

JITMM2020



Joint International Tropical Medicine Meeting 2020

(JITMM Virtual 2020)

“Tropical Disease Control amid the COVID-19 Pandemic”

15-16 December 2020

Organizer

- * Faculty of Tropical Medicine, Mahidol University

Co-Organizers

- * Mahidol University
- * Department of Disease Control, Ministry of Public Health Thailand (MOPH)
- * Mahidol Oxford Tropical Medicine Research Unit (MORU)
- * Wellcome Trust
- * Thailand Convention and Exhibition Bureau (TCEB)
- * National Yang-Ming University
- * Thailand Center of Excellence for Life Sciences (TCELS)
- * QIAGEN Thailand

Program Book

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Acknowledgements

The Organizers of JITMM Virtual 2020 express sincere appreciation and grateful thanks to all those who have contributed their kind support and cooperation in facilitating this virtual conference.

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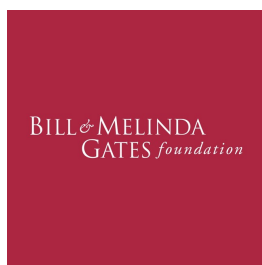
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Tuesday 15 December 2020

Opening Ceremony

8.30-9.00hr

▲ Opening Ceremony by Organizers and Co-organizers

Report

Asst. Prof. Weerapong Phumratanaprapin

Chair, JITMM Virtual 2020 Organizing Committee

Welcome Address

Dr. Opart Karnkawinpong

Director-General, Department of Disease Control, Ministry of Public Health

Welcome Address

Prof. Nicholas Day

Director, Mahidol-Oxford Tropical Medicine Research Unit (MORU), Thailand

Opening Remarks

Prof. Banchong Mahaisavariya

President, Mahidol University, Thailand

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Tuesday 15 December 2020

S1: The 25th Chamlong-Tranakchit Harinasuta Lecture

9.00-9.30hr

Chairperson:

Jetsumon Prachumsri

Keynote Speaker

Dr. Tedros Adhanom Ghebreyesus

Director-General of the World Health Organization

09.40-11.10hr

Room A

Chairpersons:

1. **Kesinee Chotivanich**
2. **Nicholas Day**

Invited speakers:

1. The COPCOV trial- an overview and update
William Schilling
Mahidol Oxford Tropical Medicine Research Unit
2. Safety of chloroquine and hydroxychloroquine
Sir Nicholas White
Mahidol Oxford Tropical Medicine Research Unit
3. Overview of trials of chloroquine and hydroxychloroquine in COVID-19
James Watson
Mahidol Oxford Tropical Medicine Research Unit
4. Prevention vs cure: a mechanistic review of chloroquine/hydroxychloroquine in COVID-19
Cintia Cruz
Mahidol Oxford Tropical Medicine Research Unit

9.40-11.10hr

Room B

Chairperson:

Liwang Cui

Invited speakers:

1. Estimates of *Plasmodium falciparum* population demography in the context of multidrug resistance
Shannon Takala-Harrison
University of Maryland School of Medicine, United States
2. Population genomic insights into the impact of malaria control on *Plasmodium falciparum* transmission dynamics and sources of resurgence
Alyssa Barry
Deakin University, Australia
3. Population dynamics and structure of *Plasmodium vivax* in the Greater Mekong sub-region during elimination
Liwang Cui
University of South Florida, United States
4. Multilevel effects of targeted mass drug administration for elimination of *P. falciparum* malaria on the Thailand-Myanmar border
Daniel Parker
University of California, Irvine, United States

S4: Neurobehavioral impact of tropical diseases

09.40-11.10hr

Room C

Chairperson:

Matthew Reed

Invited speakers:

- 1 Neurocognitive impact of Zika virus infection in adult rhesus macaque
Denise Hsu
Armed Forces Research Institute of Medical Sciences, Thailand
- 2 Mental distress and neuroimmune activation in acute infection predicts treatment response and long-term HIV disease outcomes
Robert Paul
UMSL, United States

09.40-11.10hr

Room D

Chairpersons:

Narisara Chantratita
Paul Brett

Invited speakers:

- 1 Innate-like lymphocytes in melioidosis
Shelton Wright
University of Washington, United States

- 2 Blood transcriptomics to characterize key biological pathways and identify biomarkers for predicting mortality in melioidosis
Thatcha Yimthin
Mahidol University, Thailand

- 3 Tetraspanins are involved in *Burkholderia pseudomallei*-induced cell-to-cell fusion of phagocytic and non-phagocytic cells
Tanes Sangsri
Department of Microbiology and Immunology, Faculty of Tropical Medicine, Mahidol University, Thailand

- 4 Seroprevalence of melioidosis in Thailand and Myanmar
Janjira Thaipadungpanit
Department of Clinical Tropical Medicine and Mahidol-Oxford Tropical Medicine Research Unit, Faculty, Thailand

S6: New normal of occupational setting in the era of COVID-19 (Thai/Eng Session)

09.40-11.10hr

Room E

Chairperson:

Chuleekorn Tanathitikorn

Invited speakers:

1. Risk assessment for prevention and control of COVID-19 in factory and workplace
Rungprakai Wirichai
Division of Occupational and Environmental Diseases (DOED), Ministry of Public Health, Thailand
2. A cluster of Coronavirus Disease 2019 (COVID-19) among healthcare workers related to a COVID-19 death at a private hospital, Bangkok, 2020
Patcharaporn Dejbunum
Ministry of Public Health, Thailand
3. Thailand National Safety and Health Administration (SHA) for COVID-19 prevention
Danai Teewunda
Department of Health, Ministry of Public Health, Thailand
4. Clean air technology to prevent air-borne and droplet COVID-19 infection
Anuphap Laor, Kriengsak Suriyapor, and Manus Rattanasuwan
Ministry of Public Health, Thailand
5. Migrant workers and COVID-19 response in Thailand
Aree Mungsookjareoun
WHO Country Office for Thailand

11.20-12.20hr

Room A

1. Effect of geospatial related physical ambiance and socioecological factors on COVID-19
Kyaw Soe Htun
Defence Services Medical Academy, Myanmar
2. The readiness of COVID-19 response in Myanmar: community-based surveillance system of ethnic health organizations through innovative approaches
Merry Moo
Health Information System Working Group, Myanmar
3. Modelling the impact of intervention strategies on first wave and prediction the second wave of COVID-19 in Thailand
Wiriya Mahikul
Faculty of Medicine and Public Health, HRH Princess Chulabhorn College of Medical Science, Thailand
4. Knowledge, attitude, and practices toward coronavirus disease 2019 among international travelers
Suttiporn Prapaso
Faculty of Tropical Medicine, Mahidol University, Thailand
5. Production of diagnostic monoclonal antibodies useful for COVID-19 nucleocapsid protein detection
Jeong-Heon Lee
Department of Microbiology, Ajou University School of Medicine, South Korea
6. Chimeric antigen receptor T cell, an alternative treatment for hepatitis C virus infection
Monrat Chulanetra
Mahidol University, Thailand
7. *Atractylodes lancea* (Thunb.) D.C. inhibited cholangiocarcinoma cell growth and proliferation through down-regulation of ERK signaling cascade
Pongsakorn Martviset
Faculty of Medicine, Thammasat University, Thailand
8. Antitumor effects of fucoidan via apoptotic induction on cholangiocarcinoma
Pathanin Chantree
Faculty of Medicine, Thammasat University, Thailand
9. Travel profile and purpose of people getting yellow fever vaccine at travel clinic
Sirirak Thanasakulprasert
Faculty of Tropical Medicine, Mahidol University, Thailand
10. Multiple various anatomical site of hookworm-related cutaneous larva migrans- A case report
Ploi Lakanavisid
Department of Clinical Tropical Medicine, Faculty of Tropical Medicine, Mahidol University, Thailand

