

Day 1, November 15, 2021



1:55 AM - 2:00 AM GMT+2

Welcome and overview

Speaker: Alistair Forrest

2:00 AM - 2:30 AM GMT+2

The Human Cell Atlas Asia: Building Community Driven Science

Speaker: Jay W. Shin

2:30 AM - 3:00 AM GMT+2

Asian Immune Diversity Atlas

Speaker: Shyam Prabhakar

3:00 AM - 3:10 AM GMT+2

Break

3:10 AM - 5:40 AM GMT+2

-Atlasing (organs, aging, development)-

Chairs: Aki Minoda and Shyam Prabhakar



3:10 AM - 3:40 AM GMT+2

Inferring genetic models from cell landscapes

Speaker: Guoji Guo

3:40 AM - 3:55 AM GMT+2

Mouse Ageing Promoter Atlas: effect of the microbiota on ageing

Speaker: Aki Minoda

3:55 AM - 4:10 AM GMT+2

The SG100K cohort study

Speaker: John Chambers

4:10 AM - 4:25 AM GMT+2

Gene therapy alleviates organ aging by preventing cellular senescence

Speaker: Jing Qu

4:25 AM - 4:40 AM GMT+2

Building pipelines to integrate big single-cell datasets to connect development, aging, and diverse disease conditions

Speaker: Jong-Eun Park



4:40 AM - 4:55 AM GMT+2

The challenges of annotating cells in organoids

Speaker: Sean Wilson

4:55 AM - 5:10 AM GMT+2

Gut-associated lymphoid tissue developmental programs readapted during Crohn's disease

Speaker: Kylie James

5:10 AM - 5:25 AM GMT+2

scJoint: transfer learning for data integration of atlas-scale single-cell RNA-seq and ATAC-seq

Speaker: Yingxin Lin

5:25 AM - 5:40 AM GMT+2

Facilitated Discussion

5:40 AM - 6:00 AM GMT+2

Break



6:00 AM - 8:30 AM GMT+2

-Technology (screens, spatial, new tech)-

Chairs: Quan Nguyen and Angela Ruohao Wu

6:00 AM - 6:30 AM GMT+2

Clonal lineage tracing in haematopoiesis and embryonic development

Speaker: Shalin H. Naik

6:30 AM - 6:45 AM GMT+2

scONE-seq: A Novel Single-cell Multiple-Omic Technology Reveals Genotype and Phenotype Heterogeneity Of A Frozen Tumor Sample

Speaker: Angela Ruohao Wu

6:45 AM - 7:00 AM GMT+2

Technologies for studying immunity development: single-cell analyses and beyond

Speaker: Jianbin Wang

7:00 AM - 7:15 AM GMT+2

Integrative Analysis of Single-cell Transcriptomics with Multiplexed RNA Imaging for Mapping Autism Pathophysiology

Speaker: Jinyue Liu



7:15 AM - 7:30 AM GMT+2

Exploring transcriptional noise in subcellular compartments with on-chip electrophoretic fractionation of cytoplasmic versus nuclear RNAs

Speaker: Hirofumi Shintaku

7:30 AM - 7:45 AM GMT+2

Heterogeneous response to, and recovery from, hypomethylating agents in AML cells

Speaker: Heather Lee

7:45 AM - 8:00 AM GMT+2

Spatially regularized clustering algorithm for identifying cell types and tissue domains from spatial omics data

Speaker: Vipul Singhal

8:00 AM - 8:15 AM GMT+2

Large field of view, high-resolution spatially resolved transcriptomics using DNA nanoball patterned array

Speaker: Longqi Liu



8:15 AM - 8:30 AM GMT+2

Facilitated Discussion

8:30 AM - 9:30 AM GMT+2

Poster session

9:30 AM - 10:20 AM GMT+2

Keynote

9:30 AM - 10:20 AM GMT+2

Deciphering Development One Cell at a Time

Chair: Shyam Prabhakar

Keynote Speaker: Sarah Teichmann

10:20 AM - 10:25 AM GMT+2

Close Day 1 and Day 2 overview

Day 2, November 16, 2021



2:00 AM - 2:05 AM GMT+2

Welcome Day 2

Speaker: Alistair Forrest

2:05 AM - 4:35 AM GMT+2

-Non infectious disease (cancer, genetic, lifestyle)-

Chairs: Jessica Mar and Woong-Yang Park

2:05 AM - 2:35 AM GMT+2

Remodelling of tumor microenvironment upon anti-cancer treatments

Speaker: Woong-Yang Park

2:35 AM - 2:50 AM GMT+2

Characterising spatial heterogeneity in ovarian cancer

Speaker: Elena Denisenko

2:50 AM - 3:05 AM GMT+2

Cellular and molecular architecture in HTLV-1 viral carcinogenesis revealed by multi-omics single-cell analysis

