

RESEARCH ACTIVITIES REPORT CRU ASSOCIATE MEMBERS (GRAMS) AND CLINICIAN SCIENTIST COTERIE (CSC) FOR SERIE 3/2022 SHARING FROM GRAMS AND CSC'S MEMBER!

By Salwana Ahmad



GRAMs Online Meeting was held every 2 months among GRAMs Members, Clinician Scientist Coterie (CSC) Members and staff among Hospital Pengajar, UPM and Faculty of Medicines and Health Sciences, UPM. This session was intended for the GRAMs members to share their research activities in the department and how they are coping with all the coming challenges and strive to keep moving forward. During the session, the members will have to present their research activities report comprising of remarkable research activities and outputs, promoting positive perceptions and motivation for facing challenges, improving clinical research, and cultivating research & networking. In light of cultivating the spirit of research and knowledge sharing, here are the summaries of the presentation shared for all of us to get to learn how is everyone is doing in proceeding with the quality research in UPM.



DEPARTMENT OF MEDICAL MICROBIOLOGY

Background:

Department of Medical Microbiology Hospital Pengajar Universiti Putra Malaysia provides diagnostic laboratory services for clinical specimens received from clinic/ward in Hospital Pengajar Universiti Putra Malaysia. The department provide essential knowledge and understanding for medical and health sciences students in the field of bacteriology, virology, mycology, parasitology, entomology and host-pathogen interactions besides heavily involves in scientific research in line with the university status as one of the major research universities in Malaysia.

Focus of the department is the zoonoses diseases.

GRAMs Member: Tengku Zetty Maztura Binti Tengku Jamaluddin



REMARKABLE RESEARCH ACTIVITIES AND OUTPUTS

The department has been actively involved in research related to many zoonotic diseases, including but not limited to leptospirosis, COVID- 19, cryptosporidiosis

Research Highlights and Achievements:

STUDY

STUDY ON LEPTOSPIROSIS

- ✓ 9 new *Leptospira* Sp. has been discovered in Malaysia.
- ✓ new rapid detection method for *Leptospira* has been developed to reduce turnaround-time by using loop-mediated isothermal amplification (LAMP).
- ✓ Provide laboratory services for microscopic agglutination test (MAT)
 - Gold standard method and real-time PCR.
 - Currently providing services for animal samples
 - Further development for laboratory diagnosis – human
- ✓ Two patents filed for the detection of *Leptospira*.

MYLEPTO STUDY

- ✓ Established the Malaysia Leptospirosis Research Network (MyLepto).
- ✓ a multidisciplinary research network of Malaysian researchers from various backgrounds who are actively involved in leptospirosis research.

GLEAN – MYLEPTO STUDY 2016



RESEARCH HIGHLIGHTS: PUBLICATIONS

>40 publications: Articles & books

PLOS NEGLECTED TROPICAL DISEASES

RESEARCH ARTICLE

Leptospira interrogans and *Leptospira kirschneri* are the dominant *Leptospira* species causing human leptospirosis in Central Malaysia

Noraini Philip¹, Norliza Bahtiar Affendy¹, Siti Nur Alia Ramli¹, Muhamad Arif², Pappitha Raja³, Elanngovan Nagandran⁴, Pukunan Renganathan⁴, Niazzin Mohd Taib¹, Siti Norbaya Masri¹, Muhamad Yazil Yuhana⁵, Leslie Thian Lung Than¹, Mitra Seganthirajah⁶, Cyrille Goarant⁷, Marga G. A. Goris⁸, Zamberi Sekawi¹, Vasantha Kumari Neela^{1*}

Abdullah et al. BMC Public Health (2019) 19:628
https://doi.org/10.1186/s12889-019-6981-0

BMC Public Health

RESEARCH ARTICLE

Open Access

Leptospirosis and its prevention: knowledge, attitude and practice of urban community in Selangor, Malaysia

Nurul Munirah Abdullah¹, Wan Mohd Zahiruddin Wan Mohammad², Mohd Nazri Shafei³, Surlanti Sukeri⁴, Zawaha Idris⁵, Wan Nor Anifin⁶, Noramira Nozmi¹, Siti Nor Sakinah Saudi¹, Suhailah Samsudin¹, Abdul-Wahab Zainuddin¹, Rukman Awang Hamat¹, Rosni Ibrahim¹, Siti Norbaya Masri¹, Suhainizam Muhammad Saliluddin⁶, Aziah Daud⁷, Malina Osman¹ and Tengku Zetty Maztura Tengku Jamaluddin^{1*}



Contents lists available at ScienceDirect

Microbiological Research

journal homepage: www.elsevier.com/locate/micres



Leptospirosis in human: Biomarkers in host immune responses

Chin VK^{a,b}, Lee TY^{a,b}, Lim WF^{a,b}, Wan Shahrman YWY^{a,c}, Syafinaz AN^a, Zamberi S^a, Maha A^a