11.20-12.20hr

Room B

Chairpersons

1. Wang Nguitragool
2. Wanlapa Roobsoong

Speakers

1. Further evidence needed to change treatment policy for safe and effective radical cure of *P. vivax malaria*
Varunika Ruwanpura
Menzies School of Health Research, Australia
2. Dose optimization of tafenoquine for malaria prophylaxis and elimination
Michael Gregory
Naval Medical Research Unit TWO, United States
3. A randomized controlled trial of the triple artemisinin combination therapy artemether-lumefantrine plus amodiaquine versus artemether-lumefantrine for multidrug-resistant *Plasmodium falciparum* malaria
Thomas Peto
MORU, Thailand
3. Elucidating changes in host signaling in and around *Plasmodium*-infected hepatocytes in-vivo
Elizabeth Glennon
Seattle Children's Research Institute, United States
4. Interactive web-based platform for malaria surveillance and environmental analysis
Florian Girond
Institut de Recherche pour le Développement / Institut Pasteur du Cambodge, Cambodia
5. Risk factors of metabolic acidosis and kidney injury in children with severe malaria: a secondary analysis of a randomised trial
Grace Mzumara
Malawi-Liverpool Wellcome Trust, Malawi
7. Factors associated with targeted mass drug administration long-term impact on *P. falciparum* incidence and prevalence in a malaria elimination setting of Eastern Myanmar
Jordi Landier
Aix Marseille Univ, INSERM, IRD, SESSTIM, Marseille, France
8. Selecting an optimal dosing regimen for a novel antimalarial combination therapy: OZ439-DSM265
Saber Dini
Centre for Epidemiology and Biostatistics, Melbourne School of Population and Global Health, University, Australia
9. Bayesian within-host modelling of red blood cell dynamics and primaquine-induced haemolysis in glucose-6-phosphate dehydrogenase
Parinaz Mehdipour
Melbourne School of Population and Global Health, Australia

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Tuesday 15 December 2020

**Lunch session: Translational genomics: finding the needle in the haystack
with digital PCR (Sponsored by QIAGEN)**

11.20-12.20hr

Room C

Speaker: Karolina Setyowati

Senior Sales Application Specialist, APEC, QIAGEN

11.20-12.20hr

Room D

1. Ectoparasites and their associated pathogens in Cambodia
Daliya Nop
US Naval Medical Research Unit 2, Cambodia
2. *In vitro* effects of multi-purpose disinfecting solutions towards survivability of acanthamoeba genotype t4 in Malaysia
Rosnani Hanim Mohd Hussain
Universiti Teknologi MARA (UiTM), Malaysia
3. New insights into the *in-silico* prediction and molecular docking of *Giardia intestinalis* protease resistance to nitroimidazole
Dashwa Langbang
Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), India
4. Molecular cloning of thioredoxin gene from pathogenic *Naegleria fowleri* trophozoite after transcriptomic analysis with NA-sequencing
Hae-Jin Sohn
Department of Microbiology, Ajou University School of Medicine, South Korea
5. Antimicrobial susceptibility profiles of *Salmonella enterica* from slaughtered swine and pork products in Metro Manila, Philippines
Jonah Feliza Mora
University of the Philippines Diliman, Philippines
6. Molecular characterization of filarial species causing extralymphatic filariasis in Thailand
Patsharaporn Sarasombath
Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand
7. Study of canine filariasis in Chanthaburi and Narathiwat, Thailand using microfluidic device combined with real-time PCR
Achinya Phuakrod
Department of Microbiology, Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand
8. Genomic insights into the antibiotic resistance and virulence of human and swine related *Enterococcus faecalis*
Shiang Chiet Tan
University of Malaya, Malaysia

Tuesday 15 December 2020

**Lunch session: Recent knowledge of antibody and antibody enhancement
(Sponsored by MiCAN Technologies Inc.)**

11.20-12.20hr

Room E

Speakers

1. Expression of nucleic acid-encoded human monoclonal antibody against dengue virus by electroporation *in vivo*
Surachet Benjathummarak
Mahidol University, Thailand
2. Vaccine development and antibody dependent enhancement of SARS-CoV-2
Tatsuo Shioda
Osaka University, Japan
3. Introduction of cMylc cell for SARS-CoV-2 research
Jun Shimizu
MiCAN Technologies Inc., Japan

Tuesday 15 December 2020

**S7: The research and control for COVID-19 in Taiwan
(Sponsored by National Yang Ming University)**

12.30-14.00hr

Room A

Chairperson:

Steve Hsu-Sung Kuo

Invited speakers:

1. COVID-19 in Taiwan: democracy, technology and civil society
Wen-Chen Chang
National Chiao Tung University School of Law, Taiwan, R.O.C.
2. Strategies for COVID-19 control in Taiwan
Kuang-Yao Yang
School of Medicine, National Yang-Ming University, Taiwan, R.O.C.
3. Mask or non-mask? Robust face detection with/without facial masks
Hong-Han Shuai
National Chiao Tung University, Taiwan, R.O.C.
4. COVID-19 vaccine development in Taiwan, a case study
Chia En Lien
National Yang Ming University, Taiwan, R.O.C

12.30-14.00hr

Room B

Chairpersons:

1. **Norman Waters**
2. **Mariusz Wojnarski**

Invited speakers:

1. The emerging threat of mutant parasites causing malaria rapid diagnostic test failures
Qin Cheng
ADFMIDI, Australia
2. Hemozoin-based diagnostics for point-of-care early malaria detection in resource limited settings
David Bell
Hemex Health, United States
3. Advances in antigen detection, new ways of thinking about malaria diagnostics performance
Gonzalo Domingo
PATH, United States
4. Clinical evaluation of the BioFire global fever panel: a multiplex diagnostic for malaria, chikungunya, dengue, and leptospirosis
Brian W. Jones
BioFire Defense, United States

12.30-14.00 hr

Room C

Chairperson:

Pornsawan Leungwutiwong

Invited speakers:

1. Host factors involved in chikungunya virus replication
Yusuke Maeda
Research Institute for Microbial Diseases, Osaka University
2. A novel sub-lineage of chikungunya virus East/Central/South African genotype Indian Ocean lineage caused sequential outbreaks in Bangladesh and Thailand
Juthamas Phadungsombat
Mahidol Osaka Center for Infectious Diseases (MOCID)
3. Improved rapid diagnosis test kits of chikungunya virus infection
Emi Nakayama
Research Institute for Microbial Diseases, Osaka University
4. Clinical management of chikungunya virus infection
Wirongrong Chierakul
Faculty of Tropical Medicine, Mahidol University

12.30-14.00hr

Room D

Chairpersons:

1. **Ganjana Lertmemongkolchai**
2. **Narisara Chantratita**

Invited speakers:

1. Melioidosis subunit vaccines: recent developments and future directions
Paul Brett
University of Nevada, Reno School of Medicine, United States
2. Identification and characterization of novel melioidosis vaccine candidates
Mary Burtnick
University of Nevada, Reno School of Medicine, United States
3. Hemolysin co-regulated protein 1 (Hcp 1) variant is associated with decreased virulence and low antigenicity in *Burkholderia pseudomallei*
Sarunporn Tandhavanant
Faculty of Tropical Medicine, Mahidol University, Thailand
4. Human immune response to vaccine candidate antigens in a melioidosis-endemic area in Thailand
Sineenart Sengyee
Faculty of Tropical Medicine, Mahidol University, Thailand

12.30-14.00hr

Room E

Chairperson:

Suparat Phuanukoonnon

Invited speaker:

1. Reported acceptability and feasibility of mass administration of primaquine in field sites in Thailand and Myanmar
Daniel Parker
University of California, Irvine, United States
2. Forest-going, malaria and prophylaxis: preliminary results from a multi-site qualitative study in Cambodia, Laos and Thailand
Christopher Pell
Amsterdam Institute for Global Health and Development, Netherlands
3. Understanding malaria preventive practices among border population in western Thailand: association between migration patterns and malaria prevention
Suparat Phuanukoonnon
Faculty of Tropical Medicine, Mahidol University, Thailand

14.10-15.40hr

Room A

Chairpersons:

1. Pornpan Pumirat
2. Muthita Vanaporn

Speakers:

1. Anosmia and ageusia are characteristic to COVID-19: a case report
Hisham Ahmed Imad
Mahidol-Osaka Center for Infectious Diseases, Thailand
2. Modelling the optimal timeliness and coverage of contact tracing and containment for the COVID-19 epidemic control in Thailand
Parinda Wattanasri
Centre for Global Health and Tropical Medicine, Nuffield Department of Medicine, University of Oxford, United Kingdom
3. Effects of covid-19 government travel restrictions on mobility in a rural area along the Thai-Myanmar border
Peter Haddawy
Mahidol University, Thailand
4. Epidemiology of melioidosis: a 62 months retrospective study from a teaching hospital in Kuala Lumpur, Malaysia
Vanitha Mariappan
Universiti Kebangsaan Malaysia, Malaysia
5. Human–animal–water–source interactions and leptospirosis in Thailand
Udomsak Narkkul
Department of Tropical Hygiene, Faculty of Tropical Medicine, Mahidol University, Thailand
6. Decision making, consent and perceptions of research: a qualitative case study from Northern Thailand
Nipaphan Kanthawang
Mahidol-Oxford Tropical Medicine Research Unit, Thailand
7. UHPLC-ESI-QTOF-MS/MS-based molecular networking guided isolation and dereplication of antimicrobial natural products of *Ventilago denticulate*
Muhaiminatul Azizah
Chulabhorn Graduate Institute, Chemical Biology Program, Chulabhorn Royal Academy, Thailand
8. A comparison of in vitro activity of flomoxef and current broad-spectrum antimicrobial agents against extended-spectrum β -lactamase-producing *Escherichia coli*
Soo Tein Ngoi
University of Malaya, Malaysia
9. A qualitative case study of vulnerability and agency in research participants' daily lives and their experiences of research
Rachel Greer
MORU, United Kingdom

14.10-15.40hr

Room B

Chairperson:

Mallika Imwong

Invited speakers:

1. Impact of malaria elimination on immunity and risk of malaria rebound in Myanmar
Aung Pyae Phyoo
Myanmar Oxford Clinical Research Unit, Myanmar
2. The protective effect of G6PD deficiency against severe malaria in Africa
James Watson
Shoklo Malaria Research Unit, Mahidol-Oxford Tropical Medicine Research Unit
3. The risk of hemolysis in glucose-6-phosphate dehydrogenase deficiency: genotype-phenotype association analysis
Usa Boonyuen
Department of Molecular Tropical Medicine and Genetics, Faculty of Tropical Medicine, Mahidol University

14.10-15.40hr

Room C

Chairperson:

1. **Ronald Enrique Morales Vargas**
2. **Jiraporn Ruangsittichai**

Speakers:

1. Wing morphometrics as a tool for identification of blow flies, *Lucilia* (Diptera: Calliphoridae)
Rutchanon Jitaree
Department of Parasitology, Faculty of Medicine, Chiang Mai University, Thailand
2. Collection performance of the new BG-Pro mosquito traps in various locations around the world
Jennifer McCaw
Biogents AG, Germany
3. Vector control in Indo-Pacific: developing a toolbox and improving access
Fred Yeomans
IVCC, United Kingdom
4. Utility of hot spot maps in local dengue surveillance in Quezon City, Philippines
John Robert Medina
Department of Epidemiology and Biostatistics, College of Public Health, University of the Philippine, Philippines
5. Characterization and functional analyses of dengue-specific memory CD8 t cells in healthy Thai subjects with HLA-B*38:02 allele
Laxmi Gurung
Department of Microbiology, Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand
6. Accuracy of dengue, chikungunya, and zika diagnoses by primary healthcare physicians in Tegucigalpa, Honduras
Maria Fernanda Avila Mejia
National Yang-Ming University, Taiwan

14.10-15.40hr

Room D

Chairpersons:

1. Punnee Pitisuttithum
2. Eileen Dunne

Invited speakers:

1. Injectable long-acting cabotegravir- an HIV prevention alternative?
Chaiwat Ungsedhapand
Thailand Ministry of Public Health - U.S. Centers for Disease Control and Prevention Collaboration, Thailand
2. PrEP implementation and demand generation in Thailand
Chomnad Manopaiboon
Centers for Disease Control and Prevention, Thailand, Thailand
3. Combination HIV prevention services among young men and transgender women selling or trading sex in Thailand, the COPE4 study
Andrew Hickey
Division of HIV/AIDS Prevention, U.S. Centers for Disease Control and Prevention, Atlanta, Georgia, United States
4. Assessing biological risk of HIV transmission in transgender women
Alexandra Schuetz
MHRP-AFRIMS, Thailand

14.10-15.40hr

Room E

Chairperson:

Weerawat Manosuthi

Invited speakers:

1. Adult: infection control: care and treatment
Weerawat Manosuthi and Lantharita Charoenpong
Ministry of Public Health, Thailand
2. Pediatric: infection control in pediatric
Visal Moolasart and Chaisiri Srijareonvijit
Ministry of Public Health, Thailand
3. Nursing care of critically ill COVID-19 in intensive care unit
 - Nursing care for patients on respirator
Rasamee Srico
Ministry of Public Health, Thailand
 - Nursing care for adult and pediatric
Putthiporn Limpanadusadee
Ministry of Public Health, Thailand
 - Site visit
Somtavil Umpornareekul
Ministry of Public Health, Thailand

15.40-17.10hr

Room A

Chairperson:

Anthony Jones

Invited speakers:

1. Impact of COVID-19 on the Armed Forces of the Philippines medical research and their role in the public health response
Paula Corazon Diones
Philippines-AFRIMS Virology Research Unit, Philippines
2. Evolution of a COVID-19 pandemic response: from the emergence of the disease to current priorities
Anthony Jones
Armed Forces Research Institute of Medical Sciences, Thailand
3. Evolvability of COVID-19 and its impact on genomic surveillance
Thanat Chookajorn
Faculty of Tropical Medicine, Mahidol University, Thailand
4. Effectiveness of various treatment regimens compared with standard of care in COVID-19 confirmed patients
Krittaecho Siripassorn
Bamrasnaradura Infectious Disease Institute, Ministry of Public Health, Thailand

