulta which may be the answer to the understanding of the mechanism between the aperta-type and the occulta-type as this is the first model of occulta with neurological deficits targeting 2 very specific genes whereby the surface ectoderm or the presumptive skin seems to be integral in the understanding of neural tube defects. A novel occulta-type spina bifida mediated by murine double heterozygotes EphA2 and EphA4 receptor tyrosine kinases. I am also now embarking on a series of proposed experiments to study the effects of parasites such as *Blastocystis hominis*, *Toxoplasma gondii* and *Giardia lamblia* on the developing mouse embryo. This is timely considering the recent outbreak of microorganisms potentially causing birth defects. It has been an interesting journey thus far!

**HIDUP JABATAN PARASITOLOGI !**

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- Molecular & structural biology
- Arthropods of medical importance
- Neural tube defect (Developmental neurobiology)



## ACADEMIC STAFF

### DR. CHEONG FEI WEN

Cheong Fei Wen obtained her Bachelor Degree in Biomedical Science (with distinction) from University of Malaya (UM), Malaysia in 2009. She passed her PhD with distinction early 2015 and received her PhD scroll in UM convocation 2015. She is currently holding the post of senior lecturer in Department of Parasitology, Faculty of Medicine, UM. Since PhD study, she explored into several malaria-related aspects, including protein expression of the Plasmodium knowlesi merozoite surface proteins; immunogenicity study using animal model; and epitope mapping. Her current research interests include phenotypic and genotypic measures on Plasmodium sp. resistance against anti-malarials, immunogenicity profiling of potential malarial vaccine candidates, and genome engineering in P. knowlesi using CRISPR-Cas9 system.

With her deep passion in research, she has been successfully selected and awarded to attend several international workshops/courses including Ungku Omar-Newton Fund Researcher Links Workshop: Neglected Disease in SEA: Building Capacity in Epidemiological Modelling (University of Malaya, Malaysia & Imperial College London, UK) in 2017 and Wellcome Genome Campus Advanced Course: Malaria Experimental Genetics (WGCAC, UK) in 2018. She has also obtained and be part of several research grants, including UM Research Fund Assistance (BKP), Postgraduate Research Fund (PPP), Frontier Research Grant (FRG), Fundamental Research Grant Scheme (FRGS), and Long-Term Research Grant Scheme (LRGS). With that, she has published about 20 research articles in ISI-indexed journals. She is currently the editor of the Journal of Health and Translational Medicine (JUMMEC), associate editor of Asia Pacific Journal of Molecular Biology and Biotechnology (APJMBB), and editorial board member of Tropical Biomedicine. She was the council member for Malaysian Society of Parasitology and Tropical Medicine (MSPTM) in 2019-2020.

She has received certificate of excellent service, UM in 2019. She is currently the department Course Coordinator for courses Diagnostic Parasitology and Advanced Diagnostic Parasitology in Bachelor's Degree of Biomedical Science Programme, committee member of Programme Quality Assurance - Quality Committee Faculty of Medicine (FOM), committee member of Seminar Proposal Defence for Postgraduates FOM, committee member for Jawatankuasa Kurikulum di Peringkat Jabatan (JKKJ) and Jawatankuasa Pengajian (JKP) for the department new master programme, Master of Medical Parasitology and Entomology Programme. She has been appointed as Programme Coordinator for Master of Medical Parasitology and Entomology and Programme Quality Assurance Expert (ProQAE) FOM in year 2021.

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- Molecular cloning
- Malaria
- Protein expression
- Epitope mapping

## ACADEMIC STAFF

### DR. WENN-CHYAU LEE

Wenn-Chyau Lee received his BSc (Hons) degree in Biomedical Sciences from University of Malaya, Malaysia in 2011, and graduated with his PhD in Medical Sciences from University of Malaya in 2014. Subsequently, he joined Singapore Immunology Network (SIgN, A\*STAR) as a research fellow in Laurent Renia's Laboratory. He was appointed as SIgN fellow after receiving OF-YIRG grant awarded by the National Medical Research Council (NMRC) of Singapore in 2018. He joined the newly formed A\*STAR ID Labs as an investigator in 2021. Subsequently, he joined the Department of Parasitology, Faculty of Medicine, University of Malaya as a senior lecturer. Currently, he is also an adjunct investigator of A\*STAR ID Labs, Singapore.

As a parasitologist, he has involved in studies encompassing several medically important parasites. His main research interest revolves around the immuno-pathobiology of malaria. He has been investigating and deciphering the roles of rosetting (a phenomenon where a *Plasmodium*-infected red blood cell is stably adhered to uninfected red blood cells, forming a flower-like structure called 'rosette') in the pathogenesis of malaria. Besides, he is exploring the potential of applying different biocontrol strategies to eliminate vector-borne diseases. He has worked as a research fieldworker in different places including the Thai-Burmese Border, China, peninsular Malaysia, and Malaysian Borneo. As different laboratory settings are equipped differently, he enjoys adapting and improvising facilities available in the field sites to conduct experiments, as well as coordinating the insectarium and Arthropod Containment Level 2(ACL2) facility in the Faculty of Medicine, Universiti Malaya.

To date, he has published (as first/ corresponding author) in reputable journals such as Blood (IF 25.476), Frontiers in Immunology (IF 8.786), eLife (IF 8.713), EBioMedicine (IF 11.205), Frontiers in Microbiology (IF 6.064), and Trends in Parasitology (IF 10.528). Apart from reviewing manuscripts for various journals, as well as evaluating grant proposals for local and overseas funders, he is also an editorial board member of Frontiers in Microbiology.



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- Malaria immuno-pathobiology
- Vector Biocontrol



## ACADEMIC STAFF

### DR. WAHIB MOHAMMED MOHSEN ATROOSH

Wahib M. Atroosh, from Yemen, has joined the Department of Parasitology, UM as an academic lecturer in 2019. He has started his postgraduate journey as a Master student in the Department of Parasitology, UM in December 2009, continued the PhD in 2012 and later has awarded the PhD with Distinction in 2017. The scientific career of Dr Wahib has been dedicated to the falciparum malaria parasite, the most malignant cause of human malaria, top-ranked the mortality rate and led the parasite resistance to antimalarial drugs. The research work of Dr Wahib has focused on the monitoring of antimalarial drugs resistance using *in vivo* clinical trials and molecular gene markers. He joined an external research collaboration with the Medical Research Center, Jazan University, Saudi Arabia and a local one with the School Biological Sciences, Universiti Sains Malaysia (USM) on the epidemiology, genotyping and molecular evaluation of antimalarial drugs resistance of falciparum malaria isolates from the Kingdom of Saudi Arabia and Nigeria, respectively. In addition to malaria research, Dr Wahib has contributed to other research projects including intestinal protozoa, schistosomiasis, soil-transmitted helminths (STH) and health education programs for parasitic infections. More recently, Dr Wahib has contributed to designing a new gene marker of discrimination of falciparum malaria isolates, suitable for correcting *in vivo* malaria clinical trials. Over the years of being a researcher at the Department of Parasitology, Dr Wahib has published 30 papers in ISI-indexed journals with an h-index of 14 and a total of 900 citations. Furthermore, he is a reviewer in reputable journals such as PLoS ONE, PLoS Neglected Tropical Diseases, Parasites & Vectors, Malaria Journal, Transaction of the Royal Society of Tropical Medicine and Hygiene, BMC Medicine, Pathogens and Global Health, International Research Journal of Public and Environmental Health and Tropical Biomedicine.



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- Malaria epidemiology & genotyping
- Plasmodium falciparum
- Antimalarial drug resistance



## ACADEMIC STAFF

### DR. TAN TIONG KAI (STANLEY)

Tan Tiong Kai (Stanley) received his bachelor's degree in Conservation and Biodiversity Management from the Universiti Malaysia Terengganu in 2010. He then earned his PhD from the Universiti Malaya in 2016, for his studies on nematology and drug resistance. Following the completion of his PhD study, he was enrolled as a Post-Doctoral Fellow at Biodiversity Research Center, Academia Sinica, Taipei, Taiwan. Subsequently, Dr. Tan was appointed as a Post-Doctoral Research Fellow at Faculty of Medicine, Universiti Malaya. Currently, he is a senior lecturer at the Department of Parasitology, Faculty of Medicine, Universiti Malaya.

