The development of strategic ideas and skills are indispensable for controlling and overcoming infectious diseases. The threat of new and reemerging infectious diseases is evidenced by the outbreak of SARS in 2002, together with other viral diseases such as dengue, Chikungunya and pandemic influenza. Singapore is surrounded by neighboring countries where a number of zoonotic infectious diseases are prevalent. The cooperation on infectious disease research via the joint symposia between the National University of Singapore (NUS) and Nagasaki University has helped us significantly in managing these infectious diseases via the exchange of specialists for mutual benefit. NUS is proud to host the 12th NUS-Nagasaki Symposium on Infectious Diseases. This 12th symposium will be a landmark to commemorate and celebrate the establishment of the Center for Translational Medicine (CeTM) in NUS which will be the venue for the Symposium. Invited speakers will be presenting data on advanced technological innovations and new insights in host-pathogen interactions as a key theme of this symposium for both universities.

We warmly invite graduate students, postdoctoral fellows, clinician scientists, microbiologists, biologists, and immunologists to attend this special event. Come join us and find out the latest developments in infectious disease research!

A/Prof Kevin SW Tan
Department of Microbiology, NUS
Chairperson
A/Prof Vincent Chow & Dr. Zhang Yongliang
Department of Microbiology, NUS
Co-Chairperson

The 12th NUS-Nagasaki Joint Symposium

Innovations and Insights in Infection and Immunity
Day One: 11th June 2015

08:00 - 08:55 Arrival of Guests and Registration
09:00 - 09:30 Welcome & Opening Address

Session I  Viral Infections – Chair: Vincent CHOW, Department of Microbiology, NUS
09:30 - 10:30 Sendai Virus Vector. Advantages and Applications.
Yoshiyuki NAGAI, Center of Research Network for Infectious Diseases, Japan
10:30 - 11:00 Break
11:00 - 11:30 Broad-Spectrum, Highly Selective Antiviral Macromolecules Targeting Host Factors to Block Viral Entry Steps.
Naoki YAMAMOTO, Department of Microbiology, NUS
11:30 - 12:00 Viruses as Source and Target of RNA Trans-Splicing.
Volker PATZEL, Department of Microbiology, NUS
12:00 - 12:30 The Double Stranded RNA Concealing Defines The Host Specificity Of Dengue And Japanese Encephalitis Viruses.
Kenshi MORITA, Department of Virology, Institute of Tropical Medicine, Nagasaki
12:30 - 13:30 Lunch and Poster Session

Session II  Bacterial and Fungal Infections – Chair: Thomas DICK, Department of Microbiology, NUS
13:30 - 14:00 The Pathogenesis of Chronic Pulmonary Aspergillosis and Azole Resistance.
Koichi IZUMIKAWA, Department of Molecular Microbiology and Immunology, Nagasaki
14:00 - 14:30 Catheter Associated Urinary Tract Infections and the Threat of Antimicrobial Resistance.
Paul Anantharajah TAMBYAH, Department of Medicine, NUS
14:30 - 15:00 New Approaches to Shortening Treatment for Drug-Sensitive TB - the TRUNCATE-TB Trial.
Nick PATON, Department of Medicine, NUS
15:00 - 15:30 Host Glutathione Switches On Bacterial Virulence
GAN Yunn-Hwen, Department of Biochemistry, NUS
15:30 - 16:00 Break

Session III  Emerging Diseases – Chair: ZHANG Yongliang, Department of Microbiology, NUS
16:00 - 16:30 Bats And Viruses: A New Frontier In EID.
Linsa WANG, Duke-NUS Graduate Medical School
16:30 - 17:00 Ecology and Evolution of Emerging Infectious Diseases.
Garvin James SMITH, Duke-NUS Graduate Medical School
17:00 - 17:30 Early Stage Biomarkers of Dengue Shock Syndrome.
Kenshi HIRAYAMA, Department of Immunogenetics, Institute of Tropical Medicine, Nagasaki
17:30 - 18:00 Serological Surveillance Development For Multiple Tropical Infectious Diseases Using Simultaneous Microsphere-based Multiplex Assays.
Osamu KANEKO, Department of Protozoology, Institute of Tropical Medicine, Nagasaki