15.40-17.10hr

Room B

Chairperson:

Francois Nosten

Invited speakers:

1. Progress towards *P. falciparum* malaria in Kayin State
Jade Rae
Shoklo Malaria Research Unit (SMRU), Thailand
2. Artemisinin resistance markers during elimination of *P. falciparum* in Kayin State
Aung Myint Thu
Shoklo Malaria Research Unit (SMRU), Thailand
3. Importance of community engagement for malaria elimination
Saw Winn
Shoklo Malaria Research Unit (SMRU), Thailand
4. Environment analysis and surveillance to improve malaria elimination strategy: the EASIMES project
Jordi Landier
Aix Marseille Univ, INSERM, IRD, SESSTIM, Marseille, France

15.40-17.10hr

Room C

Chairpersons:

1. **Punnee Pitisuttithum**
2. **Jerome Kim**

Invited speakers:

1. Enteric disease vaccine
Jerome Kim
The International Vaccine Institute (IVI)
2. Chikungunya vaccine
Anh Wartel
The International Vaccine Institute (IVI)
3. HIV cure developments
Eugene Kroon
SEARCH, Institute of HIV Research and Innovation, Thailand

15.40-17.10hr

Room D

Chairperson:

Matthew Reed

Invited speakers:

1. *Burkholderia pseudomallei* in soil and water

Alain Pierret

French Research Institute for Sustainable Development (IRD), Lao PDR

2. Co-evolutionary signals from *Burkholderia pseudomallei* population genomics highlight its survival strategy in a hostile environment

Claire Chewapreecha

Mahidol-Oxford Tropical Medicine Research Unit, Thailand

3. Melioidosis in animals

Matthew Reed

Armed Forces Research Institute for Medical Sciences, Thailand

4. Melioidosis prevention strategies

Direk Limmathurotsakul

Department of Tropical Hygiene, Faculty of Tropical Medicine, Mahidol University, Thailand

15.40-17.10hr

Room E

Chairpersons:

1. **Phaik Yeong Cheah**
2. **Wirichada Pan-ngum**

Invited speakers:

1. Economic and social impacts of COVID-19 public health measures: results from an online survey in five countries
Anne Osterrieder
Mahidol Oxford Tropical Medicine Research Unit, United Kingdom
2. Perspectives on public health interventions in the management of the COVID-19 pandemic in Thailand
Wirichada Pan-ngum
Mahidol-Oxford Tropical Medicine Research Unit, Faculty of Tropical Medicine, Mahidol University, Thailand
3. "Black Death, maintaining one's role and acceptance": the lived experience of COVID-19 among Thai people during the lock down period
Bhensri Naemiratch
Mahidol-Oxford Tropical Medicine Research Unit, Faculty of Tropical Medicine, Mahidol University, Thailand
4. Perceptions of COVID-19 public health measures: a mixed methods study from Malaysia
Phaik Kin Cheah
Universiti Tunku Abdul Rahman, Malaysia

17.10-18.40hr

Room A

Chairpersons:

1. **Katie Poole-Smith**
2. **Jodi Fiorenzano**

Invited speakers:

1. From count to abundance – applied hierarchical modeling in entomological surveillance
Wes McCardle
AFRIMS Entomology Thailand
2. Vector surveillance in Thailand
Thanyalak Fansiri
AFRIMS Thailand
3. Surveillance in the time of COVID: past, present, and a future case study in Mongolia
Katie Poole-Smith and Jodi Fiorenzano
AFRIMS/NAMRU-2 Thailand/Cambodia
4. *Aedes* mosquito surveillance in Phom Penh, Cambodia; during COVID-19 pandemic
Didot Prasetyo
NAMRU-2 Cambodia

17.10-18.40hr

Room B

Chairperson:

Jake Baum

Invited speakers:

1. Understanding the elusive *P. falciparum* development in liver cells
Annie Yang
Radboud University Medical Centre, Netherlands
2. New super-resolution and live imaging routines shed light on blood stage malaria parasites
Michal Pasternak
Walter and Eliza Hall Institute of Medical Research, Australia
3. Exploring the druggable landscape of *P. falciparum* gametocytes
Michael Delves
London School of Hygiene and Tropical Medicine, United Kingdom
4. Sex-specific genetic screens identify hundreds of *Plasmodium* fertility genes essential for the transmission of malaria parasites
Claire Sayers
Umea University, Sweden

17.10-18.40hr

Room C

Chairperson:

James Tibenderana

Invited speakers:

1. Health system and case management challenges during concurrent dengue and COVID-19 outbreaks
Lucy Lum Chai See
University of Malaya, Malaysia
2. Myanmar's response to compensate for COVID-19 challenges in dengue control
Nay Yi Yi Linn
Ministry of Health and Sports, Myanmar
3. Impact of COVID-19 on a dengue research project in Myanmar
Hans Overgaard
Norwegian University of Life Sciences & Khon Kaen University, Thailand
4. *Aedes*-borne diseases: building resilience against future threats
Leo Braack
Malaria Consortium, Thailand

17.10-18.40hr

Room D

Chairpersons:

1. Vanaporn Wuthiekanun
2. Narisara Chantratita

Invited speakers:

1. The double burden of diabetes and global infection
Susanna Dunachie
University of Oxford, United Kingdom
2. Tactical implementation of melioidosis research in Myanmar Army Medical Corps
Tin Maung Hlaing
Defence Services Medical Academy (DSMA), Myanmar
3. Melioidosis in the Lao PDR
Andrew Simpson
Lao-Oxford-Mahosot Hospital-Wellcome Trust Research Unit (LOMWRU), Microbiology Laboratory, Mahosot Hospital, Vientiane, Lao PDR
4. "India is the hotspot for melioidosis!" - are you serious?
Chiranjay Mukhopadhyay
Department of Microbiology, Kasturba Medical College, Manipal, India

17.10-18.40hr

Room E

Chairpersons:

1. **Phaik Yeong Cheah**
2. **Christopher Pell**

Invited Speakers

1. An introduction to the Sonar-Global Network and its ongoing efforts in AMR and infectious diseases
Tamara Giles-Vernick
Institut Pasteur, France
2. Capacity building efforts on the social dimensions of AMR
Danny de Vries
Amsterdam Institute for Global Health and Development (AIGHD)
3. AMR in Vietnam – a one health perspective
Sonia Odette Lewycka
Oxford Clinical Research Unit, Hanoi, Vietnam
4. Why do people purchase antibiotics over-the-counter? A qualitative study with patients, medical practitioners and dispensers in central, eastern and western Nepal
Bipin Adhikari
Mahidol-Oxford Tropical Medicine Research Unit, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand

8.30-10.00hr

Room A

Chairpersons:

1. **Narisara Chantratita**
2. **Pornrutsami Jintaridth**

Invited speakers:

1. Phytochemicals and the human microbiome: from epigenetic regulation to drug discovery
Amandio Vieira
Simon Fraser University, Canada
2. Short chain fatty acid from natural microbiome in fermented soybean food: inhibition of histone deacetylase activity against COVID-19
Pornrutsami Jintaridth
Department of Tropical Nutrition and Food Science, Mahidol University, Thailand
3. Seaweed components influence gut microbiota and short chain fatty acid production
Suvimol Charoensiddhi
Department of Food Science and Technology, Faculty of Agro-Industry, Kasetsart University, Thailand
4. Natural products and derivatives against SARS-CoV-2
Prasat Kittakoop
Chulabhorn Graduate Institute, Thailand

08.30-10.00hr

Room B

Chairperson:

Wang Nguitragool

Invited speakers:

- 1 Mosquito infectivity of *Plasmodium vivax*
Wang Nguitragool
Faculty of Tropical Medicine, Mahidol University, Thailand
- 2 Investigating the asymptomatic infectious reservoir in coastal Tanzania using skin feeding assays
Jessica Lin
University of North Carolina, United States
- 3 Contribution of asymptomatic *Plasmodium* infections to the transmission of malaria in Kayin State, Myanmar
Victor Chaumeau
Shoklo Malaria Research Unit, Thailand

08.30-10.00hr

Room C

Chairpersons:

1. Luis Lugo
2. Piyanate Sunyakumthorn

Invited speakers:

1. Why is the development of a long-lasting and broadly protective scrub typhus vaccine so elusive?
Allen Richards
Uniformed Services University of the Health Sciences, United States
2. A nonhuman primate model for scrub typhus
Piyanate Sunyakumthorn
Armed Forces Research Institute of Medical Sciences, Thailand
3. Development of scrub typhus vaccine
Nam-Hyuk Cho
Seoul National University, Republic of Korea

08.30-10.00hr

Room D

Chairperson:

Samandra Demons

Invited Speakers:

1. Antimicrobial-resistant *Campylobacter* and its ecological fitness
Taradon Luangtongkum
Chulalongkorn University, Thailand
2. A looming threat: colistin resistance in *Acinetobacter baumannii*
Iyarit Thaipisutikul
Mahidol University, Thailand
3. The growing threat of multi-drug resistant gonorrhoea
Kelly Hourihan
Walter Reed Army Institute of Research, Georgia
4. Development of fixed phage cocktails in the fight against multidrug-resistant organisms
Damon Ellison
Walter Reed Army Institute of Research, United States

08.30-10.00hr

Room E

Chairpersons:

1. **Khanchit Limpakarnjanarat**
2. **Pahurat Kongmuang Taisuwan**

Invited speakers:

1. CCSA spokesperson sharing experience: building trust and telling truth
Taweesilp Visanuyothin and Natapanu Nopakun
Ministry of Public Health, Thailand; Department of Information, Ministry of Foreign Affairs
2. How to manage infodemic regarding COVID-19 outbreak in SEARO?
Supriya Bezbaruah
World Health Organization Regional Office for South-East Asia
3. COVID-19 response of governments in journalist view
Jason Gale
Bloomberg News
4. How to achieve million followers and make them stunning in social platforms concerning COVID-19
Pahurat Kongmuang Taisuwan
Bureau of Risk Communication and Health Behavior Development, Department of Disease Control

JITMM2020

Wednesday 16 December 2020

Sponsored session: Introducing the Royal Society of Tropical Medicine and Hygiene

10.00-10.15hr

Speaker: Tamar Ghosh

Chief Executive, Royal Society of Tropical Medicine and Hygiene, United Kingdom

10.15-11.45hr

Room A

Chairperson:

Usa Thisyakorn

Invited speakers:

1. Pandemic and prevention of COVID-19
Terapong Tantawichien
Faculty of Medicine Chulalongkorn University
2. Clinical manifestations and antiviral treatment
Viravarn Luvira
Faculty of Tropical Medicine, Mahidol University
3. Respiratory management of COVID-19
Chaisith Sivakorn
Faculty of Tropical Medicine, Mahidol University
4. Hemodynamic and critical care support in severe COVID-19
Nattchai Srisawat
Faculty of Medicine Chulalongkorn University
5. ICU management of COVID-19 patients: experience at Siriraj Hospital
Ranistha Ratanarat
Faculty of Medicine Siriraj Hospital, Mahidol University

10.15-11.45hr

Room B

Chairpersons:

1. **Norman Waters**
2. **Michele Spring**

Invited speakers:

1. *Plasmodium vivax* CHMI
Anjali Yadava
Walter Reed Army Institute of Research (WRAIR), United States
2. *Plasmodium vivax* biomarker study in Thailand
Michele Spring
Armed Forces Research Institute of Medical Sciences, Thailand
3. Strategy to define and develop the appropriate challenge of *Plasmodium falciparum*
Kirsten Lyke and Joana Da Silva
University of Maryland, Center for Vaccine Development and Global Health, United States
4. Understanding the social and ethical implications of controlled human malaria infection study in Kenya: an embedded empirical ethics study
Primus Che Chi
KEMRI-Wellcome Trust Research Programme, Kenya

10.15-11.45hr

Room C

Chairperson:

Stefan Fernandez

Invited speakers:

1. Evidence of stable endemicity of chikungunya virus in Southern Thailand
Stefan Fernandez
Armed Forces Research Institute of Medical Science, Thailand
2. Familial dengue transmission from prospective family cohort study in Kamphaeng Phet, Thailand; case studies in household transmission
Darunee Buddhari
USAMD-AFRIMS, Thailand
3. Mast cell tryptase as a predictive biomarker for developing severe dengue
Robert Hontz
NAMRU-2, Singapore
4. *In vitro* evidence of ivermectin as a inhibitory of arbovirus replication
Taweewun Hunsawong
USAMD-AFRIMS, Thailand

Wednesday 16 December 2020

**S35: Research work in Lao PDR under Her Royal Highness Princess
Maha Chakri Sirindhorn Project (Thai session)**

10.15-11.45hr

Room D

Chairpersons:

1. Prawat Nitiyanant
2. Teera Kusolsuk

Invited speakers:

1. Factors associated with diarrhea in children age 1-5 years old in Long Hospital, Long District, Luang Namtha Province, Lao PDR.
Souphasay Singngam
Long Hospital, Luang Namtha Province, Lao PDR
2. Incidences of sarcocystis in market beef and Pork in Vientiane, Lao PDR
Nalita Xaysanasy
Mittaphab Hospital, Ministry of Health, Vientiane, Lao PDR
3. Quantity and quality of breast milk of Laotian lactating women
Kitti Sranacharoenpong
Institute of Nutrition, Mahidol University, Thailand

**S36: Emergency Operation Center and function in the national response to COVID-19
(Thai/Eng session)**

10.15-11.45hr

Room E

Chairperson:

Pornpitak Panlar

Invited speakers:

1. Emergency Operation Center and function in the national response to COVID-19
Jessada Thanakitjaroenkul
Ministry of Public Health, Thailand
2. National response plan and measure for COVID-19
Darin Areechokchai
Ministry of Public Health, Thailand
3. Logistics and stockpile management in comprehensive COVID-19 program
Apichai Pojlertaroon
Ministry of Public Health, Thailand
4. Digital engagement to capture and control COVID-19
Yongjua Laosiritaworn
Ministry of Public Health, Thailand
5. Legal aspect in the management of national COVID-19 response
Suthinee Manosamoot
Ministry of Public Health, Thailand
6. Mitigation program for affected COVID-19
Chakrarat Pittayawonganon
Ministry of Public Health, Thailand

