

Oral Program

Sunday 8 November 2015

12:00-13:00 Registration

13:00-13:10 Welcome and introduction

13:10-14:05 **[KEY.01] Development and applications of genome editing technologies**
Feng Zhang, *Broad Institute and MIT, USA*

14:05-18:00 **Session 1 – Cancer Genomics**

14:05-14:40 **[INV.01] Genomic profiles of Asian-endemic cancers**
Patrick Tan, *Genome Institute of Singapore, Singapore*

14:40-15:15 **[INV.02] Epigenetics in health and disease**
Manel Esteller, *Bellvitge Biomedical Research Institute (IDIBELL), Spain*

15:15-15:30 **[ST.01] Divergent expression patterns of H3.3-encoding genes reveal a novel cancer-related regulatory pathway**
M. Y. Tolstorukov, *Massachusetts General Hospital/Harvard Medical School, USA*

15:30-16:00 Refreshment Break

16:00-16:35 **[INV.03] Genome structure and its variation in disease**
Rick Young, *Whitehead Institute, USA*

16:35-17:10 **[INV.04] Million genomes ahead**
Jun Wang, *BGI, China*

17:10-17:45 **[INV.05] The Non-Coding RNA revolution in biomedical research**
Pier Paolo Pandolfi, *BIDMC/Harvard Medical School, USA*

17:45-18:00 **[ST.02] Sensing amino acid deficiencies by differential ribosome codon reading**
F. Loayza-Puch, *Netherlands Cancer Institute, The Netherlands*

18:00-19:30 Welcome Drinks Reception & Poster Session 1

Monday 9 November 2015

09:00-12:20 **Session 2 – Clinical and Pharmacological Genomics**

09:00-09:35 **[INV.06] Plasma DNA tissue mapping: application to nonvasive prenatal testing, cancer detection and transplantation monitoring**
Dennis Lo, *Chinese University of Hong Kong, Hong Kong*

09:35-10:10 **[INV.07] Data Integration for Discovery: Genome X Transcriptome X EMR**
Nancy Cox, *University of Chicago, USA*

10:10-10:25 **[ST.03] Genome-scale detection of hypermethylated CpG islands in circulating cell-free DNA of hepatocellular carcinoma patients**
L.Wen, *Peking University, China*

10:25-10:55 Refreshment Break

10:55-11:30 **[INV.08] Next-Generation Bromodomain Inhibitors**
Jay Bradner, *Dana Farber/Harvard Medical School, USA*

11:30-12:05 **[INV.09] Genetic study of leprosy in Chinese population: susceptibility and treatment response**
Jianjun Liu, *Genome Institute of Singapore, Singapore*

12:05-12:20 **[ST.04] Integrated analysis of a longitudinal preterm birth cohort reveals significant inflammatory-candidate genes**
M.K. Veerapan, *University of Miami/Boston Children's Hospital, USA*

12:20-13:20 Lunch

13:00-14:00 **BD Biosciences Workshop: Combined proteomic and genomic single cell profiling using the BD FACSseq™ cell sorter and BDTM Precise Assays**
Darren Ellemor, *BD Biosciences, Singapore*

13:20-15:20 Poster Session 2

14:20-15:20 Meet the Editors

15:00-15:30 Refreshment Break

15:30-17:45 Session 3 – Genomics of the Brain

15:30-16:05 **[INV.11] Pharmacogenomic strategies for prevention and treatment of Parkinson's disease**
Haydeh Payami, *Hudson Alpha Institute for Biotechnology, USA*

16:05-16:20 **[ST.05] Dissection of cell type-specific CAG repeat length effects using a novel isogenic Huntington disease (IsoHD) hESC allelic panel**
J. Ooi, *Agency for Science, Technology and Research, Singapore*

16:20-16:55 **[INV.12] Modeling psychiatric/neurological disorders using ips cell technologies and transgenic non-human primates**
Hideyuki Okano, *KEIO University, Japan*

16:55-17:30 **[INV.13] Frequency and complexity of *de novo* structural mutation in autism**
Jonathan Sebat, *University of California, San Diego, USA*

17:30-17:45 **[ST.09] The potential of targeting splicing for cancer therapy**
E. Guccione, *Institute of Molecular and Cell Biology (IMCB), Singapore*

19:00-22:30 Meet the Speakers Dinner – Ticket Holders only - Singapore Zoological Gardens

Tuesday 10 November 2015

09:00-12:25 Session 4 – RNA, Transcriptomics and Human Disease

09:00-09:35 **[INV.14] MicroRNAs and lncRNAs in mammalian physiology and cancer**
Josh Mendell, *University of Texas Southwestern & HHMI USA*

09:35-10:10 **[INV.15] Senescence long noncoding RNPs**
Myriam Gorospe, *National Institute on Ageing, USA*

10:10-10:25 **[ST.06] Transcriptome-wide profiling of human RNA reveals widespread formation of G-quadruplexes**
C.K. Kwok, *University of Cambridge/Cancer Research, UK*

10:25-11:00 Refreshment Break

11:00-11:35 **[INV.16] A microexon regulatory network and its role in autism spectrum disorder**
Ben Blencowe, *University of Toronto, Canada*

11:35-12:10 **[INV.17] A new view on RNA-binding proteins and RNA**
Matthias Hentze, *EMBL, Germany*

12:10-12:25 **[ST.07] Alternative splicing landscape of circular RNAs**
L. Yang, *Chinese Academy of Science, China*

12:25-13:30 Lunch

13:30-16:00 Session 5 – Embryonic Development and Transgenerational Inheritance

13:30-14:05 **[INV.18] Systems biology of stem cells**
Huck Hui Ng, *Genomic Institute of Singapore, Singapore*

14:05-14:40 **[INV.19] Non-CG methylation in the human genome**
Joe Ecker, *The Salk Institute for Biological Studies, USA*

14:40-15:15 **[INV.20] The transcriptome and epigenome landscapes of human primordial germ cells**
Fuchou Tang, *Peking University, China*

15:15-15:45 Refreshment Break

15:45-16:00 [ST.08] Modelling of Campomelic Dysplasia using induced pluripotent stem cells identifies a SOX9-WNT signaling axis critical for epithelial-to-mesenchymal transition

W.L. Stanford, *Ottawa Hospital Research Institute, Canada*

16:00-16:50 [KEY.02] From genomic variation to molecular mechanism

Jan Korbelt, *EMBL, Germany*

16:50-17:00 Closing remarks