

Day One: Monday 27th May 2019

08:00 - 08:30 Arrival of Guests & Registration
08:30 - 09:00 Welcome & Opening Address
09:00 - 09:45

Keynote Lecture

Chair: Yunn Hwen GAN, National University of Singapore
Ken ISHII, The University of Tokyo, Japan
Nuclear cytokines and extracellular nucleic acids in infection and vaccination

09:45 - 10:15 **Tea Break**

Session I: Host-Pathogen Interactions-I

Chair: Sylvie ALONSO, National University of Singapore

Plenary 1

10:15 - 10:45 Koya ARIYOSHI, Nagasaki University-LSHTM, Japan
Infectious disease research at San Lazaro Hospital in Manila, Philippines

10:45 - 11:05 Cevayir COBAN, Osaka University, Japan
Mysterious interactions between Plasmodium parasites and their host

11:05 - 11:25 Shin-Ichi INOUE, Nagasaki University, Japan
Roles of $\gamma\delta$ T cells in protective immunity to Malaria

11:25 - 11:45 Yunn Hwen GAN, National University of Singapore
Bacterial induced-cell fusion triggers genomic instability and cGAS-STING induced host cell death

11:45 - 12:00 Mun Keat CHONG, Merck
The roles of 3D cell culture in infectious disease

12:00 - 13:00 **Lunch Break**

Session II: Host-Pathogen Interactions-II

Chair: Paul MACARY, National University of Singapore

Plenary 2

13:00 - 13:30 Qingqing WANG, Zhejiang University, China
E3 ligase FBXW7 regulates innate immunity and Inflammation

13:30 - 13:50 Katsuyuki YUI, Nagasaki University, Japan
Activation and memory generation of Plasmodium antigen-specific CD4⁺ T cells

13:50 - 14:10 Martin HIBBERD, London School of Hygiene and Tropical Medicine, UK
Using modelling to distinguish primary from post primary dengue and identify hotspots of disease for intervention approaches

14:10 - 14:30 Koichi IZUMIKAWA, Nagasaki University-LSHTM, Japan
National action plan for combating antimicrobial resistance in Japan and our activities in Nagasaki University Hospital

14:30 - 14:40 Clement KHAW, Nikon
Nikon's solution for infectious diseases research

14:40 - 14:50 Kevin P. FRANCIS, Perkin Elmer
Preclinical and translational imaging of bacterial orthopaedic implant infections

Day One: Monday 27th May 2019 – cont...

14:50 - 15:10 Coffee Break

**Session III: Novel Approaches/Technologies/Platforms for Microbiology & Immunology
Research**

Chair: Justin CHU, National University of Singapore

Plenary 3

15:10 - 15:40 Kiyoshi KITA, Nagasaki University, Japan

Dynamic change of energy metabolism of the parasites - Promising drug target

15:40 - 16:00 Linrong LU, Zhejiang University, China

Regulation of Th17 differentiation through Ser/Thr phosphorylation

16:00 - 16:20 Chris Fook Sheng NG, Nagasaki University, Japan

Environmental drivers of infectious disease incidence: modelling associations using time series regression

16:20 - 16:40 Yiting ZHOU, Zhejiang University, China

Roles of heat shock protein in muscle regeneration

16:40-17:00 Chris SMITH, Nagasaki University, Japan

Development of an Asian Diploma of tropical medicine at Nagasaki University

17:00-17:20 Kyoko FUTAMI, Nagasaki University, Japan

Does exotic strains of Aedes aegypti cause the dengue fever outbreaks in Africa?

17:20-17:30 Kelly KIM, Bio Laboratories

Next generation rapid cell counter for microbial by Logos Biosystems

End of Day One

Speakers' Dinner at 19:00hrs for invited speakers and guests only

Venue: Faber Peak

Day Two: Tuesday 28th May 2019

08:00 - 08:30 Arrival of Guests

08:30 - 09:15

Keynote Lecture

Chair: Sylvie ALONSO, National University of Singapore

Eva HARRIS, University of California, Berkeley, USA

Friend or Foe?: Immunology and epidemiology of Dengue and Zika

Session IV: Viral Pathogenesis

Chair: Vincent CHOW, National University of Singapore

09:15 - 09:35 Justin CHU, National University of Singapore

Therapeutic targeting of human enterovirus Internal Ribosomal Entry Site (IRES) RNA

09:35 - 09:55 Meng Ling MOI, Nagasaki University, Japan

Viral genetic diversity in dengue: inter-host heterogeneity in enhancing viral growth and host response

09:55 - 10:15 Sylvie ALONSO, National University of Singapore

Hand, Foot and Mouth Disease (HFMD); Understanding the mechanisms involved in Enterovirus 71 neurovirulence

10:15 - 10:35 Sunil K. LAL, Monash University, Malaysia

A systems biology approach to infectious disease research: Translating research into application

10:35 - 11:05 Tea Break

Plenary 4

11:05 - 11:35 Eng Eong OOI, DUKE-National University of Singapore

What makes us sick?