European Journal of Clinical Microbiology and Infectious Diseases
https://doi.org/10.1007/s10096-019-03699-5

ORIGINAL ARTICLE

Raised levels of IL-6, IL-17a, and IL-22 in fatal leptospirosis

Wan Shahrman Yushdie Wan Yusoff^{1,2}, Maha Abdullah³, Zamberi Sekawi², Fairuz Amran⁴, Muhammad Yazil Yuhana⁵, Niazzin Mohd Taib⁶, Ivan Kok Seng Yap⁶, Leslie Thian Lung Than⁷, Anim Md. Shah⁷, Alex van Belkum⁸, Syafinaz Amin Nordin⁹

Zahiruddin et al. BMC Public Health (2018) 18:331
https://doi.org/10.1186/s12889-018-5234-y



Contents lists available at ScienceDirect
IJP: Parasites and Wildlife

journal homepage: www.elsevier.com/locate/ijppaw

Invited article

Detection of rodent-borne parasitic pathogens of wild rats in Serdang, Selangor, Malaysia: A potential threat to human health

Mustapha Tijani^{a,b}, Roslaini Abd Majid^a, Sharif Alhassan Abdullahi^{a,c}, Ngah Zsmy Unyah^{a,b,c}



Contents lists available at ScienceDirect
Journal of Infection and Public Health

journal homepage: http://www.elsevier.com/locate/jiph

Diagnostic accuracy of rapid diagnostic tests for the early detection of leptospirosis

Siti N. Alia^a, Narcisse Joseph^a, Noraini Philip^a, Nurul N. Azhari^a, Bashiru Garba^{a,b}, Siti N. Masri^a, Zamberi Sekawi^a, Vasantha K. Neela^{a,b,c}

Research Groups: COVID-19 research, diagnosis and consultation



RESEARCH GROUP INITIATIVE

Research group 1

Nasopharyngeal sampling for refugees

Project Leader:

Assoc. Prof. Dr. Muhammad Hj. Mohd Isa

Grant:

COVID-19 Supplementary Fund

Sponsor:

United States Agency for International Development (USAID).

Total amount:

RM 100,000.00

Duration of the project:

6 Months (End project date: 30th Sep 2021)



Assoc Prof Dr Muhammad Mohd Isa (K)



Prof Dr Maha Abdullah



Dr Iskasyar Itam @ Ismail

Research group 2

Laboratory detection of SARS-CoV-2 on refugee sample

Project Leader:

Assoc. Prof. Dr. Chee Hui Yee

Grant:

COVID-19 Supplementary Fund

Sponsor:

United States Agency for International Development (USAID).

Total amount:

RM 140,537.00

Duration of the project:

6 Months (End project date: 30th Sep 2021)



Assoc Prof Dr. Chee Hui Yee (K)



Prof Dr. Syafinaz Amin Nordin



Assoc Prof Dr Leslie Than Thian Lung



Dr. Narcisse Mary Sither Joseph



Dr. Azmiza Syawani Jasni

Research group 3

Knowledge, attitude and practices level of COVID-19 among refugees who seek COVID-19 test in HPUPM

Project Leader:

Dr. Tengku Zetty Maztura Tengku Jamaluddin

Grant:

COVID-19 Supplementary Fund

Sponsor:

United States Agency for International Development (USAID).

Total amount:

RM 100,000.00

Duration of the project:

6 Months (End project date: 30th Sep 2021)



Dr Tengku Zetty Maztura Tengku Jamaluddin (K)



Assoc Prof Dr Siti Norbaya Masri



Dr Rosni Ibrahim



Dr Nur Raihana Ithnin



Dr Chew Shu Yih



Assoc Prof Dr Malina Osman



Assoc Prof Dr Nazlin Mohd Taib



Dr Siti Zulaikha Zakariah



Assoc Prof Dr Muhammad Mohd Isa



Ms Norliza Bahtiar Affendy

Research group 4

Knowledge, attitude and practice level of COVID-19 among refugees who seek COVID-19 test in HPUPM

Project Leader:

Prof. Dr. Syafinaz Amin Nordin

Grant:

COVID-19 Supplementary Fund

Sponsor:

United States Agency for International Development (USAID).

Total amount:

RM 120,000.00

Duration of the project:

6 Months (End project date: 30th Sep 2021)



Prof Dr. Syafinaz Amin Nordin (K)



Assoc Prof Dr. Chee Hui Yee



Dr Nur Amelina Nasharuddin

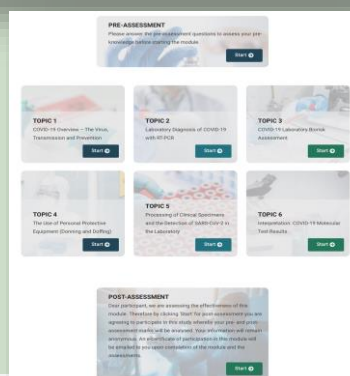


Dr. Narcisse Mary Sither Joseph



Dr. Azmiza Syawani Jasni

COVID-19 Laboratory Online Module (COVILAM)



Awards:



The Best Department Awards Research and Innovation 2017, 2018, 2019 & 20 Tengku Zetty Maztura 20.