End of Day One. Dinner @ 19:30hrs for Invited Guests Only

Day Two: 12th June 2015

08:30 - 08:55 Arrival of Guests

Session I  Malaria – Kevin TAN, Department of Microbiology, NUS
09:00 - 10:00 Towards Malaria Elimination: The New Challenges In South East Asia.
François H NOSTEN, Shoklo Malaria Research Unit, Mae Sot, Thailand
10:00 - 10:30 Breadth of the Humoral Response and Potential Vaccine Targets Following Experimental Plasmodium falciparum Sporozoite Inoculation in Humans.
Lawrence RENIA, Singapore Immunology Network (SIgN), A*STAR
10:30 - 11:00 Break
11:00 - 11:30 Regulation Of Immune Responses By IL-27-producing CD4+ T Cells During Malaria Infection.
Kanayuki YUI, Department of Molecular Microbiology and Immunology, Nagasaki
11:30 - 12:00 A New Way to Kill: Therapeutic Disruption of Malaria Parasite Rheology.
Bruce RUSSELL, Department of Microbiology, NUS
12:00 - 12:30 Evaluation of Ca^2+ Oscillation in Plasmodium falciparum through Yellow Cameleon-Nano Biosensors.
Osamu KANEKO, Department of Protozoology, Institute of Tropical Medicine, Nagasaki
12:30 - 13:30 Lunch and Poster Session

Session II  Immunology and Infections – Chair: Sylvie ALONSO, Department of Microbiology, NUS
13:30 - 14:00 Sensitivity And Specificity Of Biomarkers And RT-QuIC Assay In CSF Samples Of Human Prion Disease.
Katsuya SATOH, Department of Molecular Microbiology and Immunology, Nagasaki
14:00 - 14:30 Brutton’s Tyrosine Kinase In Innate Immunity.
Kong-Peng LAM, Bioprocessing Technology Institute (BTI), A*STAR
14:30 - 15:00 The Risk Factors Associated With Active Visceral Leishmaniasis From Asymptomatic Status.
Shinjiro HAMANO, Department of Parasitology, Institute of Tropical Medicine, Nagasaki
15:00 - 15:30 Natural IgG is Not Passive – Defining Its Role in Innate Immunity.
DING Jeak Ling, Department of Biological Sciences, NUS
15:30 - 16:00 Break
16:00 - 16:30 Antimicrobial Resistance In Japan -How To Prevent The Spread Of Multidrug-resistant Organism?
Katsurori YANAGIHARA, Department of Laboratory Medicine, Nagasaki
16:30 - 17:00 Engineering Fully Human Anti-Infective Antibodies for Dengue Therapy.
Paul MACARY, Department of Microbiology, NUS
17:00 - 17:30 Molecular Technologies To The Study And Diagnosis Of Infectious Diseases.
Yuichiro HAYASHIZAKI, RIKEN Japan
17:30 - 18:00 Closing Address and Prize Presentations
**12th NUS-Nagasaki Joint Symposium on Infectious Diseases (11 – 12 June 2015) – Poster Prize Award Winners**

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<tr>
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<td>1st Prize</td>
<td>Tan Kai Sen</td>
<td>Micro-RNA Characterization in Influenza Induced Lung Damage and Repair</td>
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<td>2nd Prize</td>
<td>Wilfried Moreira</td>
<td>A Target Mechanism-based Whole Cell Screen Identifies Bortezomib as an Inhibitor of Caseinolytic Protease in Mycobacteria</td>
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<td>Merit</td>
<td>Parveen Kaur</td>
<td>A Humanized Mouse Model for Chikungunya Virus Infection</td>
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<td>Merit</td>
<td>Sitara Ajjampur</td>
<td><em>Ex vivo</em> Mouse Intestinal Model to Study Adhesion of <em>Blastocystis spp.</em></td>
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<td>Merit</td>
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<td>DUSP10 Regulates Intestinal Epithelial Cell Growth and Colorectal Tumorigenesis</td>
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<td>Zhao Xiang</td>
<td>Peptides Co-agonism in CD8+ T Cell Activation</td>
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<td>Merit</td>
<td>Carla Claser</td>
<td>Understanding the Immune-pathophysiological Mechanism Triggered in the Lungs during Rodent <em>Plasmodium Ssp</em> Infection</td>
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<td>Merit</td>
<td>Chen Huixin</td>
<td>Development and Evaluation of a SYBR Green-Based Multiplex Reverse Transcriptase-Polymerase Chain Reaction for Rapid Diagnosis and Serotyping of Dengue and Chikungunya Viruses</td>
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<td>Merit</td>
<td>Jan Marzinek</td>
<td>Multiscale Modelling of Dengue Virus Envelope Protein Dynamics and Protein – Lipid Interactions</td>
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<tr>
<td>Merit</td>
<td>Lee Hong Kai</td>
<td>Predicting Clinical Severity Based on Substitutions Near Epitope A of Influenza A/H3N2</td>
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