Speaker: Keisuke Kataoka



3:05 AM - 3:20 AM GMT+2

CRISPR screening to elucidate mechanisms of tumor immune evasion

Speaker: Jane Oliaro

3:20 AM - 3:35 AM GMT+2

Screening disease-specific eQTLs using single nuclear RNA-seq of human liver tissues

Speaker: Murim Choi

3:35 AM - 3:50 AM GMT+2

Differential Inference for scRNA-seq Data

Speaker: Yingying Wei

3:50 AM - 4:05 AM GMT+2

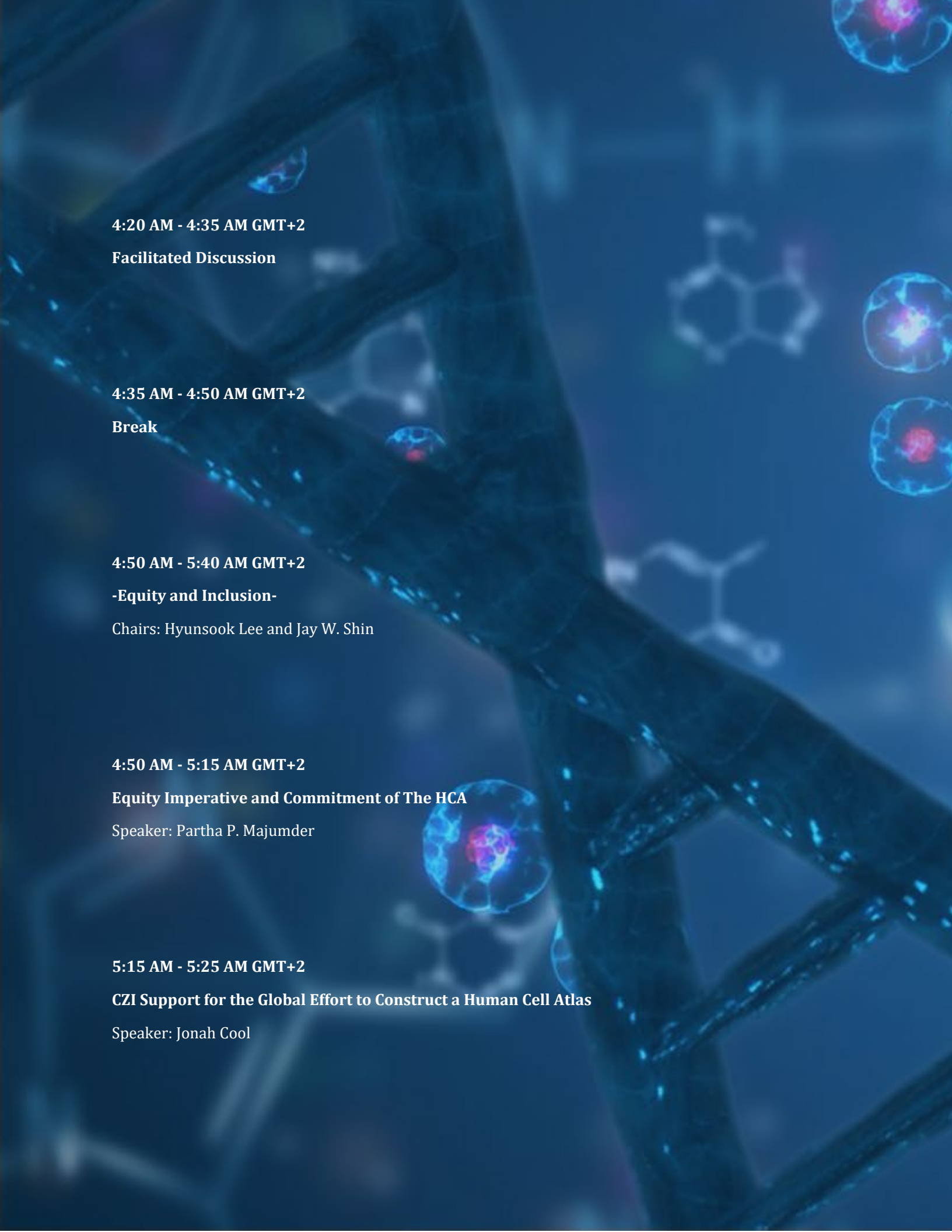
Single-cell and Bulk transcriptomics reveals 2 epithelial cancer subtypes that underpins the molecular classification of colorectal cancer