Copyrighted and awards won at International University Carnival on E-learning Learning tools Gamification, AR,



Professor Dr. Syafinaz Amin Nordin and her team have been awarded the Gold Medal in the 32nd International Invention, Innovation & Technology Exhibition 2021 held on 13-14 December 2021 at Kuala Lumpur.

The 'Putra Amazing Agar' is a specialized invention to act as a 'ready-made agar' which promotes the growth of pathogens from sterile body fluid samples and has a potential to overcome any obstacles when the traditional agar is used.



Top 1% Q1 Journal Publication among faculty members.

Current Research Project:

STAFF NAME	PROJECT ID	RESEARCH TITLE	GRANT NAME (SCIENCEFUN D/FRGS ETC.)	AMOUNT RECEIVED
Prof. Dr. Zamberi Bin Sekawi	5539240	Strategic integrated measure on advocating IDEAS2: A comprehensive fundamental, technical and public health approaches	MRUN	467,500.00
		Influenza Disease burden and cost estimates in Malaysia	Sanofi Pasteur	232,245.00
	9614200	Prevalence of Occult Hepatitis B Infection (OBI) among Chronic Kidney Diseases Patients in Serdang Hospital in 2018	GERAN PUTRA	20,000.00
Assoc. Prof. Dr. Vasantha Kumari Neela		Deciphering virulence of novel pathogenic Leptospira species isolated from environment and small mammals in Malaysia in hamster models	FRGS	115,900.00
	PRGS 2020-1	Lepto IFA IgG-IgM: Indirect immunofluorescent assay (IFA) for the detection of IgG and IgM antibodies against Leptospira	PRGS	145,000.00
Prof. Dr. Rukman Bin Awang Hamat	UPM/800-4/11/MRUN/2018/5539240	Fundamental behavioural study on Infectious diseases in community (sub projek 1 under IDEAS2 MRUN)	MRUN Fasa 2	150,000.00
	9656600	Development of Loop-Mediated Isothermal Amplification (LAMP) for Invasive Streptococcus pyogenes Isolates Detection	GERAN PUTRA	25,000.00
	5540418	Determining the diversity of antimicrobial resistance bacteria and their resistance genes via One Health approach in manure, soil, vegetables, irrigation water and farm workers in selected organic farms via molecular method: a microbial risk assessment towards improving Malaysian good agriculture practice (MyGAP).	FRGS	170,000.00
	(6300282)	Knowledge and health beliefs as determinants for catfish consumption among communities	Private Company	26 000.00
	BPC I-2021(06)	Investigation the prior exposure of the conventional and organic chicken eggs to Acinetobacter species, Pseudomonas aeruginosa, Klebsiella pneumoniae and Corynebacterium diphtheria	IMU	4,000.00
Prof. Dr. Syafinaz Binti Amin Nordin		Phenotyping and the genotyping characterization of invasive of GBS isolated from human and fish in Malaysia	GPB	96,000.00
	9611600	The Prevalence and Factors Associated with Chlamydia trachomatis Infection among Subfertile Couples of Lembaga Penduduk dan Pembangunan Keluarga Negara (LPPKN) Subfertility Clinic from Feb 2018 until Feb 2019	GERAN PUTRA	23,500.00
	9003327	Tween 80 incorporated media as a solution for high culture negative rate in CAPD-associated peritonitis patients	GERAN PUTRA	60,000.00
		COVILAM (COVID-19 Laboratory Module): A training module for the laboratory testing and the interpretation of the results for coronavirus disease (COVID-19)	MyOHUN	120,000.00
		Putra Amazing Agar – A Tween 80 Added Blood Agar as a Solution For High Culture Negative Rate in Sterile Body Fluid Samples	GERAN PUTRA	100,000.00

Current Research Project:

STAFF NAME	PROJECT ID	RESEARCH TITLE	GRANT NAME (SCIENCEFUND/FRGS ETC.)	AMOUNT RECEIVED
Assoc. Prof. Dr. Niazlin Binti Mohd Taib	IPSR/RMC/UTARRF/2019-C1/Y03	"Knowledge and awareness of hand, foot and mouth disease among parents in Malaysia: A community-based cross sectional survey."	UTARRF	28,780.00
	9690500	Molecular Factors of Human Cytomegalovirus that Influence the Effect of Antiviral Therapy in Immunocompromised Patients	GP-IPS	25,000.00
Dr. Tengku Zetty Maztura Binti Tengku Jamaluddin	FRGS/1/2021/SKK04/UCSI/02/1	Integrative Elucidation of Socio-Ecological Drivers of Antimicrobial Resistance Emergence and Transmission at the Human-Animal-Environment Interface	FRGS	114,500.00
	FRGS/1/2019/SS09/UITM/02/7	Malaysian Sign Language(MySL) as a Third Language in Creating Community Inclusive Communication(CIC) to Safeguard Mental Health Among the Deaf.	FRGS	90,700.00
		Knowledge, attitude and practices level of COVID-19 among refugees who seek COVID-19 test in HPUPM	MyOHUN	100,000.00
		Implementation of standardized bioinformatics practices, pipelines, and data structures in AMR sequencing laboratories in LMICs.	PHA4GE 2021: AMR Sub grant (AMR-SG-02)	20,000 (USD), RM 84,733.245
Assoc. Prof. Dr. Siti Norbaya Binti Masri	9648700	Molecular Identification of Fungi Causing Tissue Mycoses from Formalin Fixed Paraffin Embedded (FFPE) Tissue Sample in Serdang Hospital from Year 2014 to 2017	GP-IPS	25,000.00
Dr. Siti Zulaikha Zakariah	9679300	Characterisation and Succession of the Hospital Microbiome before and after Human Occupancy in a Newly-Opened Hospital	GP-IPM	60,000.00
Dr. Rosni Ibrahim	9680700	Epidemiology and Microbiological Profile of Microbial Keratitis in Selected Government Hospitals Southern Region in Malaysia	GP-IPS	25,000.00
Assoc. Prof. Dr. Leslie Than Thian Lung	5534100	Development of prototype of palm oil-based probiotics pessary for vaginal health	PRGS	124,650.00
	9612400	Development of Loop-Mediated Isothermal Amplification (LAMP) Assay for Detection of Candida glabrata	GP-IPS	25,000.00
		Effects of physiologically relevant alternative carbon sources on cell wall properties and host-pathogen interactions in Candida glabrata	GPB	100,000.00
		Effect of physiologically relevant alternative carbon sources on cell wall properties and host-pathogen interactions in Candida glabrata	FRGS	168,400.00
Assoc. Prof. Dr. Chee Hui Yee	9678200	Establishment of Loop-Mediated Isothermal Amplification (LAMP)- based Biosensor for Detection of Human Pathogenic Leptospira spp.	GP-IPS	25,000.00
		Clinical evaluation of multi-nation, multi-center case study for SARS-CoV-2 variant analysis	Seegene Inc, Korea	USD10,000 (RM42,000)
	9708000	Whole genome sequencing as a tool to identify potential variants of SARS-CoV-2 from retrospective samples	GPB	77,000.00

Current Research Projects:

STAFF NAME	PROJECT ID	RESEARCH TITLE	GRANT NAME (SCIENCEFUND/ FRGS ETC.)	AMOUNT RECEIVED
Dr. Azmiza Syawani Jasni	9650100	Investigating the potential of <i>Elateriospermum tapos</i> (<i>E. tapos</i>), Plant-based source of omega-3 fatty acids as a conjugation inhibitor for prevention of antibiotic resistant gene transfer	GERAN PUTRA (FAST TRACK)	50,000.00
		Elucidating the Inhibitory Activity of Tualang Honey in Bacterial Conjugation for Preventing Dissemination of Antibiotic-Resistant Bacteria	FRGS	114,680.00
Dr. Narcisse Mary a/p Sither Joseph Vesudian	9690700	Investigation of Immunogenic T Cell Epitopes in Leptospiral Outer Membrane Proteins Using Immunoinformatics Approach to Stimulate Host Immune Response	GP-IPM	54,000.00
Dr. Norashiqin Misni	5540249	Exploring the stability and effectiveness of Citrus aurantifolia fruit peel (CAFP) – synthesized AgNPs encapsulated with polyethylene glycol (PEG) against immature stage of <i>Aedes aegypti</i> .	FRGS	137,330.00
Dr. Nur Raihana Ithnin	GP-IPM/2020/9686100	Prevalence of Intestinal Microsporidiosis, Potential Risk Factors and Molecular Epidemiology characteristics of Microsporidia amongst Refugee Children in Selangor	GP-IPS	40,000.00

HIGHLIGHT Current Research Project:

Independent Medical Education Grant
31st March 2022-30th March 2023

Collaborative grant:

Prinsipal Investigator: Dr Tengku Zetty Maztura Tengku Jamaluddin

Members:

Prof Dr Syafinaz Amin Nordin

Assoc. Prof. Dr Siti Norbaya Masri

Assoc. Prof. Dr Niazlin Mohd Taib

Assoc. Prof. Rosni Ibrahim

Assoc. Prof. Siti Zulaikha Zakariah

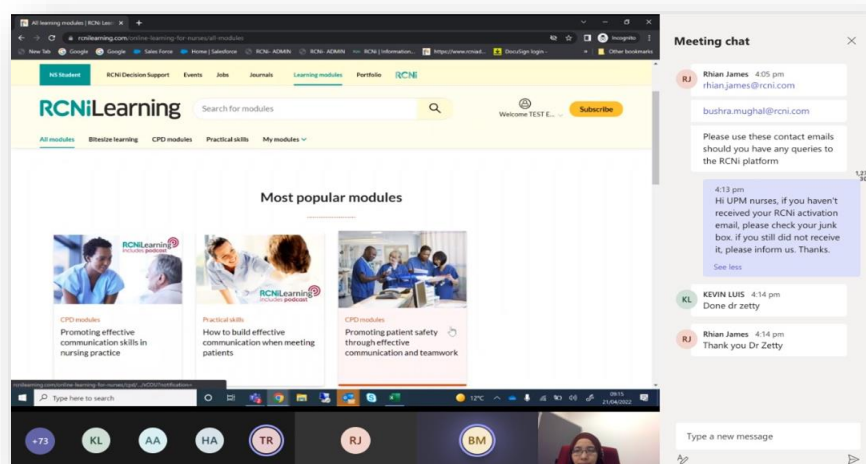
Pilot study, WIP:

MDYR2 students Research Project

Evaluated 3 modules.

176 nurses involved.

82 nurses completed the study.



Onboarding call RCNi UK and Nursing Unit, HPUPM

PROMOTING POSITIVE PERCEPTIONS AND MOTIVATION FOR FACING CHALLENGES, IMPROVING CLINICAL RESEARCH, and CULTIVATING RESEARCH & NETWORKING.

In promoting positive perceptions and motivations for improving clinical research and cultivating research, the department has few strategies that had been implemented:

1. Provide interest and research groups and;
2. Having internal collaboration worldwide including

Putra Infectious Diseases Research Group (Putra IDRes)

Aim: To address these issues through strategic, innovative and cutting-edge fundamental and applied research focusing on multiple aspects of infectious diseases such as transmission, diagnosis, therapeutics, prevention and control.

Importance: finding solutions to issues or threats posed by infectious diseases.

Achievements:

- Active in research areas involving multidrug-resistant organisms (MDROs), respiratory, vector-borne and hepatitis viruses, fungal pathogens, helminths and infectious diseases public health as well as One Health.
- Published in Top 1% and 10% in their respective fields with patents.
- Awarded grant from Long Term Research Grant Scheme (LRGS) which focuses on leptospirosis.

Moving forwards: to bring the research to greater heights by having high quality and more impactful research through strategic collaboration with researchers from top universities and industries around the world.



Malaysian Society of
Infectious Diseases and Chemotherapy



MMIG
MALAYSIAN MYCOLOGY INTEREST GROUP

Malaysian Mycology Interest Group (MMIG) under Malaysian Society of Infectious Diseases and Chemotherapy (MSIDC)

Aim: Promotes knowledge and awareness of fungal infections among healthcare workers.

Achievements:

- Involved in preparing and proposing antifungal usage guidelines for MOH.
- Compiling national antifungal susceptibility testing data for molds.

Moving forwards: Collaborating with Asia Fungal Working Group (AFWG), a working group of International Society for Human and Animal Mycology (ISHAM) (in progress).

Antimicrobial Resistance Research Group, University Malaya

Aim: To encourage collaborations in antimicrobial resistance studies across academic institutions/disciplines.

Achievements:

- Originally started from collaborative inter-university research on Surgical Site Infections sponsored by industrial grant, Shionogi Pte Ltd.

Moving forwards: To coordinate and conduct antimicrobial resistance studies involving bacterial infections in Malaysian hospitals.

Members members with clinical and medical microbiology backgrounds as well as members from other branches of medical fields like paediatric, medicine and dermatology.

- Prof. Dr. Syafinaz Binti Amin Nordin (Leader)
- Prof. Dr. Zamberi Bin Sekawi
- Prof. Dr. Rukman Bin Awang Hamat
- Assoc. Prof. Dr. Vasantha Kumari Neela
- Assoc. Prof. Dr. Malina Binti Osman
- Assoc. Prof. Dr. Niazlin Binti Mohd Taib
- Assoc. Prof. Dr. Siti Norbaya Binti Masri
- Assoc. Prof. Dr. Chee Hui Yee
- Assoc. Prof. Dr. Leslie Than Thian Lung
- Dr. Tengku Zetty Maztura Binti Tengku Jamaluddin
- Dr. Siti Zulaikha Zakariah
- Dr. Rosni Ibrahim
- Dr. Ngah Zasmy A/L Unyah
- Dr. Azmiza Syawani Jasni
- Dr. Narcisse Mary a/p Sither Joseph Vesudian
- Dr. Norashiqin Misni
- Dr. Nur Raihana Ithnin
- Assoc. Prof. Dr. Intan Hakimah Ismail
- Assoc. Prof. Dr. Wan Syamimee Wan Ghazali
- Dr. Sithra A/P Rengasamy
- Dr How Kang Nien