His current research interests include (1) Epidemiology of blood and gastrointestinal parasites and vector-borne diseases; and (2) Medico-veterinary parasitology and entomology, particularly in the aspects of anthelmintic and insecticide resistance.

Dr Tan TK also actively involves in one of the oldest professional societies in Malaysia, the Malaysian Society of Parasitology and Tropical Medicine (MSPTM). He serves as a council member for the 59<sup>th</sup> MSPTM 2022/2024. He was Honorary Secretary for the 56<sup>th</sup> Council of MSPTM 2019/2020; and Honorary Assistant Secretary for the 55<sup>th</sup> Council of MSPTM 2018/2019. In addition, he is also a Managing Editor of Tropical Biomedicine, an ISI-indexed journal for parasitology, entomology, tropical medicine and other aspects of biomedical research.

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- Vector-borne diseases (filariasis)
- Parasitology (helminthiasis & protozoan diseases)
- Nematology (anthelmintic resistance)



## POST-DOCTORAL RESEARCH FELLOWS



**Dr. Lai Meng Yee**  
Malaria (*Plasmodium knowlesi*)  
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**Dr. Arutchelvan Rajamanikam**  
Gut microbiome; *Blastocystis* & host-  
pathogen interaction; pathobiome  
arun04@um.edu.my



**Dr. Yap Nan Jiun**  
Molecular epidemiology &  
characterization of parasites  
nanjiunyap@um.edu.my



**Dr. Wong Meng Li**  
Medical entomology (mosquito)  
mengli88@um.edu.my

# POSTGRADUATE STUDENTS

## PhD STUDENTS

Matric No. (New)	Name(PHD)
17169664/2	Er Yi Xian
17218454/1	Freddy Franklin A/L Anthony Joseph
17006117/1	Manal Ali Saleh
17201545/1	Nantha kumar A/L Jeyaprakasam
17198072/1	Naqib Rafieqin B. Noordin
17006695/1	Pavitra A/P Soosai
17219440/1	Phang Wei Kit
17202544/1	Sandhya Pramasivan
17020182/3	Siti Waheeda Binti Mohd Zin @ Zain
17068070/2	Tan Jia Hui
17199122/1	Tan Pei Yee
17218684/1	Ummi Wahidah Binti Azlan
17013354/1	Vinnie Siow Wei Yin
17219544/1	Shahhazziq Shahari
17202081/2	Lee Phone Youth @ Zen Lee
17199121/2	Tan Wing
17217909/2	Ng Yee Ling
S2135943/1	Nur Zulaikha Zulkefli
17116098/3	Eiranurfarisha binti Mohd Latif

## MASTER STUDENTS

Matric No. (New)	Name (Master by Research)
S2029043/1	Nisheljeet Singh A/L Jogineder Singh
17062142/3	Siti Farah Norasyikeen Bt Sidi Omar
17157589/2	Syahirah Nadiah Binti Mohd Johari
17202247/1	Ummi Kalthum bt Azlan
17138657/3	Wan Siti Mariam
S2131964/1	Nurmanisha Majid

Matric No. (New)	Name (Master by Coursework)
17093309/2	Rishitharan A/L Subramaniam
17176848/2	Nurul Izza Binti Zakaria
S2109209/1	Ainaa Nadrah Sohairi
S2164338/1	Sharifah Nor Akmar Syed Mohd
S2168085/1	Abdul Jabir Jaafar
S2170147/1	Abu Faiz Abu Bakar
S2170236/1	Nur Farahain Ismail
S2182197/1	Muhammad Nabil
S2193683/1	Nur Nadiah Bakar



# SUPPORT STAFFS

**Mazni Mohamed Ali**  
Administrative Assistant



**Awang Bhukhari Bin Matsat**  
Administrative Assistant



**Dzuzaini Mohd Ghazali**  
Research Officer



**Mohd Khairul Bin Roslan**  
Medical Laboratory Technologist



**Sharifah Nor Akmar Syed Mohd**  
Medical Laboratory Technologist



**Mohd Redzuan Ahmad Naziri**  
Medical Laboratory Technologist



**Mohd Sazalle Jamil**  
Pembantu Operasi



**Rohani Ali**  
Pembantu Operasi



# DIAGNOSTIC UNIT

## Medical Laboratory Technologist (PPUM staff)



Hasidah binti Omar



Wan Hafiz bin Wan Ismail



Farikha binti Sarip

**Parasitology Diagnostic Unit** is the diagnostic division of the Department of Parasitology, a component part of the “Unit Pengurusan Makmal”, University Malaya Medical Centre. It offers the following services:

1	Malaria Detection	10	Cysticercosis IgG
2	Microfilariae Detection	11	Strongyloidiasis IgG
3	Filariasis IgG	12	Acanthamoeba Culture
4	Schistosomiasis IgG	13	Identification of Dipteran Larvae/Ectoparasites/Helminths
5	Amoebiasis IgG	14	Stool FEME
6	Echinococcosis IgG	15	Urine/Vaginal Discharge for Parasites Detection
7	Leishmaniasis IgG	16	<i>Leishmania donovani</i> - Bone Marrow Smear
8	Toxoplasmosis IgG & IgM	17	PCR Toxoplasmosis
9	Toxocariasis IgG	18	PCR Malaria

Contact information of Parasitology Diagnostic Unit:

**Jabatan Mikrobiologi Perubatan**

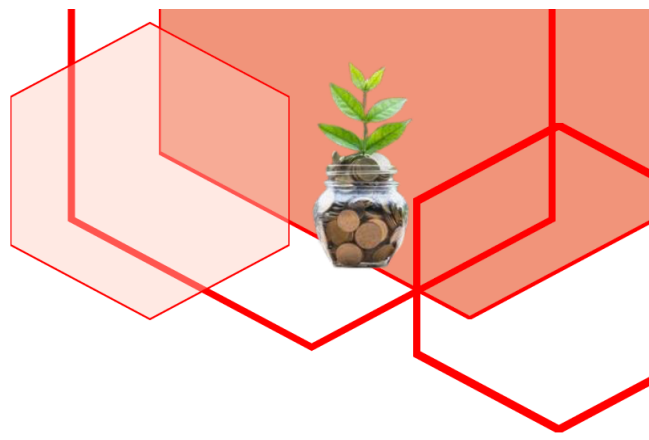
**Tingkat 5, Menara Timur,**

**Pusat Perubatan Universiti Malaya**

**MONDAY – FRIDAY, 8.00 AM – 5.00 PM**



# RESEARCH GRANTS



## Ongoing research grants in the department

### Prof. Dr. Lau Yee Ling

- Rapid Point-of-Care (PoC) tests for the detection of malaria, 2018 - 2023. (LRGS: LR002D-2018); role: PI
- *In vitro* and *ex vivo* anti-plasmodial activity of *Vernonia amygdalina* against *Plasmodium knowlesi*, 2021 - 2024. (FRGS: FP007-2021); role: PI

### Prof. Dr. Suresh Kumar

- Elucidating the interaction between *Blastocystis* sp. and microbial diversity to study its effect on healthy individuals and patients with different stages of colorectal cancer, 2019-2023 (TRGS: TR001A-2018A); role: PI
- Assessment of gut microbiota including *Blastocystis* sp. in the early detection of mental illness, 2019 - 2022 (FRGS: FP012-2019A); role: PI

### Prof. Datin Dr. Indra Vythilingam

- Geographical distribution and bionomics of the vectors of *Plasmodium knowlesi* malaria with reference to malaria elimination in Peninsular Malaysia, 2019-2023. (LRGS: LR002C-2018); role: PI

### Prof. Dr. Fong Mun Yik

- A multi-pronged approach in combating knowlesi malaria, 2019 - 2023. (LRGS: LR002-2018); role: PI
- Genetic diversity of *Plasmodium knowlesi* invasion-related proteins, 2019 - 2023. (LRGS: LR002A-2018); role: PI
- Characterizing the zoonotic potential of *Plasmodium cynomolgi*, a malaria parasite prevalent in macaques in Malaysia and Southeast Asia, 2020 - 2024 . (FRGS: FP012-2020); role: PI

### Prof. Dr. Yvonne Lim Ai Lian

- Interactions between helminth colonization and the gut microbia, 2018 - 2022. (US NIH R01: IF019-2018); role: PI
- Association of skin microbial dysbiosis and host genetics with fungal skin infections among underserved communities, 2021 - 2024. (FRGS: FP017-2021); role: PI

