

Programme Danish Single Cell Symposium, April 26-27, 2023

Day 1

8:20 – 9:00 Registration

9:00 – 9:10 Welcome

Session 1: Biotechnology – wet-lab applications

Chair: Konstantin Khodosevich

09.10 – 09:55 Keynote

Fran Quintana, Harvard Medical School, USA

Title: New methods for the study of mechanisms of cell-cell interaction

09:55 – 10:20

Sine Reker Hadrup, Technical University of Denmark, Denmark

Title: Using single-cell technologies to interrogate antigen specificity and T cell-fitness in context of cancer immunotherapy

10:20 – 10:45

Erwin Schoof, Technical University of Denmark, Denmark

Title: Single-Cell Proteomics - Ready for your systems biology toolkit

10:45 – 11:10 Coffee and networking break

11:10 – 11:55 Keynote

Jeff Moffitt, Boston Children's Hospital, USA

Title: Imaging the transcriptome: Creating tissue atlases with MERFISH

11:55 – 12:20

Göran Karlsson, Lund University, Sweden

Title: Defining CML stem cells using single- cell genomics

12:20 – 12:45

Jamie Yam Auxilios, University of Copenhagen, Denmark

Title: A micro-fluidics platform for exploring RNA expression response to microenvironmental gradients

12:45 – 13:40 Lunch break

Session 2: Biotechnology – computational applications

Chair: Tune Pers

13.40 – 14:25 Keynote

Peter Kharchenko, San Diego Institute of Science, Altos labs, USA

Title: Analysis of subclonal CNVs from RNA data in cancer and normal tissues

14:25 – 14:50

KJ Won, Cedars Sinai Medical School, USA

Title: Studying gene regulation driven by the local and the global environment from spatial transcriptomics data

14:50 – 15:15

Yonglun Luo, Aarhus University, Denmark

Title: A spatial-temporal transcriptome landscape of chronic kidney disease progression

15:15 – 15:45 Coffee and networking break

15:45 – 16:30 Keynote

Smita Krishnaswamy, Yale University, USA

Title: Multiscale diffusions, scattering and flows on single cell data

Junior researcher short talks for Sessions 1 and 2

16:30 – 16:40

Bernd Coester, University of Copenhagen, Denmark

Title: Neuronal projection mapping with single-cell resolution guided by gene expression data

16:40 – 16:50

Addison Webster, University of Virginia, USA

Title: Decoding the Neural Circuitry of Energy Balance with Molecular Connectomics

16:50 – 17:00

Katarina Dragicevic, University of Copenhagen, Denmark

Title: Overcoming barriers to accurate covariate correction in case-control analysis of single-cell RNA-seq experiments

17:00 – 17:10

Mikaela Koutrouli, University of Copenhagen, Denmark

Title: FAVA: High-quality functional association networks inferred from scRNA-seq and proteomics data

17:10 – 17:30 Walk to Maersk Tower building

17:30 – 20:00 Buffet dinner with drinks and Poster session area in front of Niels Jerne Auditorium

Day2

Session 3: Neuro

Chair: Konstantin Khodosevich

09.00 – 09:45 Keynote

Igor Adameyko, Medical University of Vienna, Austria

Title: Novel mechanisms of fate selection in epy neural crest lineage and beyond

09:45 – 10:10

Birgitte Kornum, University of Copenhagen, Denmark

Title: Long term hypothalamic molecular changes following an airway influenza infection

10:10 – 10:25

Konstantin Khodosevich, University of Copenhagen, Denmark

Title: Understanding neurodevelopmental disorders using single cell omics

10:25 – 10:55 Coffee and networking break

10:55 – 11:20

Vanessa Hall, University of Copenhagen, Denmark

Title: Navigating through the Brain's spatial processing system

11:20 – 11:45

Vijay Tiwari, University of Southern Denmark, Denmark

Title: Using functional genomics to decode gene regulatory mechanisms underlying neurodevelopmental disorders

Junior researcher short talks Session 3

11:45 – 11:55

Raquel Garza, Lund University, Sweden

Title: Challenging the role of oligodendrocytes upon TBI

11:55 – 12:05

Lizzie Godschall, University of Virginia, USA

Title: Identifying the Genetic Architecture of the Dorsomedial Hypothalamus

12:05 – 13:05 Lunch break

Session 4: Metabolism

13:05 – 13:50 Keynote

John Campbell, University of Virginia, USA

Title: Unraveling vagal circuits for heart and gut function, one cell at a time

13:50 – 14:15

Joanna Kalucka, Aarhus University, Denmark

Title: The impact of metabolic syndrome on the adipose endothelial cells

14:15 – 14:40

Tune H. Pers, University of Copenhagen, Denmark

Title: Single-cell mapping of body weight-regulatory hindbrain cell populations

14:40 – 15:10 Coffee and networking break

15:10 – 15:35

Kim Ravnskjær, University of Southern Denmark, Denmark

Title: Liver Cell Dynamics in Health and Disease

15:35 – 16:00

Henning Fenselau, Max Planck Institute for Metabolism Research, Germany

Title: Deconstructing vagal gut-brain communication with cell-specific recombinase systems

16:00 – 16:10

Junior researcher short talk Session 4

Dylan Rausch, University of Copenhagen, Denmark

Title: Leptin-induced intracellular mechanisms regulating hypothalamic feeding circuits

16:10 – 16:45 End of conference with networking break