Members:

- Assoc. Prof. Dr. Siti Norbaya Masri (Secretary)
- Assoc. Prof. Dr. Leslie Than Thian Lung (Training Committee)

Members:

- Sazalv bin Abu Bakar (Interim Leader, UM)
- Cindy Teh Shuan Ju, UM
- Sasheela A/P Sri La Sri Ponnampalavanar, UM
- Rina A/P N. Karunakaran, UM
- Kartini binti Abdul Jabar, UM
- Ngoi Soo Tein, UM
- Azian Harun, USM
- Siti Suraiya Md Noor, USM
- Ramliza Ramli, UKM
- Zalina Ismail, UKM
- Sharifah Azura Salleh, UKM
- Tengku Zetty Maztura Tengku Jamaluddin, UPM
- Niazlin Mohd Taib, UPM
- Siti Norbaya Masri, UPM
- Azmiza Syawani Jasni, UPM
- Chong Chun Wie, Monash University Malaysia
- Victor Lim Kok Eow, IMU
- Anis Ahmed Khan, IMU

PROMOTING POSITIVE PERCEPTIONS AND MOTIVATION FOR FACING CHALLENGES, IMPROVING CLINICAL RESEARCH, and CULTIVATING RESEARCH & NETWORKING.

International Collaboration

No	Department Member	Internationalization
1.	Prof. Dr. Zamberi Sekawi	<ul style="list-style-type: none"> Global Leptospirosis Environmental Action Network (GLEAN)
2.	Prof. Dr. Rukman Awang Hamat	<ul style="list-style-type: none"> US Naval Medical Research Unit (NAMRU-2), Singapore.
3.	Prof. Dr. Syafinaz Amin Nordin	<ul style="list-style-type: none"> National University of Singapore, Singapore University of Otago, New Zealand
4.	Assoc. Prof. Dr. Siti Norbaya Masri	<ul style="list-style-type: none"> University Hospital Cologne, Germany
5.	Assoc. Prof. Dr. Vasantha Kumari Neela	<ul style="list-style-type: none"> Pasteur Institute, France University of Glasgow, UK
6.	Assoc. Prof. Dr. Chee Hui Yee	<ul style="list-style-type: none"> University of Cambridge, UK World Health Organisation Seegene Inc, Korea The Association of Southeast Asian Institutions of Higher Learning (ASAIHL) United Nations High Commissioner for Refugees
7.	Dr. Tengku Zetty Maztura Tengku Jamaluddin	<ul style="list-style-type: none"> Nagasaki University, Japan Juntendo University, Japan Public Health Alliance for Genomic Epidemiology (PHA4GE)
8.	Assoc. Prof. Dr. Leslie Than Thian Lung	<ul style="list-style-type: none"> Medical Research Council for Medical Mycology (MRC CMM) at the University of Exeter, UK (previously University of Aberdeen, UK) McGovern Medical School at the University of Texas Health Science Center at Houston (UTHealth Houston) University of Manchester, UK.



NAMRU-2 Visit to FMHS & HPUPM, 26th April 2022



Public Health Alliance for
Genomic Epidemiology

PHA4GE AMR Sub-Grant USD20,000.
UKM, UBA, Tokyo University & UPM.