## RESEARCH GRANTS



- |                                       |   |
|---------------------------------------|---|
| <b>Assoc. Prof. Dr. Romano Ngui</b>   | • Study of emerging zoonotic infectious diseases among the orang asli as early disease detection system, 2020-2022. (Grant name abbreviation: GPF006A-2020); role: PI                   |
| <b>Dr. Noraishah Mydin Abdul-Aziz</b> | • Identification of candidate gene variants and its relevance in the understanding of spina bifida in Malaysia, 2019-2023. (FRGS: FP090-2019A); role: PI                                |
| <b>Dr. Amirah Amir</b>                | • Zoogeographical distribution, epidemiology, and multilocus genotyping of <i>Plasmodium knowlesi</i> among primates in Peninsular Malaysia, 2019 - 2023. (LRGS: LR002B-2018); role: PI |

## New grants secured in year 2022

- Socioecological dynamics of zoonotic and vector-borne diseases in changing landscapes implications for surveillance and control. 2022 - 2026. (Wellcome Trust Award; IF050-2022)

Principal investigators: Prof. Dr. Lau Yee Ling, Prof. Datin Dr. Indra Vythilingam

- Unravelling rodent malaria gametocytogenesis to unlock a zoonotic transmission model. 2023 - 2028. (Wellcome Discovery Award); role: PI

Principal investigator: Prof. Dr. Lau Yee Ling

- Investigation on the susceptibility of *Aedes aegypti* to insecticides and dengue viruses after the infection of *Wolbachia*, 2022 - 2025. (FRGS: FP026-2022); role: PI

Principal investigator: Dr. Lee Wenn Chyau



# PUBLICATIONS

Published works in year 2022 (updated 20 December 2022)

1. Mokhtar AS, Muslimin M, Mat-Saat AY, Ghazali AM, Ismail AK, **Abdul-Aziz NM**. Bite Envenomation by *Latrodectus Geometricus* (Araneae: Theridiidae) spiders in Malaysia. *Trop Biomed*. 2021;38:568-577.
2. Heo C., Abdul Rani R, **Ngui R**. A Case of Zoonotic *Ancylostoma ceylanicum* Infection in a Suburban Area of Selangor, Malaysia. *Acta Parasitol*. 2022;67:564-568.
3. Hassan NA, Noor Badi FA, Mohd-Shaharuddin N, **Wan Yusoff WS**, **Lim YAL**, Chua KH, Sidi Omar SFN, Chang LY, Majid HA, **Ngui R**. A conventional multiplex PCR for the detection of four common soil-transmitted nematodes in human feces: Development and Validation. *Trop Biomed*. 2022;39:135-143.
4. Low VL, Tan TK, Tohiran KA, **Lim YAL**, AbuBakar S, Nasir DM. A novel clade of bat-associated Bartonella detected in the bat fly *Leptocyclopodia ferrari* (Diptera: Nycteribiidae) parasitizing *Cynopterus brachyotis* (Chiroptera: Pteropodidae). *Vet Microbiol*. 2022; 264:109284.
5. Kumarasamy V, **Atroosh WM**. Anbazhagan D, Abdalla MMI, Azzani M. Association of *Blastocystis hominis* with colorectal cancer: A systematic review of in vitro and in vivo evidences. *World J Gastrointest Oncol*. 2022;14:734-745.
6. Jeyaprakasam NK, Low VL, Liew JWK, Pramasivan S, **Wan Yusoff WS**, Saeung, Atiporn, **Vythilingam I**. Blood meal analysis of *Anopheles* vectors of simian malaria based on laboratory and field studies. *Sci Rep*. 2022; 12: 354.
7. Lai MY, Bukhari FDM, Zulkefli NZ, Ismail I, Mustapa NI, Soh TST, Hassan AH, Peariasamy KM, Lee YL, Suppiah J, Thayan R, Isa MKM, Wahid NZA, **Lau YL**. Clinical testing on SARS-CoV-2 swab samples using reverse-transcription loop-mediated isothermal amplification (RT-LAMP). *BMC Infect Dis*. 2022;22:697.
8. Tan JH, **Lau YL**. Cloning, expression and purification of *Plasmodium knowlesi* circumsporozoite protein and immunoblot analysis with *P. knowlesi* strain A1H1 protein extract. *Trop Biomed*. 2022;39:209-214.
9. Lai MY, Bukhari FDM, Zulkefli NZ, Ismail I, Mustapa NI, Soh TST, Hassan AH, Peariasamy KM, Lee YL, Suppiah J, Thayan R, **Lau YL**. Colorimetric detection of SARS-CoV-2 by uracil-DNA glycosylase (UDG) reverse transcription loop-mediated isothermal amplification (RT-LAMP). *Int J Infect Dis*. 2022; 120:132-134.
10. **Lee WC**, Shahari S, Ngeue SYT, **Lau YL**, Rénia L. Cytoadherence properties of *Plasmodium knowlesi*-infected erythrocytes. *Front Microbiol*. 2022; 12:804417.
11. Low VL, Azhar SS, Tan TK, Bathumanaban P, AbuBakar S, Chandrawathani P, Nizamuddin HNQ, Hanim MSF, Akma NH, Norlizan MN, **Lim YAL**. Correction to: First report of *Rickettsia asembonensis* in small ruminants. *Vet Res Commun*. 2022; 46:985-986.
12. Selvarajoo S, Liew JWK, Chua TH, Tan W, Zaki RA, **Ngui R**, **Sulaiman WYW**, Ong PS, **Vythilingam I**. Dengue surveillance using gravid oviposition sticky (GOS) trap and dengue non-structural 1 (NS1) antigen test in Malaysia: randomized controlled trial. *Sci Rep*. 2022;12:571.
13. Uni S, Udin ASM, Tan PE, Rodrigues J, Martin C, Junker K, Agatsuma T, Low VL, **Lim YAL**, Saijuntha W, Omar H, Zainuri NA, Fukuda M, Kimura D, Matsubayashi M, Uga S, Takaoka H, Azirun MS, Ramli R. Description and molecular characterisation of *Pelecitus copsychi* sp. (Nematoda: Onchocercidae) from the white-rumped shama *Copsychus malabaricus* (Scopoli) (Passeriformes: Muscicapidae) of Pahang, Malaysia. *Curr Res Parasitol Vector-Borne Dis*. 2022;2:100078.
14. Lee PYZ, Lai MY, Izzati Binti Rozlan S, Abdul Hamid MH, Jelip J, Nani Mudin R, **Lau YL**. End-point detection of loop-mediated isothermal amplification (LAMP) on malaria by direct observation with colorimetric dyes. *Exp Parasitol*. 2022; 239:108310.
15. Mohd-Zin SW, Tan ACW, **Atroosh WM**, Thong MK, Azizi AB, Greene NDE, **Abdul-Aziz NM**. Eph and Ephrin Variants in Malaysian Neural Tube Defect Families. *Genes (Basel)*. 2022; 13:952.
16. Ooi CH, Phang WK, Liew JWK, **Atroosh WM**, **Lau YL**. Epidemiology of indigenous Plasmodium knowlesi infection in Sarawak, 2011–2019. *Trop Med Int Health*. 2022; 27:705-718.