11.50-12.50hr

Room A

Chairpersons:

1. Aongart Mahittikorn
2. Supaluk Popruk

Speakers:

1. The potential involvement of bats (Chiroptera) in enzootic transmission of Japanese encephalitis virus in West Kalimantan, Indonesia
Ajib Diptyanusa
Universitas Gadjah Mada, School of Medicine, Indonesia
2. Risk factors for zoonotic helminths among domestic animals in Agusan del Sur and Surigao del Norte: implications for public health
Sheina Macy Manalo
Department of Veterinary Paraclinical Sciences, College of Veterinary Medicine, University of the Philippines, Philippines
3. Impacts of farming practices on food safety: parasite contamination of vegetable farms
Constance Aurelle Ramirez
University of the Philippines Los Banos, Philippines
4. *Paragonimus westermani* infection of freshwater crab *Sundathelphusa philippina* and *melaniid* snails in Cadacac River in Irosin, Sorsogon, Philippines
Jasmin Ayyah Samudio
Parasitology Research Laboratory, Animal Biology Division, Institute of Biological Sciences, College of Arts and Sciences, University of the Philippines Los Baños, Philippines
5. Incidence and risk factors associated with parasite soil contamination in selected rural communities in Caraga Region, Philippines
Kim Louise Patagnan
UPLB-IBS, Philippines
6. Socio-economic determinants of intestinal helminth infections in selected rural communities of Mindanao, Philippines
Anna Monica B. Dancel
Animal Biology Division, Institute of Biological Sciences, University of the Philippines Los Banos, Philippines
7. Remaining pockets of high endemicity of schistosomiasis and soil-transmitted helminthiasis in selected communities in Agusan del Sur and Surigao del Norte, the Philippines
Vicente Belizario Jr
Department of Parasitology, College of Public Health, University of the Philippines Manila, Philippines
8. ColoSSos project- detecting SARS-CoV-2 in Victoria wastewater under the COVID pandemic response
Aaron Jex
Walter and Eliza Hall Institute, Australia

11.50-12.50hr

Room B

1. Field evaluation of automatic new diagnostic CellCheck® in comparison to standard microscopy for detection of malaria from clinical suspected cases in Lampung Province, Indonesia
Ayleen Kosasih
University of Indonesia, Indonesia
2. Understanding heterogeneity of malaria infection at the village and household level in two serial cross-sectional surveys in Papua New Guinea
Desmond Gul
Burnet Institute, Australia
3. Molecular surveillance of dihydroartemisinin piperaquine resistance markers in Thailand
Khine Nwe Win
Mahidol University, Thailand
4. A first molecular evidence of *Plasmodium*-inhibiting *Wolbachia* strain in *Anopheles*
Kasem Kulkaew
Faculty of Medicine Siriraj Hospital Mahidol University, Thailand
5. Making malaria notifiable: testing and treating every case to eliminate the disease
Marie Lamy
Asia Pacific Leaders Malaria Alliance, Singapore
6. Genetic variations in histidine-rich protein 2 and histidine-rich protein 3 of Myanmar *Plasmodium falciparum* isolates
Huong Giang Le
Department of Parasitology and Tropical Medicine, and Institute of Health Sciences, Gyeongsang National University, Korea
7. Genetic polymorphism and natural selection of circumsporozoite surface protein in Vietnam
Tuan Cuong Vo
Department of Convergence Medical Science, Gyeongsang National University, Korea
8. Effects of KAE609 and KAF156 on cytoadhesion of *Plasmodium falciparum*
Srisuda Keayarsa
Department of Clinical Tropical Medicine, Faculty of Tropical Medicine, Mahidol University, Thailand
9. Continued improvements in the accuracy of antimalarial drug level measurements: results from 10 years of proficiency testing conducted by WWARN
Ranitha Vongpromek
Infectious Diseases Data Observatory (IDDO) & Worldwide Antimalarial Resistance Network (WWARN), Thailand
10. Deforestation and malaria in Lao PDR: spatial epidemiology using earth observation satellite data
Emilie Louise Akiko Matsumoto-Takahashi
National Center for Global Health and Medicine (NCGM), Tokyo, Japan

11.50-12.50hr

Room C

1. Causal relationship model of zika prevention behavior
Sawanya Siriphakhamongkhon
Office of Disease Prevention and Control 3, Nakhon Sawan Province, Department of Disease Control, Thailand
2. Anti-dengue activity of *Dendrocalamus sericeus* ethanolic crude extract
Jundee Rabablert
Silpakorn University, Thailand
3. Coverage and utilization of bed nets among population at risk of malaria living along Thai-Myanmar border in Tak Province, Thailand
Kasama Pooseesod
Faculty of Tropical Medicine, Mahidol University, Thailand
4. Village-scale analysis of malaria dynamics in a malaria elimination program: identification of factors associated to local heterogeneity
Eva Legendre
Aix Marseille Univ, IRD, INSERM, SESSTIM, Marseille, France
5. Study on diversity and habitat preferences of Phlebotomine sand flies in Cambodia
Nin Noch
U.S. Naval Medical Research Unit TWO Cambodia
6. Overall prevalence and distribution of knockdown resistance (kdr) mutations in a natural population of *Aedes aegypti* in Mandalay region, Myanmar
Haung Naw
Gyeongsang National University College of Medicine. South Korea
7. A multiplex PCR based on mitochondrial COI sequence for identification three groups of *Anopheles subpictus* complex in Thailand
Parinya Wilai
Chiang Mai University, Thailand
8. Towards the development of bio-acoustic sensors for adult mosquito vector counts in Thailand: analysis of mosquito wingbeat audio signals
Myat Su Yin
Faculty of ICT, Mahidol University, Thailand
9. Health literacy and zika virus disease among the reproductive age women in upper central region of Thailand
Samran Siriphakhamongkhon
Office of Disease Prevention and Control 3, Nakhon Sawan Province. Department of Disease Control Thailand

10. Point mutations in the voltage-gated sodium channel gene of pyrethroid -resistant *Aedes aegypti* mosquitoes and their insecticide susceptibility

Jakkrawarn Chomposri

National Institute of Health, Department of Medical Sciences, Thailand

11. Chemical composition and mosquitocidal activity of *Cymbopogon citratus* essential oil against *Aedes aegypti* from dengue and chikungunya risk areas

Chayada Khamsawas

National Institute of Health, Department of Medical Sciences, Thailand

11.50-12.50hr

Room D

1. Distribution of *Burkholderia pseudomallei* sequence types (ST) in Malaysia (1964-2019) and the emergence of ST1342
Polly Soo Xi Yap
University of Malaya, Malaysia
2. Typing and molecular characterization of carbapenem-resistant *Acinetobacter baumannii* isolates from a nosocomial outbreak in a tertiary teaching hospital
Jia Jie Woon
University of Malaya, Malaysia
3. Prevalence of carbapenemase-producing *Pseudomonas aeruginosa* strains from a Malaysian tertiary hospital
Kalaivani Kalai Chelvam
University Malaya, Malaysia
4. Molecular epidemiology of non-carbapenemase-producing carbapenem-resistant *Klebsiella pneumoniae* isolated in Malaysia
Yee Qing Lee
University of Malaya, Malaysia
5. VtrN suppresses expression of type III secretion system 2 in *Vibrio parahaemolyticus*
Sarunporn Tandhavanant
Faculty of Tropical Medicine, Mahidol University, Thailand
6. Association of phylogroups with resistance profiles of *Escherichia coli* isolates from asymptomatic bacteriuria in pregnant women
Lalitha Maniam
University of Malaya, Malaysia
7. Molecular investigation of carbapenem-resistant *Enterobacteriaceae* isolated from a tertiary teaching hospital in Malaysia
Zhi Xian Kong
University of Malaya, Malaysia
8. Projecting impacts of short course multidrug-resistant tuberculosis in South-East Asia Region using a mathematical model
Win Min Han
Department of Tropical Hygiene, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand

11.50-12.50hr

Room E

Chairperson:

1. **Dorn Watthanakulpanich**
2. **Urusa Thaenkham**

Speakers:

1. Epidemiological surveillance and holistic intervention targeting intestinal parasitic infection in the endemic area
Aulia Rahmi Pawestri
Department of Protozoology, Faculty of Tropical Medicine, Mahidol University, Thailand
2. Epidemiology, clinical presentations and treatment outcome of *Strongyloides stercoralis* infection in a tertiary care hospital, Kuala Lumpur Malaysia
Azlin Muhammad
Universiti Kebangsaan Malaysia, Malaysia
3. Coverage evaluation of mass drug administration for elimination of schistosomiasis in Sigi and Poso District, Indonesia
Helena Uliyartha Pangaribuan
National Institute of Health Research and Development, MoH RI, Indonesia
4. Knowledge and prevalence of helminthiasis in expectant mothers in Malang Indonesia
Yulia Dwi Setia
Parasitology Department Faculty of Medicine Universitas Brawijaya, Indonesia
5. Real-world long-term human papillomavirus vaccine effectiveness in Thai adult women
Ga Young Lee
Faculty of Tropical Medicine, Mahidol University, Thailand
6. Will citizen science change human behavior towards infectious disease control?
Mika Saito
Graduate School of Medicine, University of the Ryukyus, Japan
7. The effects of valproic acid on the biosynthesis of fatty acids and polyketides in microorganisms
Prapassorn Poolchanuan
Chulabhorn Research Institute, Thailand

13.00-14.30hr

Room A

Chairpersons:

1. Ivo Mueller
2. Chris Drakeley

Invited Speakers:

1. *P. vivax* serology: a tool to identify and target potential hypnozoite carriers
Rhea Longley
The Walter and Eliza Hall Institute of Medical Research, Australia
2. VAR2CSA serology to detect *P. falciparum* transmission patterns
Alfredo Mayor
Barcelona Institute for Global Health, Spain
3. Using health facility-based serological surveillance to predict receptive areas at risk of malaria outbreaks in elimination areas
Henry Surendra
Eijkman-Oxford Clinical Research Unit, Indonesia
4. Applying malaria serological surveillance techniques to COVID-19
Michael White
Institut Pasteur, France

13.00-14.30hr

Room B

Chairperson: Luis Lugo**Invited speakers**

1. Aotus monkeys as a model for human malaria (*P. vivax*, *P. falciparum*) infections
Fiona McCallum
Australian Defence Force Malaria and Infectious Disease Institute, Australia
2. Rhesus monkey models for drug discovery in malaria at WRAIR
Gregory Reichard
Walter Reed Army Institute of Research, United States
3. Immune protection in a relapsing *P. cynomolgi* rhesus model
Sathit Pichyangkul
USAMD-AFRIMS, Thailand
4. A humanized mouse model for *Plasmodium vivax* to test interventions that block liver stage to blood stage transition and blood stage infection
Carola Schaefer
Seattle Children's Research Institute, United States

13.00-14.30hr

Room C

Chairperson:

Terapong Tantawichien

Invited speakers:

1. Overview and management of dengue infection
Terapong Tantawichien
Faculty of Medicine Chulalongkorn University
2. Pulmonary complication in dengue patients
Chaisith Sivakorn
Faculty of Tropical Medicine, Mahidol University
3. Acute kidney injury and renal replacement therapy
Weerapong Phumratanaprapin
Faculty of Tropical Medicine, Mahidol University
4. Fluid management, hemodynamic, critical care and CRRT support
Nattachai Srisawat
Faculty of Medicine Chulalongkorn University
5. Severe dengue case demonstration
Wiwat Chanchaoenthana
Faculty of Tropical Medicine, Mahidol University

13.00-14.30hr

Room D

Chairpersons:

1. **Santi Maneewatchararangsri**
2. **Supachai Topanurak**

Invited speakers:

1. Innovation roadmap, ecosystem and management in Thailand
Nathasit Gedsri
College of Management, Mahidol University
2. From natural product research to innovative medical devices
Supayang Voravuthikunchai
Natural Product Research Center of Excellence, Prince of Songkla University
3. Novel innovation in cancer immunotherapy
Suradej Hongeng
Faculty of Medicine Ramathibodi Hospital, Mahidol University

13.00-14.30hr

Room E

Chairperson:

Chawetsan Namwat

Invited speakers:

1. Surveillance: process and data management from local to central level
Walairat Chaifoo
Ministry of Public Health, Thailand
2. Field epidemiologists' responses and capacities
Phanthanee Thitichai
Ministry of Public Health, Thailand
3. COVID-19 infection in pub bar cluster, Thailand
Rapeepong Suphanchaimat
Ministry of Public Health, Thailand
4. COVID-19 outbreak investigation at a boxing stadium in Thailand
Nichakul Pisitpayat
Ministry of Public Health, Thailand
5. COVID-19 infection among Dawah group in Thailand
Farooq Phiriyasart
Ministry of Public Health, Thailand

14.40-16.10hr

Room A

Chairpersons:

1. **Jodie McVernon**
2. **Wirichada Pan-ngum**

Invited speakers:

1. Assessment of social distancing strategies against COVID-19 by mathematical modelling in Thai setting
Wirichada Pan-ngum
Mahidol-Oxford Tropical Medicine Research Unit, Faculty of Tropical Medicine, Mahidol University, Thailand
2. Modelling to support pandemic response in Australia
Jodie McVernon
The Peter Doherty Institute for Infection and Immunity, Australia
3. Real-time modelling for pandemic control in Malaysia and the Philippines
James Trauer
Monash University, Australia
4. COVID-19 pandemic modelling in context: uniting people and technology across nations
Lisa White
University of Oxford, United Kingdom

14.40-16.10hr

Room B

Chairpersons:

1. Ivo Mueller
2. Leanne Robinson

Invited Speakers:

1. Forest malaria in Cambodia: the occupational and spatial clustering of malaria infection risk in a cross-sectional survey in Mondulhiri, Cambodia
Mirco Sandfort
Institut Pasteur Paris, France
2. The epidemiology of declining and re-surgling *P. falciparum* and *P. vivax* in Papua New Guinea
Leanne Robinson
Burnet Institute; WEHI & PNGIMR, Australia
3. Decreased bioefficacy of long-lasting insecticidal nets and the resurgence of malaria in Papua New Guinea
Stephan Karl
Australian Institute of Tropical Health and Medicine, James Cook University, Australia
4. Improving primaquine treatment for *P. vivax* malaria
Kamala Ley-Thriemer
Menzies School of Health Research, Australia
5. Tafenoquine: a silver bullet for *P. vivax* elimination?
Narimane Nekkab
Institut Pasteur, France