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for f in wabricate_card.output; do hamronize abricate "$f" --reference_database_version abricate_card_2021-Mar-27 --analysis_software_version abricate_v1.0.1 --format tsv --output "${f}.hamronize_abricate_card.tsv"; done
for f in wabricate_ecoli_vf.output; do hamronize abricate "$f" --reference_software_version abricate_v1.0.1 --format tsv --output "${f}.hamronize_abricate_vf.tsv"; done
for f in wabricate_plasmidfinder.output; do hamronize abricate "$f" --analysis_software_version abricate_v1.0.1 --format tsv --output "${f}.hamronize_abricate_plasmidfinder.tsv"; done
for f in wabricate_ecoh.output; do hamronize abricate "$f" --reference_software_version abricate_v1.0.1 --format tsv --output "${f}.hamronize_abricate_ecoh.tsv"; done
for f in wabricate_resfinder.output; do hamronize abricate "$f" --reference_software_version abricate_v1.0.1 --format tsv --output "${f}.hamronize_abricate_resfinder.tsv"; done
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for f in wabricate_argannot.output; do hamronize abricate "$f" --reference_software_version abricate_v1.0.1 --format tsv --output "${f}.hamronize_abricate_argannot.tsv"; done
```

**hAMRonization:
A virtual workshop
13th April (Wed) 2022
0830-1130 MYT**

Are you:

- Sequencing whole genomes of antibiotic-resistant (AMR) bacteria?
- Comparing AMR genes between bacterial strains from different laboratories?
- Generating reports on surveillance of AMR bacteria?

Registration: <https://forms.gle/bp9Ay7cL8cP19F4aA>

Jointly organised by:

With support from:

Join us for a free virtual workshop to utilize the hAMRonization tool:

- overview of AMR database and gene prediction tools
- introduction into hAMRonization
- hands-on session (PC and stable internet connection required)
- Suitable for researchers with no bioinformatics background

Inquiries: hui-min@ppukm.ukm.edu.my

hAMRonization platform briefing by PHA4GE



GRAND CHALLENGES ANNUAL MEETING 2021

Home Agenda Directory Scientific Tracks Networking Lounge Plenary Speakers

Our team

Invited to present at the Grand Challenges Annual Meeting 2021

The Association of Southeast Asian Institutions of Higher Learning (ASAIHL) Conference 2022



Join us virtually!

ASAIHL CONFERENCE 2022 SELANGOR, MALAYSIA

"Emerging Infectious Diseases: A Recurrent Threat to Human Society"

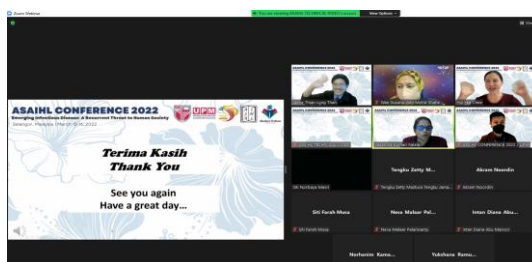
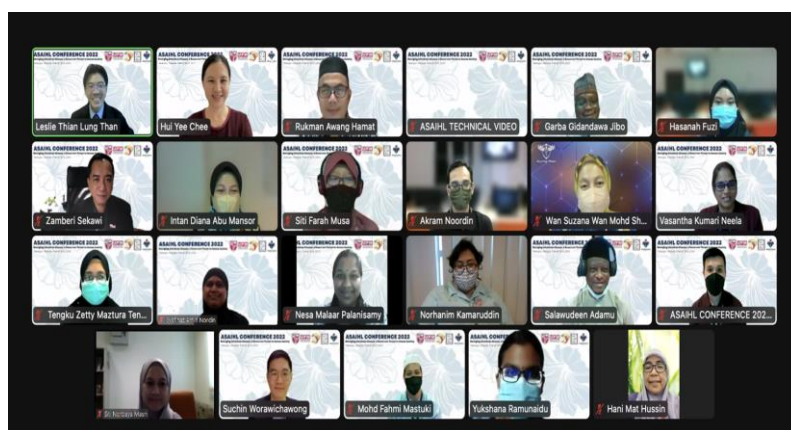
15 & 16 March 2022
Universiti Putra Malaysia

Enquires
Further and latest information can be found at <https://conference.upm.edu.my/myasahi>
Please email any inquiries to: myasahi@upm.edu.my

REGISTRATION
Admission is **FREE**
Click here for registration
Due date : 1 March 2022

Facebook: [facebook.com/UPMPutraMalaysia](https://www.facebook.com/UPMPutraMalaysia) | Instagram: [uniputramalaysia](https://www.instagram.com/uniputramalaysia) | YouTube: [user/putrapum](https://www.youtube.com/user/putrapum)

AGRICULTURE • INNOVATION • LIFE



More than 600 registered participants from 21 countries

Mentoring and Inclusivity for all department members:

With aim to apply grants under university scheme and Ministry of Higher Education (MOHE), newly appointed staff will be assigned with a mentor for professional development especially for research and academic.

Apply local and international grants voluntarily in collaboration with industries such as:

- Pfizer Inc USA grant for Invasive Fungal Infections, 2 applications submitted
- NAMRU-2 and UM collaborative visit
- Malaysian Research University Network Young Researchers Grant (MY-RGS) collaboration with AMR UM group members, extend involvement to other department members also
- Establishing connections via webinars, conferences e.g. ASAIHL 2022, JIMN linkages, etc.

Challenges in conducting research:

- Research are done in piecemeal rather than as a whole.
- Inclusiveness will promotes a passive researcher in the department if they are not actively engaged in the research projects.
- Internal and external conflict do exist when overstepping delineation and boundaries between clinical work and research activities.
- Long process of getting ethical clearance due to amendment needed of the submitted proposal will effect the study commencement.
- Researchers need to undertook risk of project delay, withdrawal of grant by grantor, give up on collaboration due to official requirement such as:
 - MOA required for grant and procurement of reference material from MOH.
 - Long process, warranting many layers of reviews by faculty, +/- RMC, legal, +/- JPU, +/- VC signature.



DEPARTMENT OF ORTHOPAEDIC – EXTRAORDINARY SERVICES.

Background:

The Department of Orthopedic is made up of eight units are as follows: Hand & Microsurgery, Spots Surgery, Arthroplasty Surgery, Spine Surgery, Paediatric Orthopaedic, Advance Trauma Surgery, Foot & Ankle Surgery, Arthroplasty & Oncology Surgery. Presently the department is running the following undergraduate programs which are Orthopaedics Senior Orthopaedics (SPK4912) and Introductory Orthopedics (SPK3914). In 2013 the department started to offer post- graduate program namely Master of Surgery (Orthopaedics). The program's main objective is to produce Orthopaedic specialists to meet the high demand of public and private sector. Apart from undergraduate teaching, service and community work, members of the department are also involved in postgraduate teaching and research. Orthopaedic department has started its services in Hospital Pengajar Universiti Putra Malaysia (HPUPM) since early year 2020. Our vision is to become one of an important department in HPUPM and giving our full commitment to deliver extraordinary services to our patients.



CRAMs Member: Dr. Sanjiv Rampal A/Lekhraj Rampal

REMARKABLE RESEARCH ACTIVITIES AND OUTPUTS

Past Research Projects:

YEAR	NUMBER OF PUBLICATIONS/YEAR
2016	6
2017	7
2018	5
2019	5
2020	18
2021	16
2022	2 - Ongoing

Current Research Projects:

RESEARCHER	TITLE
Dr. Sanjiv Rampal	Effect of RGTA and GCSF on superficial digital flexor tendon repair and rehabilitation in a goat model-Mr Colin with Vet UPM.
	Empirical Antibiotics in Necrotising fasciitis systemic review.
	Empirical Antibiotics in Management of Diabetic foot Systemic Review.
	Systemic review on injuries suffered while playing soccer.
	Infrapatellar Branch of Saphenous Nerve During Total Knee Arthroplasty Among Asian Population: Cadaveric Study Collaboration with Anatomy Department
Dr. Azamuddin Alias	Normal Anatomical Location Of Distal Fibula Within The Syndesmotc Joint In True Lateral Ankle Radiograph : A Measurement Ratio Of Distal Fibula Within The Syndesmotc Joint
	The association of clinical and electrophysiological findings in carpal tunnel syndrome and its concurrent compressive neuropathy. A cross sectional prospective study in tertiary centres in Malaysia

Current Research Projects (Grant):

RESEARCHER	TITLE	SOURCE OF GRANT AND AMOUNT GRANTED
Prof. Dr. Manohar Arumugam	Role of Music to Alleviate Pain and Anxiety during Post-Operative Period in Patients with Femur Fracture at Hospital Serdang.	Grant Putra RM50,000
	Whole-Exome Scanning for Variants and the Aetiology Associated with the Development of Dupuytren's Contracture Using Next Generation Sequencing.	FRGS RM166,900
Dr. Fahrudin Che Hamzah	The Ability of Povidone-Iodine on Implant Coated with Staphylococcus Aureus Biofilm.	Geran Putra IPS RM20,000
Dr. Sanjiv Rampal	Cadaveric Study of the Anatomical Course of Infrapatellar Branch of Saphenous Nerve in Relation to Midline Skin Incision for Total Knee Arthroplasty.	Geran Putra IPS RM25,000
Dr. Imma Isniza Ismail	Incidence of Corona Mortis in Multiracial Asian Hemipelvis Cadavers in Malaysian Tertiary Hospital.	Geran Putra RM22,000
Dr. Collin Looi Seng Kim	Effect of Regenerating Agents and Granulocytes-Colony Stimulating Factors on Superficial Digital Flexor Tendon Repair and Rehabilitation in a Goat Model.	Geran Putra IPM/ RM55,000

Past Research Achievements:

- 2 CIJ publications published
A review of the efficacy of intraarticular hip injection for patients with hip osteoarthritis: To inject or not to inject in hip osteoarthritis? Q3 journal
- Complementary Medicine a Costly Risk in Management of Chronic Knee Osteoarthritis? Q3 Journal



PROMOTING POSITIVE PERCEPTIONS AND MOTIVATION FOR FACING CHALLENGES, IMPROVING CLINICAL RESEARCH, and CULTIVATING RESEARCH & NETWORKING.

In doing the research, the department faced **challenges** in many ways like all researchers in the field. The top 3 mentioned challenges were:

- Less patients to write case series
- No emergency department –hence less patients
- No APC for publications fee

To **overcome the challenges** issues, they had shared a few pro active solution to improve the research activities in department such as:

- Participating in multiple workshops on line including CRAM CRU online.
- Grant Workshop Tomorrow.
- Adding the APC cost in Grant proposal.
- Collaborating with other universities for APC sharing.
- Collaborating with private industry for clinical trials.

We would like to thank Assoc. Prof. Dr. Tengku Zetty Maztura and Dr. Sanjiv Rampal for the sharing. We hope that the sharing can transform tacit knowledge into explicit, written, and easily communicated knowledge for the right people to receive the right information at the right time. See you the next time!.



Check out more information about our CRU Associate Members (CRAMs) for the Year 2022/2023 Member on HPUPM website at [CRAMs Members](#).

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