17. **LeeWC**, Russell B, Rénia L. Evolving perspectives on rosetting in malaria. *Trends Parasitol.* 2022;38:882-889.
18. Mariappan V, Ngoi ST, **Lim YAL**, **Ngui R**, Chua KH, Teh CSJ. Genotypic and phenotypic characterization of *Escherichia coli* isolated from indigenous individuals in Malaysia. *Iran J Basic Med Sci.* 2022; 25:468-473.
19. Latif ENM, Shahari S, **Amir A**, **Cheong FW**, **Lau YL**, Abdullah ML, **Fong MY**. Genetic diversity of Duffy binding protein 2 region II of *Plasmodium cynomolgi* from wild macaques in Peninsular Malaysia. *Trop Biomed.* 2022; 39:66-72.
20. Phang WK, Bukhari FDM, Zen LPY, Jaimin JJ, Dony JJF, **Lau YL**. Genetic polymorphism of circumsporozoite protein (CSP) in *Plasmodium malariae* isolates from Malaysia. *Parasitol Int.* 2022; 87:102519.
21. Tan PY, Mohd Johari SN, Teng KT, Loganathan R, Lee SC, **Ngui R**, Selvaduray KR, **Lim YAL**. High prevalence of malnutrition and vitamin A deficiency among schoolchildren of rural areas in Malaysia using a multi-school assessment approach. *Br J Nutr.* 2022;1-14.
22. Tan TK, Yap NJ, Leong KF, Teh CS, Tay ST, **Lim YAL**. Imported case of *Leishmania tropica* cutaneous leishmaniasis in a 10-year-old child in Malaysia. *Trop Biomed.* 2022;39:86-88.
23. **Abdul-Aziz, N. M.** "I have spina bifida and what this means to Malaysia". *Neurosci Res Notes.* 2022; 5:149.
24. Siow WYV, Low VL, Tan TK, Wong ML, Leong CS, Ahmad NW, **Lim YAL**. Identification of potential vectors of *Dirofilaria immitis* and *Brugia pahangi* (Spirurida: Filariidae): First observation of infective third-stage larva of *B. pahangi* in *Culex quinquefasciatus* (Diptera: Culicidae) *Pathog Glob Health.* 2022; 116:356-364.
25. Nivrenjeet, S., Mohd-Zin, S. W., Nisheljeet, S., Azizi, A. B., Palaniandy, K., Firdaus-Railh, M., Muhamad Ariffin, M. H., Greene, N. D. E. and **Abdul-Aziz, N. M.** Inflammation in Embryology: A review of neuroinflammation in spina bifida. *Neurosci Res Notes.* 2022; 5:132.
26. Siow WYV, Tan TK, Low VL, Teoh YB, Prakash BK, Sivanandam S, Sharma RSK, **Lim YA**. Integration of microscopic, serological and molecular techniques for detection of filarial parasites in dogs in Malaysia. *Acta Parasitol.* 2022;67:468-475.
27. Cuenca PR, Key S, Lindblade KA, **Vythilingam I**, Drakeley C, Fornace K. Is there evidence of sustained human-mosquito-human transmission of the zoonotic malaria *Plasmodium knowlesi*? *Malar J.* 2022;**21**:89.
28. Pramasivan S, Liew JWK, Jeyaprakasam NK, Low VL, **Ngui R**, **Vythilingam I**. Multiplex PCR Assay for the Identification of Four Species of the *Anopheles Leucosphyrrus* Sub-Group in Malaysia. *Insects.* 2022; 13:195.
29. Azratul-Hizayu T, Chen CD, Lau KW, Azrizal-Wahid N, Tan TK, **Lim YAL**, Sofian-Azirun M, Low VL. Phenotypic profile of *Aedes albopictus* (Skuse) exposed to pyrethroid-based mat vaporizers and underlying detoxification mechanisms: A statewide report in Selangor, Malaysia. *Parasitol Int.* 2022; 86:102483.
30. **Atroosh WM**, **Lau YL**, Snounou G, Azzani M, Al-Mekhlafi HM. *Plasmodium falciparum* histidine rich protein 2 (pfhrp2): an additional genetic marker suitable for anti-malarial drug efficacy trials. *Malar J.* 2022;21:2.
31. **Lee WC**, **Cheong FW**, **Amir A**, **Lai MY**, Tan JH, Phang WK, Shahari S, **Lau YL**. *Plasmodium knowlesi*: the game changer for malaria eradication. *Malar J.* 2022; 21:140.
32. Yusuf NM, Zulkefli J, Jiram AI, **Vythilingam I**, Hisam S, Devi R, Salehhuiddin A, Ali NM, Isa M, Alias N, Ogu Salim N, Aziz AA, Sulaiman LH. *Plasmodium spp.* in macaques, *Macaca fascicularis*, in Malaysia, and their potential role in zoonotic malaria transmission. *Parasite.* 2022; 29:32.
33. Al-Mekhlafi HM, Madkhali AM, Abdulhaq AA, **Atroosh WM**, Ghzwani AH, Zain KA, Ghailan KY, Hamali HA, Mobarki AA, Alharazi TH, Eisa ZM, **Lau YL**. Polymorphism analysis of pfndr1 gene in *Plasmodium falciparum* isolates 11 years' post-adoption of artemisinin-based combination therapy in Saudi Arabia. *Sci Rep.* 2022; 12:517.



34. Lai MY, Suppiah J, Thayan R, Ismail I, Mustapa NI, Soh TST, Hassan AH, Peariasamy KM, Lee YL, **Lau YL**. RNA purification-free detection of SARS-CoV-2 using reverse transcription loop-mediated isothermal amplification (RT-LAMP). *Trop Med Health*. 2022; 50:2.
35. **Lee WC**, Russell B, **Lau YL**, Nosten F, Rénia L. Rosetting Responses of *Plasmodium*-infected Erythrocytes to Antimalarials. *Am J Trop Med Hyg*. 2022; 106:1670-4.
36. **Lau YL**, Zulkefli NZ, Mohd Bukhari FD, Lai MY, Suppiah J, Thayan R. Short report simple RNA extraction method for reverse transcription loop-mediated amplification detection of SARS-COV-2. *Southeast Asian J Trop Med Public Health*. 2022;53.
37. Lai MY, Suppiah J, Thayan R, Ismail I, Mustapa NI, Soh TST, Hassan AH, Peariasamy KM, Lee YL, **Lau YL**. Simple RNA extraction method for reverse transcription loop-mediated amplification detection of SARS-COV-2. *Trop Med Health*. 2022;50.
38. Roslan MA, **Ngui R**, **Vythilingam I**, Chan KT, Ong PS, Low CK, Muhammed NH, **Sulaiman WYW**. Surveillance of *Aedes Aegypti* and *Aedes Albopictus* (Diptera: Culicidae) in high-rise apartment buildings in Selangor, Malaysia. *Int J Trop Insect Sci*. 2022;42:1959-1969.
39. Nisheljeet S, Azizi AB, Palaniandy K, Ganesan D, Ong TA, Alias A, Rajamanickam R, **Atroosh WM**, Mohd-Zin SW, Lee-Shamsuddin A, Nivrenjeet S, Lo W, **Abdul-Aziz NM**. Survey on untethering of the spinal cord and urological manifestations among spina bifida patients in Malaysia. *Children (Basel)*. 2022; 9:1090.
40. Gan CH, Tan KW, Ooi ML, Liew JWK, Ng YL, **Lau YL**. Synthesis, anticancer and antimalarial activities of organosulfur and organoselenium derivatives of cyclopentadienyliron dicarbonyl as photoCORMs. *Inorganica Chimica Acta*. 2022;536:120872.
41. Lai MY, **Lau YL**. Two-stage detection of *Plasmodium* spp. by combination of recombinase polymerase amplification and loop-mediated isothermal amplification assay. *Am J Trop Med Hyg*. 2022;107:815-819.
42. Er YX, Lee SC, Than LT, Muslim A, Leong KF, Kwan Z, Mohd Sayed I, **Lim YAL**. *Tinea imbricata* among the indigenous communities: current global epidemiology and research gaps associated with host genetics and skin microbiota. *J Fungi (Basel)*. 2022;8:202.
43. Van de Straat B, Sebayang B, Grigg MJ, Staunton K, Garjito TA, **Vythilingam I**, Russell TL, Burkot TR. Zoonotic malaria transmission and land use change in Southeast Asia: what is known about the vectors. *Malar J*. 2022;21:109.
44. Azlan UK, **Cheong FW**, **Lau YL**, **Fong MY**. *Plasmodium knowlesi* Duffy binding protein alpha region II (PkDBP $\alpha$ II) in clinical isolates from Peninsular Malaysia and Malaysian Borneo exhibit different immune responses in animal models. *Parasitol Res*. 2022;121:3443-3454.
45. Abdalla MMI, Azzani M, **Atroosh W**, Anbazhagan D, Kumarasamy V. The association between mental health and obesity in postmenopausal women: A systematic review. *Endocr Regul*. 2022;56:295-310.
46. Roslan MA, **Ngui R**, **Vythilingam I**, **Wan Sulaiman WY**. Community surveillance of *Aedes albopictus* associated with Wolbachia detection in low-rise residential areas in Selangor, Malaysia. *J Vector Ecol*. 2022; 47:142-152.
47. Roslan MA, **Ngui R**, Marzuki MF, **Vythilingam I**, Shafie A, Musa S, **Wan Sulaiman WY**. Spatial dispersal of *Aedes albopictus* mosquitoes captured by the modified sticky ovitrap in Selangor, Malaysia. *Geospat Health*. 2022; 17.
48. Brown R, Salgado-Lynn M, Jumail A, Jalius C, Chua TH, **Vythilingam I**, Ferguson HM. Exposure of primate reservoir hosts to mosquito vectors in Malaysian Borneo. *EcoHealth*. 2022; 13:1-3.