14.40-16.10hr

Room C

Chairpersons:

1. Yupaporn Wattanagoon
2. Wirongrong Chierakul

Invited speakers:

1. **Viravarn Luvira**
Department of Clinical Tropical Medicine, Faculty of Tropical Medicine, Mahidol University
2. **Chaisith Sivakorn**
Department of Clinical Tropical Medicine, Faculty of Tropical Medicine, Mahidol University
3. **Jittima Dhitavat**
Department of Clinical Tropical Medicine, Faculty of Tropical Medicine, Mahidol University
4. **Supitcha Kamolratanakul**
Department of Clinical Tropical Medicine, Faculty of Tropical Medicine, Mahidol University

14.40-16.10hr

Room D

Chairperson:

Francois Nosten

Invited speakers:

1. TB/DR-TB control activities during COVID-19 pandemic by National TB Programme, Myanmar
Cho Cho San
National Tuberculosis Programme, Myanmar
2. Childhood tuberculosis treatment outcomes and mortality risk factors within a migrant population at the Thailand-Myanmar border, 2013-2018
Amy Carroll
Barts Health NHS Trust, London, United Kingdom
3. Mortality in migrants with tuberculosis on the Thai-Myanmar border
Banyar Maung Maung
Shoklo Malaria Research Unit, Thailand
4. Tuberculosis in unregistered migrants from Myanmar
Htet Ko Ko Aung
Shoklo Malaria Research Unit, Thailand

Wednesday 16 December 2020

**S46: Capturing of COVID-19 cases travelling from high risk countries at port of entry, state and local quarantine, and development of national laboratory services
(Thai/Eng session)**

14.40-16.10hr

Room E

Chairperson:

Suksont Jittimane

Invite speakers:

1. Control measures of COVID-19 at international ports of Thailand
Chollasap Sharma
International Communicable Disease Control, Don Meang Airport, Division of Port Health
2. Arrangement of state quarantine best practice and experience from Thailand
Suksont Jittimane
Institute for Urban Disease Control and Prevention
3. Development of national COVID-19 laboratory system
Pilailuk Akkapaiboon Okada
National Institute of Health, Department of Medical Sciences, Nonthaburi, Thailand
4. Prompt response from zero to hundred percentage to be national laboratory reference for COVID-19: an experience from Bangkok
Kamolthip Atsawawanunt
Institute for Urban Disease Control and Prevention

16.10-17.40hr

Room A

Chairpersons:

1. **Wirongrong Chierakul**
2. **Prakaykaew Charunwatthana**

Invited speakers:

1. Facing COVID-19 situation in the UK
Simon Peter Boyd
Department of Gastroenterology, Luton and Dunstable Hospital, Bedfordshire, UK
2. Facing COVID-19 situation in Sudan and Saudi Arabia
Mohammed Yasein Elamin
Ministry of Health, Saudi Arabia
3. Facing COVID-19 situation in Nepal
Anup Bastola
Sukraraj Tropical and Infectious Disease, Hospital Teku, Kathmandu, Nepal
4. A public health perspective of COVID-19 from Nepal
Biraj Karmacharya
Department of Public Health, Kathmandu University, School of Medical Sciences, Kathmandu, Nepal
5. Facing COVID-19 situation in Japan
Yoshiro Hadano and Hirotake Mori
Tokyo Medical and Dental University; Department of General Medicine, Juntendo University
6. Facing COVID-19 situation in Malaysia
Muhamad Yazli Yuhana
UiTM Medical Specialist Centre

S48: Ivermectin for malaria: characterizing pharmacokinetics, metabolites and impacts on *Anopheles* and *Plasmodium*

16.10-17.40hr

Room B

Chairpersons:

1. Kesinee Chotivanich
2. Joel Tarning

Invited speakers:

1. Ivermectin and its metabolites
Phornpimon Tiphara Wong
Mahidol Oxford Tropical Medicine Research Unit, Thailand
2. Ivermectin metabolites and *Anopheles*
Kevin Kobylinski
Armed Forces Research Institute of Medical Sciences, Department of Entomology, Thailand
3. Ivermectin metabolite pharmacokinetics
Richard Høglund
Mahidol-Oxford Tropical Medicine Research Unit, Faculty of Tropical Medicine, Mahidol University, Thailand
4. Ivermectin and artemisinin resistant *Plasmodium falciparum*
Achaporn Yipsirimetee
Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand

16.10-17.40hr

Room C

Chairperson:

Pongrama Ramasoota

Invited speakers:

1. RGD-AAV bacteriophage delivery system for vaccine and therapeutic development
Amin Hajitou
Imperial College, London, United Kingdom
2. *In silico* and *in vitro* analysis of small molecules and natural compounds targeting feline coronavirus (CoV) main protease, a surrogate platform for CoVs
Sirin Theerawatanasirikul
Faculty of Veterinary Medicine, Kasetsart University, Thailand
3. Therapeutic antibody against dengue virus: toward commercialization
Pongrama Ramasoota
Center of Excellence for Antibody Research, Faculty of Tropical Medicine, Mahidol University, Thailand
4. Characterization of human anti-dengue NS1 monoclonal antibodies derived from Thai DENV2 patients
Pannamthip Pitaksajakul
Center of Excellence for Antibody Research, Faculty of Tropical Medicine, Mahidol University, Thailand

16.10-17.40hr

Room D

Chairperson:

Jonas Schmidt-Chanasit

Invited speakers:

1. Sars-CoV-2 vaccine development: progress and challenges
Marylyn Addo
University of Hamburg, Germany
2. Lassa fever in Africa
Stephan Guenther
Bernhard Nocht Institute for Tropical Medicine, Germany
3. Sars-CoV-2 animal models
Martin Beer
Friedrich-Loeffler-Institut, Germany

Wednesday 16 December 2020

**S51: COVID-19 response in relation to other disease control program
(Thai/Eng session)**

16.10-17.40hr

Room E

Chairperson:

Wanna Hanshaoworakul

Invited speakers:

1. Developing tools for enhancing the surveillance of bat-borne pathogens in livestock and surveillance of COVID-19 in animals
Weerapong Thanapongtharm
Bureau of Disease Control and Veterinary Services, Department of Livestock Development, Thailand
2. The new normal: prevention and control of non-communicable diseases in the COVID-19 mitigating
Sasithorn Tungsawat
Division of Non Communicable Disease, Department of Disease Control, MOPH
3. Tobacco control program and COVID-19
Chayanan Sittibusaya
Office of Tobacco Products Control Committee, DDC, MOPH
4. TB control and COVID-19
Phalin Kamolwat
Division of Tuberculosis Department of Disease Control, MOPH
6. HIV, STIs and COVID – 19: impact on sex workers and people living with HIV
Taweasap Siraprapasiri and Surang Janyam
Disease Control Department of the Ministry of Public Health; Workers in Group (SWING) Foundation

17.40-18.40

Chairperson:

Weerapong Phumratanaprapin

Keynote Speaker

Recent advances in antiparasitic chemotherapy

Prof. Sir Nicholas White

Professor of Tropical Medicine, Mahidol University and University of Oxford