

Research Innovation in Infectious and Inflammatory Diseases

CREATE Joint Symposium

Hebrew University of Jerusalem – National University of Singapore
and The Singapore - MIT Alliance for Research and Technology

UTown Auditorium 2, July 8-9, 2013

Monday, July 8, 2013

08:00 – 08:50 Arrival, registration, breakfast

08:50 **Welcome and Opening Remarks** (Chairs – Ophry Pines, HUJ; Peter Dedon, MIT)
Prof. LOW Teck Seng, Chief Executive Officer, National Research Foundation
The Honorable Amira ARNON, Ambassador of Israel to Singapore
The Honorable David ADELMAN, American Ambassador to Singapore
Prof. Barry HALLIWELL, Deputy President, National University of Singapore

09:20 – 10:35 **Session I: Pathways and signaling in inflammation and disease** (Chair – E. Razin, HUJ PL)
Ehud RAZIN (HUJ) – Mast cell signaling in inflammation
David ENGELBERG (HUJ) – Engineering MAP/stress kinases for studying inflammatory disease
Yongliang ZHANG (NUS) - Signal transduction in innate and adaptive immunity

10:35 – 11:20 **Keynote Lecture:** (Chair – TBA)
Prof. WONG Tien Yin (Director of the Singapore Eye Institute) Lessons from the Development of Eye Research in Singapore – 15 Years of SERI

11:20 – 11:45 Coffee Break

11:45 – 13:25 **Session II: Inflammation, immune response and disease** (Chair – P. Matsudaira, NUS)
Jianzhu CHEN (MIT) – Humanized mouse models of the immune system
Yunn Hwen GAN (NUS) – Regulation of host immunity and bacterial virulence by cellular redox
V.ANGELI (NUS) – A novel role for neutrophils: Organizer of inflammatory lymphangiogenesis
Harry ASADA (MIT) - Systems-scale modeling of angiogenesis

13:25 – 14:15 Lunch

14:15 – 16:00 **Session III: Stress response in health and disease** (Chair – P. MacAry NUS PL)
Peter DEDON (MIT) – Translational control of stress response
Ophry PINES (HUJ) – Dual protein targeting and cell stress responses.
Norbert LEHMING (NUS) – Transcriptional regulation in disease.
Stephan GASSER (NUS) – Immune recognition of tumors

16:00 – 16:30 Coffee Break

16:30 – 18:10 **Session IV: Infectious disease** (Chair – E. Hanski, HUJ)
Vincent CHOW (NUS) – Pathogenic mechanisms of 1° influenza and 2° bacterial pneumonia
Peter PREISER (NTU) – Molecular mechanisms of malaria pathogenesis
Ming DAO (MIT) – Biophysical approaches to host-pathogen interactions
Thomas DICK (NUS) - Whole cell screens in antimycobacterial drug discovery

19:00 **Conference dinner**

08:00 – 09:00 Continental breakfast

09:00 – 10:40 **Session V: Infectious disease** (Chair – HOD Microbiology NUS)

Pei-Yong SHI (NITD) – Novel therapeutics and vaccine for dengue

Paul MACARY (NUS) – Anti-glycolipid antibodies as diagnostic candidates for TB Infection

Chwee Teck LIM (NUS) – Mechanobiology of malaria infection

Emanuel HANSKI (HUJ) – Molecular mechanisms of microbial pathogenesis

10:40-11:10 Coffee Break

11:10 – 12:50 **Session VI: Session I: From molecules to structure and disease** (Chair – J. Chen, MIT PL)

Paul MATSUDAIRA (NUS) - Imaging organism development with cell-level resolution

Oded LIVNAH (HUJ) – Structural basis of the unique activation mode of p38a in T-cells

Yechiel FRIEDLANDER (HUJ) - GWAS in disease

Chew-Kiat HENG (NUS) – GWAS in disease

12:50 – 15:00 **Poster Session and light lunch**

15:00-16:15 **Session VII: Bioengineering and disease** (Chair - C.T. Lim, NUS)

G. BARBASTATHIS (MIT) Active illumination computational microscopy for tissue & live animal imaging

Harry YU (NUS) - Optical detection of inflammation and disease

Jongyoon HAN (MIT) - Microfluidic and mechanical isolation of infected cells

16:15 **Conference closing** (P. Dedon and O. Pines)