## Publications in journals with 2-years IF > 4.000

Name of Journal	2-year IF	5-year IF	IF (WoS)	SJR rank	Number of papers published	Number of papers with department staff/member as first author	Number of papers with department staff as corresponding author/ (PI)
<i>International Journal of Infectious Diseases</i>	12.074	9.022	3.623	Q1	1	1	1 (Lau YL)
<i>Trends in Parasitology</i>	10.528	10.554	9.014	Q1	1	1	1 (Lee WC)
<i>Frontiers in Microbiology</i>	6.064	5.489	5.640	Q1	1	1	1 (Lee WC)
<i>Journal of Fungi</i>	5.724	6.413	5.816	Q1	1	1	1 (Lim YAL)
<i>Scientific Reports</i>	4.996	5.516	4.379	Q1	3	2	2 (Vythilingam I)
<i>Genes (Basel)</i>	4.141	3.286	4.096	Q2	1	1	1 (Abdul-Aziz NM)



# ACTIVITIES & EVENTS

## PROPOSAL SEMINARS

No.	NAME/MATRIC NO.	TITLE
1	Eira Nurfarisha Bt Mohd Latif (17116098)	Genetic diversity and erythrocytes binding phenotypes of the <i>Plasmodium cynomolgi</i> duffy binding protein 2

## CONFIRMATION DEFENCE

No.	NAME/MATRIC NO.	TITLE
1	Tan Pei Yee (17199122/1)	Effects of $\beta$ -Carotene rich-red palm oil-fortified biscuit on nutritional status, ocular status, intestinal parasites and gut microbiota among vitamin A deficient (VAD) primary school children in rural areas of Malaysia
2	Er Yi Xian (17169664/2)	Epidemiology, skin microbiota and host genetics of common skin diseases (scabies and tinea) among Orang Asli

# ACTIVITIES & EVENTS

## CANDIDATURE DEFENCE

No.	NAME/MATRIC NO.	TITLE
1	Syahirah Nadiah Binti Mohd Johari (17157589/2)	A population based cross-sectional study of soil-transmitted helminth infections (STH), nutritional status and associated risk factors among rural school children in Malaysia
2	Nantha Kumar a/l Jeyaprakasam (17201545)	Entomological studies of simian malaria vectors and molecular characterisation of their parasites in Peninsular Malaysia
3	Manal Ali Saleh AlAshwal (17006117/1)	Molecular epidemiology of cutaneous leishmaniasis among suspected Utmah population in Yemen
4	Naqib Rafieqin Noordin (17198072/1)	Genetic and phenotypic characterisation of <i>Plasmodium knowlesi</i> Merozoite Surface Protein-1 corresponding to Peninsular Malaysia and Malaysian Borneo
5	Tan Jia Hui (17068070)	Development and optimization of immunochromatographic test (ICT) for rapid diagnosis of human malaria and its field evaluation
6	Lee Phone Youth @ Zen Lee (17202081)	Development of point of care loop mediated isothermal amplification-lateral flow assay for detection of <i>Plasmodium</i> species
7	Sandhya Pramasivan (17202544)	Development of a molecular identification marker, genetic variation and spatial distribution of simian malaria vectors in Peninsular Malaysia
8	Siti Waheeda Mohd. Zin (17020182/3)	Epidemiology and study of candidate Neural Tube Defects gene variants in Malaysia
9	Phang Wei Kit (17219440/1)	Genetic diversity of <i>Plasmodium knowlesi</i> and modelling of its transmission in Peninsular Malaysia
10	Wan Siti Maryam binti Wan Nazri (17138657/3)	Evaluation of antigen-specific polyclonal antibodies using sandwich enzyme-linked immunosorbent assay (ELISA) method for <i>P. knowlesi</i> detection
11	Umni Wahidah binti Azlan (17218684/1)	Genetic diversity and immunogenicity profiling of <i>Plasmodium knowlesi</i> secreted protein with Altered Thrombospondin Repeated domain (PkSPATR) and Rhoptry Associated Protein 1 (PkRAP1)
12	Ng Yee Ling (17217909/2)	Genetic diversity and functional characterization of <i>Plasmodium knowlesi</i> apical membrane antigen-1 (PkAMA-1) and <i>Plasmodium knowlesi</i> thrombospondin-related apical merozoite protein (PkTRAMP) from Peninsular Malaysia and Malaysian Borneo
13	Nisheljeet Singh A/L Joginder Singh (S2029043/1)	Investigating scientific understanding and advocacy amongst Malaysian spina bifida families encompassing in-vivo diet study and antibiotic stewardship.



# ACTIVITIES & EVENTS

## THESIS SEMINAR

No.	NAME/MATRIC NO.	TITLE
1	Nantha Kumar A/L Jeyaprakasam (17201545)	Entomological studies of simian malaria vectors and molecular characterisation of their parasites in Peninsular Malaysia
2	Manal Ali Saleh (17006117/1)	Cutaneous leishmaniasis in Yemen: molecular epidemiology and assessment of knowledge, attitude and practices among rural population in Utmah district
3	Ummi Wahidah binti Azlan (17218684/1)	Genetic diversity study and immunogenicity profiling of <i>Plasmodium knowlesi</i> secreted protein altered thrombospondin repeat (PkSPATR) and rhoptry-associated protein 1 (PkRAP1) in Malaysia
4	Lee Phone Youth @ Zen Lee (17202081/2)	Development of Point-of-Care Loop mediated Isothermal Amplification Lateral flow (LAMP-LF) assay for detection of <i>Plasmodium</i> species
5	Ng Yee Ling (17217909/2)	Genetic diversity and functional characterization of <i>Plasmodium knowlesi</i> apical membrane antigen-1 (PkAMA-1) and <i>Plasmodium knowlesi</i> thrombospondin-related apical merozoite protein (PkTRAMP) from Malaysia

## CONVERSION SEMINAR

No.	NAME/MATRIC NO.	TITLE
1	Eira Nurfarisha Mohd Latif (17116098/2)	Genetic diversity and erythrocyte binding phenotypes of the <i>Plasmodium cynomolgi</i> Duffy Binding Protein 2 and Reticulocyte Binding Protein 1a

