

2014 Symposium: Genomics of the Single Cell

Duane L. Roth Auditorium ▪ Sanford Consortium for Regenerative Medicine Building
University of California, San Diego ▪ La Jolla, CA

FRIDAY, October 17, 2014

7:30 Coffee & Registration

8:00 – 8:05 UCSD/IGM Welcome & Opening Remarks

Jonathan Sebat (UCSD)
IGM Organizing Committee Chair

8:05 – 8:10 Welcome from Illumina, Inc.

Jeremy Preston
Illumina, Inc.

SESSION I: Human Genetics, Somatic Mutations, Cancer

Session Chair: Julie Collens, Illumina

8:10 – 8:40 Decoding Cell Lineage from the Transcriptome

Marshall Horwitz
University of Washington

8:40 – 9:10 Single Cell Sequencing and Somatic Mutation in Neurons

Kun Zhang
University of California, San Diego

9:10 – 9:40 Driver Mutations and Tumor Progression

Ivana Bozic
Harvard University

9:40 – 10:00 BREAK

10:00 – 10:30 Growth Matters: Somatic and Germline Mutations of Core PI3K-AKT Pathway Genes Cause a Wide Spectrum of Developmental Disorders

William Dobyns
Seattle Children's Hospital & University of Washington

10:30 – 11:00 Single Cell Analysis of Mammalian Pre-implantation Embryos

Guoping Fan
University of California, Los Angeles

11:00 – 11:30 Single Cell Transcriptome-based Dissection of Lineage Fate Decisions

H. Leighton Grimes
Cincinnati Children's Hospital Medical Center

11:30 – 12:00 PANEL SESSION: Human Genetics

12:00 – 1:00 LUNCH BREAK

SESSION II: Regulation of Gene Expression in Single Cells

Session Chair: Paul Steinberg, Fluidigm

1:00 – 1:30 Single-cell Gene Expression Analyses in CD8+ T Lymphocyte Fate Specification

John Chang
University of California, San Diego

1:30 – 2:00 Single Cell Analysis of Early Stages of Hematopoietic Development

Sherman Weissman
Yale University

2:00 – 2:30 Unlocking the Genome: One Cell at a Time

Jian Bing-Fan
Illumina, Inc.

2:30 – 2:50 BREAK

2:50 – 3:20 Global Scaling of Gene Expression for Single Cell Homeostasis

Arjun Raj
University of Pennsylvania

3:20 – 3:50 Single Cell Transcriptome Analysis: Some Surprises

James Eberwine
University of Pennsylvania

3:50 – 4:20 PANEL SESSION: Gene Expression

4:20 – 4:30 Closing Remarks

Kelly A. Frazer
Director, Institute for Genomic Medicine

4:30 – 5:30 Closing Reception