

Emerging Technologies in Single Cell Biology Symposium 2017

Wednesday, May 10, 2017

9:00 AM – 5:30 PM

Arthur H. Rubenstein Auditorium
Smilow Center for Translational Research
Perelman School of Medicine
University of Pennsylvania
3400 Civic Center Boulevard
Philadelphia, PA 19104

PROGRAM

8:15am Breakfast

9:00 **Welcome & Introduction**
James H. Eberwine, PhD and Junhyong Kim, PhD
Co-Directors, Penn Program in Single Cell Biology

9:15 **Microfluidics-Free and WGA-Free Single-Cell Genomics**
Paul Blainey, PhD
Assistant Professor, Department of Biological Engineering
Broad Institute, Massachusetts Institute of Technology

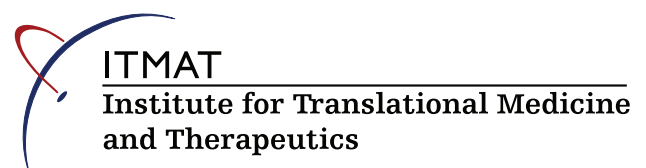
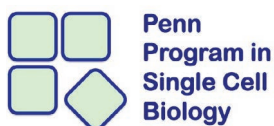
9:55 **Single-Neuron Methylome Analysis Reveals Epigenomic Diversity
in the Mammalian Brain**
Maria Margarita Behrens, PhD
Senior Staff Scientist, Computational Neurobiology Lab
Salk Institute for Biological Studies

10:35 Refreshments in the Lobby

10:50 **Sub-Cellular Transcriptomes of Single Neurons:
Insights Into RNA Localization and Isoform Regulation**
Graduate Student Presentation: Sarah Middleton, PhD
Department of Biology, Junhyong Kim Lab, University of Pennsylvania

11:05 **To Explore Novel Beta Cell Biology by Single Cell Sequencing
From Pancreatic Islets of Newborn Donor**
Postdoc Presentation: Julia Wang, PhD
Department of Genetics, Klaus Kaestner Lab, University of Pennsylvania

11:20 **Nanoscale Microfluidics for Clinical Diagnostics:
Applications in Pancreatic Cancer and Traumatic Brain Injury**
David Issadore, PhD
Assistant Professor, Department of Bioengineering, University of Pennsylvania



12:00pm Lunch (symposium attendees will provide their own meal)

**2:00 From Cell States to Cell Fates by Single Cell RNA-Seq:
Examples in Developing and Adult Tissues**
Allon Klein, PhD
Assistant Professor of Systems Biology, Harvard University

**2:40 Somatic Mutation and Genomic Diversity in
Human Cerebral Cortex**
Christopher Walsh, MD, PhD
Chief of Genetics and Genomics, Boston Children's Hospital;
Bullard Professor of Pediatrics and Neurology, Harvard Medical School

3:20 Refreshments in the Lobby

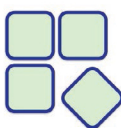
3:35 Understanding Cellular Heterogeneity
Sarah Teichmann, FMedSci
Head of Cellular Genetics, Wellcome Trust Sanger Institute

4:15 The NIH Common Fund HuBMAP Initiative
Richard Conroy, PhD
Program Leader, Office of Strategic Coordination
National Institutes of Health

4:30 Round Table Technology Discussion

5:15 Closing Remarks
James H. Eberwine, PhD and Junhyong Kim, PhD
Co-Directors, Penn Program in Single Cell Biology

Organized by:



**Penn
Program in
Single Cell
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