# ACTIVITIES & EVENTS

Date	Activity description
19-Jan-22	Journal club: CRISPR/CAS9-engineered inducible gametocyte producer lines as a valuable tool for <i>Plasmodium falciparum</i> malaria transmission research; by <b>Dr. Cheong Fei Wen</b> (Dept. Parasitology, FOM, UM), chaired by <b>Dr. Noraishah Mydin Abdul Aziz</b> (Dept. Parasitology, FOM, UM).
15 Feb – 15 Jun 2022	Dewan CP Ramachandran Charity Virtual Run, chaired by <b>Dr. Lee Wenn Chyau</b> (Dept. Parasitology, FOM, UM).
16-Feb-22	Research collaboration meeting with Assist. Prof. Dr. Caroline L. Ng from Nebraska University Medical Centre, USA, chaired by <b>Prof. Dr. Lau Yee Ling</b> (Dept. Parasitology, FOM, UM).
23-Feb-22	Journal club: Rosetting phenomenon in malaria: Who cares?; by <b>Dr. Lee Wenn Chyau</b> (Dept. Parasitology, FOM, UM), chaired by <b>Dr. Noraishah Mydin Abdul Aziz</b> (Dept. Parasitology, FOM, UM).
16-Mar-22	Journal club: The role of single cell eukaryotes in the host gut microbiome: pathogen, passenger or probiotic?; by <b>Assoc. Prof. Dr. Kevin Tan Shyong-Wei</b> from National University of Singapore (NUS), chaired by <b>Dr. Lee Wenn Chyau</b> (Dept. Parasitology, FOM, UM).
17-Mar-22	Safety tool box workshop for researchers in department, chaired by <b>Assoc. Prof. Dr. Zurainee Mohd. Nor</b> (Dept. Parasitology, FOM, UM), coordinated by <b>Cik Dzuzaini bt Mohd Ghazali</b> (Dept. Parasitology, FOM, UM).
11-Apr-22	Postgraduate student exchange & research collaboration discussion with NUS, by <b>Assoc. Prof. Dr. Kevin Tan Shyong-Wei</b> (Vice Dean, Yong Loo Lin School of Medicine, NUS), <b>Prof. Shahrul Kamaruzzaman</b> (Deputy Dean, FOM, UM), <b>Prof. Dr. Lau Yee Ling</b> (HOD Parasitology, FOM, UM), <b>Dr. Lee Wenn Chyau</b> (Dept. Parasitology, FOM, UM).
28-Apr-22	Journal club: Mosquito utopias and dystopias; by <b>Prof. Datin Dr. Indra Vythilingam</b> (Dept. Parasitology, FOM, UM), chaired by <b>Dr. Noraishah Mydin Abdul Aziz</b> (Dept. Parasitology, FOM, UM).
19-Jun-22	Research seminar on “ <i>Plasmodium knowlesi</i> : the game changer for malaria eradication” for the Faculty of Graduate Studies, Mahidol University, Thailand; by <b>Dr. Lee Wenn Chyau</b> (Dept. Parasitology, FOM, UM), chaired by <b>Dr. Varakorn Kosaisavee</b> (Mahidol University).
22-Jun-22	Breakfast talk: Central nervous system infections: role of neurosurgeon; presented by <b>Dr. Ng Wei Ping</b> (Hosp. Kuala Lumpur), chaired by <b>Dr. Noraishah Mydin Abdul Aziz</b> (Dept. Parasitology, FOM, UM).
1-Jul-22	Appointed as adjunct investigator by A*STAR ID Labs, Singapore: <b>Dr. Lee Wenn Chyau</b> (Dept. Parasitology, FOM, UM).
20-Jul-22	Journal club: Spider as model of neurobiology & why is it important to the field of parasitology; by <b>Dr. Noraishah Mydin Abdul Aziz</b> (Dept. Parasitology, FOM, UM).
17-18 Aug 2022	The 1 <sup>st</sup> International Conference of Medical Parasitology and Entomology (ICMPE) 2022, chaired by <b>Prof. Datin Dr. Indra Vythilingam</b> (Dept. Parasitology, FOM, UM).
24-Aug-22	Journal club: <i>Pediculus humanus capitis</i> : its genetic diversity and potential associated pathogens among disadvantaged communities; by Dr. Aida Syahinaz Mokhtar (UiTM), chaired by <b>Dr. Noraishah Mydin Abdul Aziz</b> (Dept. Parasitology, FOM, UM).
25-Aug-22	Scientist Seminar on “Rosetting phenomenon in malaria”, for School of Pharmacy Scientist Seminar (SoPSS) of University of Nottingham Malaysia; by <b>Dr. Lee Wenn Chyau</b> (Dept. Parasitology, FOM, UM), chaired by <b>Assoc. Prof. Dr. Pung Yuh Fen</b> (Uni. Nottingham Malaysia).



# ACTIVITIES & EVENTS

Date	Activity description
29-Aug-22	Research collaboration meeting with Assist. Prof. Dr. Tomonori Hoshi from Nagasaki University, Japan, chaired by <b>Prof. Dr. Lau Yee Ling</b> and <b>Prof. Datin Dr. Indra Vythilingam</b> (Dept. Parasitology, FOM, UM).
1-Sep-22	Appointed as co-chair, Association of Pacific Rim Universities (APRU) Asia Pacific Woman in Leadership (APWiL), 2022 – 2025: <b>Prof. Dr. Yvonne Lim Ai Lian</b> (Dept. Parasitology, FOM, UM).
14-15 Sep 2022	Malaria Workshop for JSS Medical Laboratory, by <b>Prof. Dr. Lau Yee Ling</b> , <b>Prof. Dr. Fong Mun Yik</b> , <b>Assoc. Prof. Dr. Romano Ngui</b> , <b>Dr. Amirah Amir</b> , <b>Dr. Lai Meng Yee</b> (Dept. Parasitology, FOM UM).
17-Sep-22	The 5 <sup>th</sup> International Parasitology Quiz & Oratorical Competition, chaired by <b>Dr. Wahib Atroosh</b> (Dept. Parasitology, FOM, UM).
21-Sep-22	Journal club: A journey of discoveries through the Fullbright Scholar program at NIH, USA, by <b>Prof. Dr. Yvonne Lim Ai Lian</b> (Dept. Parasitology, FOM, UM), chaired by <b>Dr. Noraishah Mydin Abdul Aziz</b> (Dept. Parasitology, FOM, UM).
23 Sep–21 Oct 2022	Appointed as panel member for the evaluation of the Infectious Diseases Horizontal Coordinating Office (IDHTCO) Seed Fund research proposals, Singapore: <b>Dr. Lee Wenn Chyau</b> (Dept. Parasitology, FOM, UM).
14-Oct-22	Scientific Booth (parasitology), KIDScience Labs, Faculty of Medicine Research Carnival 2022: <b>Pn. Sharifah Nor Akmar binti Syed Mohd</b> , <b>En. Mohd Redzuan Ahmad Naziri</b> (Dept. Parasitology, FOM, UM).
19-Oct-22	Journal club: Immunogold in TEM: principles and applications; by <b>Dr. Mogana Das A/L Murtey</b> (School of Dental Sciences, Health Campus, Universiti Sains Malaysia), chaired by <b>Dr. Noraishah Mydin Abdul Aziz</b> (Dept. Parasitology, FOM, UM).
14 Oct 2022 – 14 Jan 2023	Dewan CP Ramachandran Eco-Charity Virtual Run, chaired by <b>Dr. Lee Wenn Chyau</b> (Dept. Parasitology, FOM, UM).
24 Oct 2022- 28 Oct 2022	20th International Congress for Tropical Medicine and Malaria, Bangkok, Thailand: <b>Prof Datin Dr. Indra Vythilingam</b> , <b>Prof Lau Yee Ling</b> & <b>Prof Fong Mun Yik</b>
1-Nov-22	Appointed as associate vice chancellor (global engagement), Universiti Malaya: <b>Prof. Dr. Yvonne Lim Ai Lian</b> (Dept. Parasitology, FOM, UM).
7 Nov 2022 - 11 Nov 2022	7th World One Health Congress, Singapore: <b>Prof Datin Dr. Indra Vythilingam</b> , <b>Prof Lau Yee Ling</b> & <b>Dr. Lee Wenn Chyau</b> (Dept. Parasitology, FOM, UM).
16 Nov 2022	Journal club: Zoonotic malaria; by <b>Prof. Dr. Lau Yee Ling</b> & <b>Dr. Amirah Amir</b> (Dept. Parasitology, FOM, UM).
17 Nov 2022 – 20 Nov 2022	International Congress on Infectious Diseases, Kuala Lumpur: <b>Prof Datin Dr. Indra Vythilingam</b> , <b>Prof. Dr. Lau Yee Ling</b> & <b>Prof. Dr. Yvonne Lim Ai Lian</b> (Dept. Parasitology, FOM, UM).
5 - 6 Dec 2022	Post graduate convocation ceremony: <b>Dr. Sivaneswari Selvarajoo</b> , <b>Dr. Wan Najdah Wan Mohd Ali</b> , <b>Ms Umami Kalthum Azlan</b> , <b>Ms. Rafidah Ali</b> (Dept. Parasitology, FOM, UM).
6 Dec 2022	Asia Pacific Malaria Elimination Network (APMEN) tech talk: <b>Prof. Datin Dr. Indra Vythilingam</b> (Dept. Parasitology, FOM, UM).
14 Dec 2022	FOM Research Office Strategic Planning Event: <b>Assoc. Prof. Romano Ngui</b> & <b>Dr. Lee Wenn Chyau</b> (Dept. Parasitology, FOM, UM).