Speaker: Ignasius Joanito

4:05 AM - 4:20 AM GMT+2

Characterization of Cell-state Heterogeneity in Gingivo-Buccal Oral Squamous Cell Carcinoma (OSCC-GB)

Speaker: Sumitava Roy



4:20 AM - 4:35 AM GMT+2

Facilitated Discussion

4:35 AM - 4:50 AM GMT+2

Break

4:50 AM - 5:40 AM GMT+2

-Equity and Inclusion-

Chairs: Hyunsook Lee and Jay W. Shin

4:50 AM - 5:15 AM GMT+2

Equity Imperative and Commitment of The HCA

Speaker: Partha P. Majumder

5:15 AM - 5:25 AM GMT+2

CZI Support for the Global Effort to Construct a Human Cell Atlas

Speaker: Jonah Cool



5:25 AM - 5:40 AM GMT+2

Data Coordination Platform - Empowering Discovery with Consortia Data

Speakers: Trevor Heathorn and William Sullivan

5:40 AM - 6:35 AM GMT+2

Establishing and Expanding Single-Cell Biology Network in Thailand

Speaker: Varodom Charoensawan

5:50 AM - 6:00 AM GMT+2

Sequencing Vietnamese Genomes at scale: Towards Precision Medicine in Viet Nam

Speaker: Nam Sy Vo

6:00 AM - 6:10 AM GMT+2

Scalable algorithms for scRNA-seq clustering, trajectory inference, and cancer clonal inference

Speaker: Joshua Ho

6:10 AM - 6:35 AM GMT+2

Facilitated Discussion



6:35 AM - 6:50 AM GMT+2

Break

6:50 AM - 9:20 AM GMT+2

Infectious disease and Immunity

Chairs: Ponpan Matangkasombut and Christine Wells

6:50 AM - 7:20 AM GMT+2

Single cell RNA sequence analysis in ILC2s-related diseases

Speaker: Kazuyo Moro

7:20 AM - 7:35 AM GMT+2

Defining micro-anatomical change and immune cell interaction in the spleen using spatial transcriptomics.

Speaker: Ashraful Haque

7:35 AM - 7:50 AM GMT+2

Dynamic Immune Response to Natural Human Dengue Infection at Single-Cell Resolution

Speakers: Varodom Charoensawan and Ponpan Matangkasombut



7:50 AM - 8:05 AM GMT+2

Synchronized Plasmodium falciparum cell atlas: Effects of Heat stress in malaria and beyond

Speaker: Ishaan Gupta

8:05 AM - 8:20 AM GMT+2

Human fetal immunity and microbial priming in early life

Speaker: Archita Mishra

8:20 AM - 8:35 AM GMT+2

Cellular immune response to COVID-19 deciphered by single-cell multi-omics

Speaker: Waradon Sungnak

8:35 AM - 8:50 AM GMT+2

Mapping pulmonary and systemic inflammation in children with cystic fibrosis at single cell resolution

Speaker: Melanie Neeland

8:50 AM - 9:05 AM GMT+2

Single-cell Transcriptomics Reveals Immune-stromal Cell Interactions in the Dental Pulp in Health as Disease

Speaker: Anunya Opasawatchai



9:05 AM - 9:20 AM GMT+2

Facilitated Discussion

9:20 AM - 9:35 AM GMT+2

Break

9:35 AM - 10:20 AM GMT+2

Panel discussion - future directions of HCA Asia

Panelists: Alistair Forrest, Hyunsook Lee, Jessica Mar, Ponpan Matangkasombut, Aki Minoda, Quan Nguyen, Woong-Yang Park, Shyam Prabhakar, Jay W. Shin, Christine Wells and Angela Ruohao Wu

10:20 AM - 10:30 AM GMT+2

Close of meeting

Speaker: Alistair Forrest