11:35 - 11:55 Lisa NG, Singapore Immunology Network (SIgN), A*STAR, Singapore

Cellular and molecular mechanism of Arbovirus pathogenesis: from models to therapies

11:55 - 12:15 Yuzuru TAGUCHI, Nagasaki University, Japan

About strain diversity of prions and pathogenesis of amyloids: in silico analysis of pathogenic amyloids

12:15 - 12:25 Adam CLIFFE, Leica Microsystems

THUNDER Imagers from Leica see through the haze

12:25 - 13:30 Lunch Break

Session V: Microbial Pathogenesis Focusing on Parasite and Parasitic Worm Infection

Chair: Benoit MALLERET, National University of Singapore

Plenary 5

13:30 - 14:00 Kenji HIRAYAMA, Nagasaki University, Japan

iPS cell serves as a source of dendritic cells for in vitro dengue

14:00 - 14:20 David CONWAY, London School of Hygiene and Tropical Medicine, UK

Malaria parasite adaptation and variation in erythrocyte invasion pathways

14:20 - 14:40 Benoit MALLERET, National University of Singapore

The molecular basis of reticulocyte invasion by Plasmodium vivax

Day Two: Tuesday 28th May 2019 – cont...

14:40 - 15:00	Shinjiro HAMANO, Nagasaki University, Japan <i>ILC2s exacerbate the pathogenesis of amebic liver abscess through promoting the accumulation of eosinophils and neutrophils</i>
15:00 - 15:20	Alexander WARD, London School of Hygiene and Tropical Medicine, UK <i>A potential Trypanosoma cruzi niche for chronic long-term survival</i>
15:20 - 15:40	Kazuhide YAHATA, Nagasaki University, Japan <i>Gliding motility in Plasmodium falciparum</i>
15:40 - 15:50	Kasja PROKOPEC, Biomed Diagnostics <i>Interested in cytokine secretion?-ELISpot and Fluorospot with Mabtech IRIS™</i>
15:50 - 16:00	Coffee Break
	Session VI: Bacterial Pathogenesis Chair: John CHEN, National University of Singapore
	<u>Plenary 6</u>
16:00 - 16:30	Shu Sin CHNG, National University of Singapore <i>Bacterial lipid trafficking and outer membrane homeostasis</i>
16:30 - 16:50	John CHEN, National University of Singapore <i>New and non-canonical mechanisms of genetic transduction</i>
16:50 - 17:10	Yoshitomo MORINAGA, Nagasaki University, Japan <i>Molecular and epidemiological analysis of drug resistant bacteria in Japan</i>
17:10 - 17:30	Pablo BIFANI, National University of Singapore <i>Bacterial fitness and drug discovery in rifampicin tuberculosis</i>
17:30 - 17:40	Fei Chuin LEW, Acea Biosciences <i>New technique in identifying, quantifying, and tracking infectious disease using real-time cell analysis</i>
17:40 - 17:50	Melvin SIN, Andor Technology <i>Dragonfly high speed confocal: Why Dragonfly is an ideal imaging system for you</i>
17:50	Poster and Networking Session

Day Three: Wednesday 29th May 2019

08:30 - 09:00 Arrival of Guests

09:00 - 09:45

Keynote Lecture

Chair: Kevin TAN, National University of Singapore
Kimberly KLINE, SCELSE, Nanyang Technological University, Singapore
Enterococcus faecalis Biofilm-associated infection

Session VII: Microbiome & Biofilms in Health and Disease

Chair: Kevin TAN, National University of Singapore

09:45 - 10:05 Hsih Yin TAN, BIGHEART, National University of Singapore

Engineering systemic organ interactions modular microfluidics

10:05 - 10:25 In Young HWANG, SynCTI, National University of Singapore

Reprogramming microbes for disease intervention & prevention: Live biotherapeutics for microbiome modulation

10:25 - 10:45 Jun Hong CH'NG, National University of Singapore

Characterizing dual-species interactions in biofilms

10:45 - 10:55 Ling Li CHIA, Bio-Rev

Introduction to ATCC microbiome standards

10:55 - 11:15 Break

11:15 - 11:35 Haiyan LIU, National University of Singapore

Crosstalk between microbiome and immune system in tumor development

11:35 - 11:55 Chin Wen PNG, National University of Singapore

Examination of gastric microbiome in patients with intestinal metaplasia

11:55 - 12:05 Ryan CHONG, Abcam

Research reproducibility crisis - Raising standards

12:05 - 12:30 Poster Prize Presentations and Closing Address

12:30 - 14:00 Lunch Break