# HIGHLIGHTS



**DEWAN CP RAMACHANDRAN VIRTUAL CHARITY RUN**

A DONATION DRIVE TO BUILD A LECTURE HALL FOR MASTER OF MEDICAL PARASITOLOGY & ENTOMOLOGY

REGISTRATION PERIOD: 21.03.22 – 01.07.22  
RUNNING PERIOD: 01.04.22 – 01.07.22

**Let's Run For Charity!**

EVENT VENUE: VIRTUAL RUN/ANYWHERE  
ACCUMULATE RUNS USING ANY APP (e.g. Strava, RunKeeper, etc.)  
\* Results should be uploaded to Ticket2U by 01.07.2022

CATEGORIES: 42 / 21 / 10 / 5 KM

REGISTRATION FEE: RM 65.00

\* Tax exemption receipt will be provided  
\* 100% of fund collected will go into the lecture hall repair and renovation project  
\* We welcome donation in support of our charity event through the following link:  
<https://epay.um.edu.my/sistem/admin/login>

Organized by: **UNIVERSITI MALAYA** Department of Parasitology Faculty of Medicine Universiti Malaysia

For More Enquiries:  
Email: [dcpr.charityrun@gmail.com](mailto:dcpr.charityrun@gmail.com)  
Website: <https://medicine.um.edu.my/parasitology-department>



**INTERNATIONAL CONFERENCE OF MEDICAL PARASITOLOGY & ENTOMOLOGY 2022 (ICMPE 2022)**

Elimination of parasitic and vector-borne diseases: is it possible?

**17 & 18 August 2022**  
Virtual conference

Abstract submission deadline: 1 July 2022

Vector-borne and parasitic diseases are significant healthcare burden to many countries. The elimination of these infections has been the ultimate goal of every country. In fact, a number of parasitic infections are deemed close to complete eradication (i.e. schistosomiasis, malaria and lymphatic filariasis). Nevertheless, obstacles have arisen from time to time regarding the possibility of completely eradicating any of these infections. In addition, many parasitic infections are neglected diseases, resulting in inadequate understanding of these pathogens. Hence the need to control these pathogens, let alone a complete eradication. A thorough understanding of an infection is a prerequisite to the successful elimination of the infection. This conference aims at providing a platform for researchers from different parts of the world to share their knowledge on climate change and the trend of disease transmission, latest techniques in fundamental and translational research, economic issues and policies related to the control and prevention of parasitic and vector-borne diseases, globally healthy and health care health and big data/geographic information system (GIS) (artificial intelligence (AI)), especially, the interaction among researchers from different disciplines can facilitate generation of better ideas to control and prevent the diseases of interest.

Topics covered:

- Climate change and the trend of disease transmission
- Techniques in fundamental and translational research
- Economic issues and policies related to the control and prevention of parasitic and vector-borne diseases
- Artificial intelligence and big data
- GIS (artificial intelligence)
- Big data/geographic information system/artificial intelligence

Registration Fee:  
General RM80 (USD20)  
Student RM40 (USD10)

Registration & More Information  
<https://icmpe2022um.asiaite.com/icmpe2022>  
Email: [icmpe2022@gmail.com](mailto:icmpe2022@gmail.com)

Organized by the Department of Parasitology Faculty of Medicine, Universiti Malaysia



**MALARIA WORKSHOP**

Department of Parasitology  
Faculty of Medicine  
Universiti Malaysia

14-15 September  
2022, 9-5PM

REGISTRATION  
[medicine.um.edu.my/parasitology-department](https://medicine.um.edu.my/parasitology-department)



**5TH INTERSVARSITY PARASITOLOGY QUIZ & ORATORICAL COMPETITION**

FOR MBBS & BIOMED STUDENTS

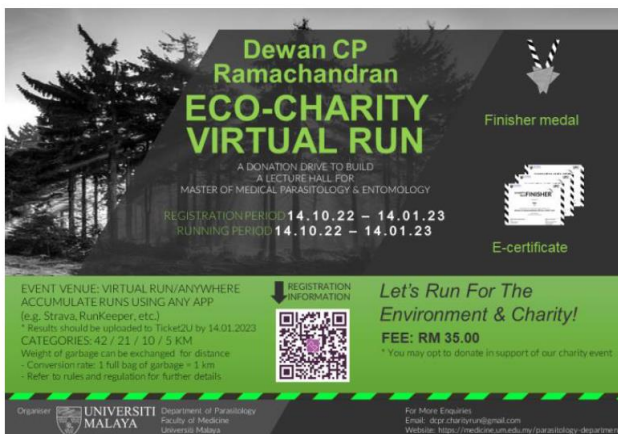
SATURDAY  
**17 TH**  
SEPTEMBER 2022  
8:00 - 12:00

REGISTER BY 30 JULY 2022

VIA ZOOM

Organized by:  
Department of Parasitology  
Faculty of Medicine  
Universiti Malaysia  
Malaysia  
[medicine.um.edu.my/parasitology-department](https://medicine.um.edu.my/parasitology-department)

For more information:  
[wahib@um.edu.my](mailto:wahib@um.edu.my) : +603 7967 4745



**DEWAN CP RAMACHANDRAN ECO-CHARITY VIRTUAL RUN**

A DONATION DRIVE TO BUILD A LECTURE HALL FOR MASTER OF MEDICAL PARASITOLOGY & ENTOMOLOGY

REGISTRATION PERIOD: 14.10.22 – 14.01.23  
RUNNING PERIOD: 14.10.22 – 14.01.23

**Let's Run For The Environment & Charity!**

EVENT VENUE: VIRTUAL RUN/ANYWHERE  
ACCUMULATE RUNS USING ANY APP (e.g. Strava, RunKeeper, etc.)  
\* Results should be uploaded to Ticket2U by 14.01.2023

CATEGORIES: 42 / 21 / 10 / 5 KM  
Weight of garbage can be exchanged for distance  
Conversion rate: 1 full bag of garbage = 1 km  
Refer to rules and regulation for further details.

REGISTRATION FEE: RM 35.00  
\* You may opt to donate in support of our charity event

Organized by: **UNIVERSITI MALAYA** Department of Parasitology Faculty of Medicine Universiti Malaysia

For More Enquiries:  
Email: [dcpr.charityrun@gmail.com](mailto:dcpr.charityrun@gmail.com)  
Website: <https://medicine.um.edu.my/parasitology-department>



# JOURNAL CLUBS

DEPARTMENT OF PARASITOLOGY,  
UNIVERSITY OF MALAYA

**JOURNAL CLUB**

**CRISPR/CAS9-ENGINEERED INDUCIBLE GAMETOCYTE PRODUCER LINES AS A VALUABLE TOOL FOR *PLASMODIUM FALCIPARUM* MALARIA TRANSMISSION RESEARCH**

Discovering, learning, and reaching for the beyond



**JANUARY 19, 2022**  
10:00 AM - 11:00 AM  
Dr. Cheong Fui Wen, PhD  
Department of Parasitology  
Faculty of Medicine  
University of Malaya

GOOGLE MEET LINK (CLICK HERE)

JAN


DEPARTMENT OF PARASITOLOGY,  
UNIVERSITY OF MALAYA

**JOURNAL CLUB**

**ROSETTING PHENOMENON IN MALARIA**

**WHO CARES?**

Discovering, learning, and reaching for the beyond



**FEBRUARY 23, 2022**  
10:00 AM - 11:00 AM  
Dr. Lee Wenn Chyau, PhD  
Department of Parasitology  
Faculty of Medicine  
University of Malaya

GOOGLE MEET LINK (CLICK HERE)

FEB

**THE ROLE OF SINGLE CELL EUKARYOTES IN THE HOST GUT MICROBIOME: PATHOGEN, PASSENGER OR PROBIOTIC?**



**ASSOCIATE PROFESSOR KEVIN TAN SHYONG-WEI**  
Head, Department of Microbiology and Immunology,  
National University of Singapore,  
Yong Loo School of Medicine

PLATFORM:  
MICROSOFT TEAMS  
LINK (CLICK HERE)

**16 MARCH 2022**  
11.00 AM


MAR

DEPARTMENT OF PARASITOLOGY,  
UNIVERSITY OF MALAYA

**JOURNAL CLUB**

**MOSQUITO UTOPIAS AND DYSTOPIAS**

Discovering, learning, and reaching for the beyond



**APRIL 28, 2022**  
10:00 AM - 11:00 AM  
DATIN PROF. DR. INDR A/P  
VYTHILINGAM  
Department of Parasitology  
Faculty of Medicine  
University of Malaya

MICROSOFT TEAMS LINK (CLICK HERE)

APR

UNIVERSITI MALAYA  
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**Breakfast@UMHealth**  
LIVE WEBINAR SERIES  
EPISODE 20

MMA CIPD points approved for this session.

