

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Single Cell Biology (EK26)

March 17-19, 2021 • Virtual at your computer • , CO, USA

Scientific Organizers: Shalev Itzkovitz and Arjun Raj

Sponsored by BioLegend, Inc. and Cell Research

Scholarship Deadline: / Abstract Deadline: February 4, 2021 / Discounted Registration Deadline:

WEDNESDAY, MARCH 17

Keynote Address (8am Denver/Mountain Time Start)

Michael Elowitz, California Institute of Technology, USA
Developmental Circuits at the Single Cell Level

Single Cell Biology of Mammalian Organs (8:30am Denver/Mountain Time Start)

Ana Domingos, University of Oxford, UK
Sympathetic Neuroimmune Heterogeneity

Naomi Habib, Hebrew University of Jerusalem, Israel
Dissecting the Alzheimer's Brain: From Single Cells to Cellular Communities

Shalev Itzkovitz, Weizmann Institute of Science, Israel
Spatial Omics of the Intestinal Epithelium

Ramnik Xavier, Massachusetts General Hospital, USA
Single Cell Analysis of the Intestine

Novel Technologies in Single Cell Analysis (3pm Denver/Mountain Time Start)

Prisca Liberali, Friedrich Miescher Institute for Biomedical Research, Switzerland
Single Cell Approaches to Collective Cell Behavior

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

Aaron Streets, University of California, Berkeley, USA
Imaging and Sequencing Single Cells

Long Cai, California Institute of Technology, USA
Image-Based Transcriptomics in the Spatial Context

THURSDAY, MARCH 18

Single Cell Analysis in Pathology (8am Denver/Mountain Time Start)

Leeat Keren, Stanford University, USA
New Tools for Visualizing Cellular Heterogeneity in Cancer

Martin Guilliams, Ghent University - VIB, Belgium
Cell-Cell Circuits Driving Modular Tissue Regeneration

Uri Alon, Weizmann Institute of Science, Israel
Optimal Division of Labour Within a Cell Type

Alex K. Shalek, Massachusetts Institute of Technology, USA
Identifying and Rationally Modulating Cellular Drivers of Enhanced and Diminished Immunity

Computational Approaches (3pm Denver/Mountain Time Start)

Arjun Raj, University of Pennsylvania, USA
Single Cell Analysis in Cancer

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

Jean Fan, Harvard University, USA
Statistical Approaches and Computational Tools for Analyzing Spatially Resolved Single-Cell Transcriptomics Data

FRIDAY, MARCH 19

Tracking Dynamics of Single Cells (8am Denver/Mountain Time Start)

Roser Vento-Tormo, Sanger Wellcome Trust, UK
Mapping the Temporal and Spatial Dynamics of the Human Endometrium in vivo and in vitro

Silvia Santos, Francis Crick Institute, UK
Signaling Dynamics for Cellular Fate Control

Sabrina L. Spencer, University of Colorado-Boulder, USA
Real-Time Visualization of Rapid Escape from Drug Treatment in Single Melanoma Cells

Hernan G. Garcia, University of California Berkeley, USA
Transcriptional Dynamics in Single Cells

Fate Tracing of Single Cells (3pm Denver/Mountain Time Start)

Philipp Junker, Max Delbrück Center for Molecular Medicine, Germany
High-Throughput Lineage Tracing in the Regenerating Zebrafish Heart

Allon M. Klein, Harvard University, USA
Connecting Cellular States to Cellular Fates

Samantha A. Morris, Washington University in St Louis, USA
New Genomic Technologies to Measure and Manipulate Cell Identity

John Isaac Murray, University of Pennsylvania, USA
A Lineage-Resolved Molecular Atlas of C. Elegans