TUESDAY, MARCH 16
Arrival and Registration

WEDNESDAY, MARCH 17
Welcome and Keynote Address
Michael Elowitz, California Institute of Technology, USA
Developmental Circuits at the Single Cell Level

Developmental Biology at Single Cell Resolution
John Isaac Murray, University of Pennsylvania, USA
A Lineage-Resolved Molecular Atlas of C. Elegans
Martin Guiliams, Ghent University - VIB, Belgium
Cell-Cell Circuits Driving Modular Tissue Regeneration
Prisca Liberali, Friedrich Miescher Institute for Biomedical Research, Switzerland
Single Cell Approaches to Collective Cell Behavior

Tissue Spatial Reconstruction
Long Cai, California Institute of Technology, USA
Image-Based Transcriptomics in the Spatial Context
Shalev Itzkovitz, Weizmann Institute of Science, Israel
Spatial Transcriptomics of Mammalian Tissues
Speaker to be Announced
Speaker from TissueVision

Poster Session 1

THURSDAY, MARCH 18

Single Cell Analysis in Pathology
Arjun Raj, University of Pennsylvania, USA
Single Cell Analysis in Cancer
Leeat Keren, Stanford University, USA
New Tools for Visualizing Cellular Heterogeneity in Cancer
Sabra L. Spencer, University of Colorado-Boulder, USA
Single-Cell Analysis of Heterogeneity in Proliferation-Quiescence Decisions
Alex K. Shalek, Massachusetts Institute of Technology, USA
Identifying and Rationally Modulating Cellular Drivers of Enhanced and Diminished Immunity

Poster Session 2

FRIDAY, MARCH 19

Computational Approaches
Uri Alon, Weizmann Institute of Science, Israel
Design Principles of Tissues
Stephen Quake, Stanford University, USA
Technology and Applications in Single Cell Analysis
Nancy R. Zhang, University of Pennsylvania, USA
Transfer Learning for Single Cell Transcriptomics
Cole Trapnell, University of Washington, USA
Computational Tools for Biological Inference

Single Cell Biology of Mammalian Organs
Ramnik Xavier, Massachusetts General Hospital, USA
Single Cell Analysis of the Intestine
Ana Domingos, University of Oxford, UK
Sympathetic Neuroimmune Heterogeneity
Naomi Habib, Hebrew University of Jerusalem, Israel
From Single Cells to Cellular Landscapes of the Alzheimer’s Brain

Poster Session 3

SATURDAY, MARCH 20

Novel Technologies in Single Cell Analysis
Britt S. Adamson, Princeton University, USA
Functional Genomics with High-Resolution Phenotypes
Jessica Whited, Harvard University, USA
Single-Cell Approaches to Understanding Complex Tissue Regeneration in Axolotl
Jean Fan, Harvard University, USA
Beyond Gene Counts: From CNV Inference to Alternative Splicing to RNA Velocity in Single Cells
Aaron Streets, University of California, Berkeley, USA
Imaging and Sequencing Single Cells

Fate Tracing of Single Cells
Allon M. Klein, Harvard University, USA
Connecting Cellular States to Cellular Fates
Samantha A. Morris, Washington University in St Louis, USA
Visualizing Reprogramming Dynamics with Single Cell Resolution
Philipp Junker, Max Delbrück Center for Molecular Medicine, Germany
Organism-Wide Lineage Tracing

Meeting Wrap-Up: Outcomes and Future Directions (Organizers)

SUNDAY, MARCH 21
Departure