Wednesday, 22<sup>nd</sup> June 2022  
08.00-09.00 AM | Zoom App

1. Platform: ZOOM (please download app if using mobile device)
2. Please click this link to join the webinar: <http://bit.ly/Breakfast-at-UMHealth-22-EP20>
3. The link for e-Certificate will be shared during the session.

**Central Nervous System Infections: Role of Neurosurgeon**

CNS infections and their sequelae constitute a disastrous morbidity and mortality. Immediate recognition of symptoms facilitates expeditious evaluation, prompt diagnosis and timely management. This talk will focus on the commonest CNS infections within the field of neurosurgery and treatment modalities.

**Speaker:**  
Dr. Ng Wei Ping  
Neurosurgeon  
Department of Neurosurgery  
Hospital Kuala Lumpur


**Moderator:**  
Dr. Noraishah Mydin Abdul Aziz  
Senior Lecturer  
Department of Parasitology  
Faculty of Medicine, Universiti Malaya



JUN

**Syarahan Jabatan**

**SPIDER AS MODELS OF NEUROBIOLOGY & WHY IT IS IMPORTANT TO THE FIELD OF PARASITOLOGY**



**DR NORAISHAH MYDIN ABDUL AZIZ**  
Department of Parasitology,  
Faculty of Medicine,  
Universiti Malaya

PLATFORM:  
MICROSOFT TEAMS  
LINK (CLICK HERE)

**20 JULY 2022**  
10.00 AM - 11.00 AM

JUL

# JOURNAL CLUBS

**PEDICULUS HUMANUS CAPITIS: ITS GENETIC DIVERSITY AND POTENTIAL ASSOCIATED PATHOGENS AMONG DISADVANTAGED COMMUNITIES**

*Syarah Jabatan*

Pediculosis capitis caused by *Pediculus humanus capitis* (De Geer) remains a health issue throughout the world and Malaysia is no exception to this problem. It is one of the most reported cases of ectoparasitic infections affecting young children, particularly those living in overcrowded institutions. DNA barcoding has revealed that *P. humanus* includes five genetically distinct lineages/clades based on the studies of two mitochondrial genes (cox1 and cytb), and each clade exhibits a unique geographical distribution. Understanding the genetic diversity in head lice populations is crucial for analysing the potential spread of lice-borne pathogens in human.

**DR AIDA SYAFINAZ MOKHTAR**  
Penyarah Kanan,  
Pusat Pengajian Biologi,  
UTM Cawangan Negeri Sembilan,  
Kampus Kuala Pilah

**PLATFORM:**  
**ZOOM**  
**LINK (CLICK HERE)**

**24 AUGUST 2022**  
11.30 AM - 12.30 PM

AUG

**A JOURNEY OF DISCOVERIES THROUGH THE FULLBRIGHT SCHOLAR PROGRAM AT NIH, USA**

*Journal Club*

The prestigious Fulbright Program was founded by USA Senator J. William Fulbright in 1946. It is recognised globally as one of the most significant movements of scholars across the world. Since 1963, it has been awarded to more than a thousands Malaysians. For my Fulbright Scholar Program, I was attached to the National Institute of Allergy and Infectious Diseases (NIAID), NIH, USA to further understand gut worm colonisation and their interactions with gut microbiota. The experience was filled with amazing discoveries and great networking opportunities. It also highlighted the importance of being agile in embracing newer technologies which are constantly evolving.

**PROFESSOR DR YVONNE LIM AI LIAN**  
Department of Parasitology,  
Faculty of Medicine,  
Universiti Malaya

**PLATFORM:**  
**ZOOM**  
**LINK (CLICK HERE)**

**21 SEPTEMBER 2022**  
10.00 AM - 11.00 AM

SEP

**IMMUNOGOLD IN TEM: PRINCIPLES AND APPLICATIONS**

*Journal Club*

Ever since electron microscopy became an important tool in the scientific research, the focus had been mainly on ultrastructural analysis with little success in the development and application of suitable techniques for the localization of macromolecules in cells. The emergence of immunogold techniques managed to fill this gap in serving this function. Immunogold labeling is a high-resolution method used for the identification and localization of macromolecules in the context of cells and subcellular structures together with distribution of proteins, antigens, and other macromolecules of interest. The target antibodies are used to attach small probes of colloidal gold which are easily visible in the electron microscope to the cellular macromolecule of interest. The aim of this talk is to equip researchers, postgraduate students, and technicians with essential knowledge to utilize immunogold techniques for ultrastructural investigations in the life sciences. The principles, techniques and applications involved have been highlighted to give researchers a quick review of the techniques before embarking on their ultrastructural localisation procedures.

**DR MOGANA DAS A/L MURTEY**  
Lecturer,  
School of Dental Sciences,  
Health Campus,  
Universiti Sains Malaysia

**PLATFORM:**  
**MICROSOFT TEAMS**  
**LINK (CLICK HERE)**

**19 OCTOBER 2022**  
10.00 AM - 11.00 AM

OCT

**ZOONOTIC MALARIA**

**16.11.2022 1100-1200**

**LAU YEE LING & AMIRAH AMIR**  
DEPARTMENT OF PARASITOLOGY  
FACULTY OF MEDICINE  
UNIVERSITY OF MALAYA  
KUALA LUMPUR  
MALAYSIA

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# RETIREMENT



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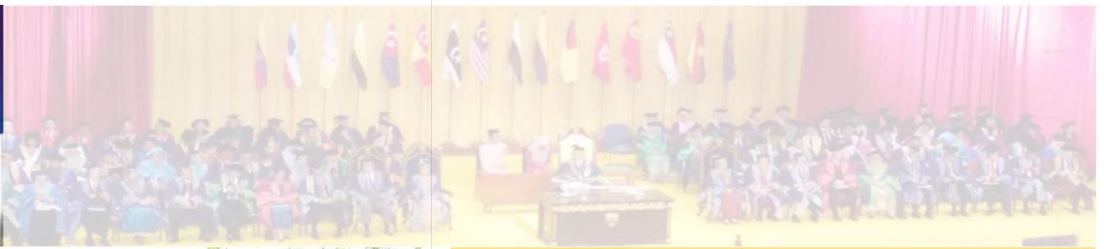
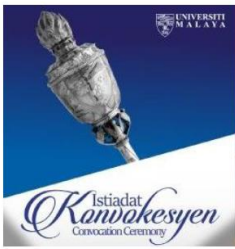


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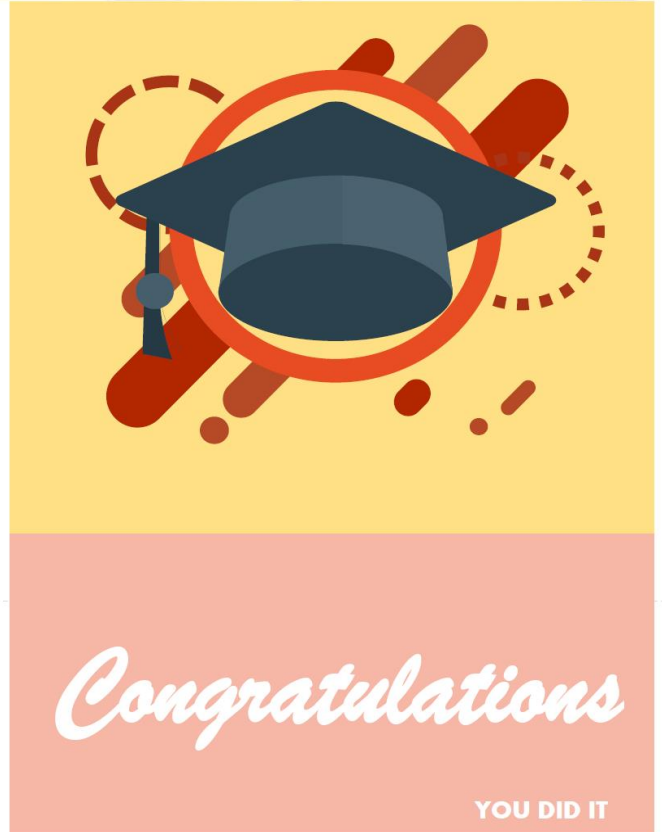
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ONE-YEAR MASTER DEGREE BY COURSEWORK



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- o Hybridoma antibody
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- o Data interpretation techniques
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- o Parasites and autoimmune, cancer and neurological diseases
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