Tuesday, October 23, 2018

8:30 AM REGISTRATION AND COMPLIMENTARY BREAKFAST

9:00 AM Introduction: Susan L. Solomon, JD – The NYSCF Research Institute

9:05 AM Welcome Remarks: Richard Lifton, MD, PhD – The Rockefeller University

OPENING LECTURE

9:10 AM Feng Zhang, PhD – Broad Institute of MIT and Harvard

TISSUE RENEWAL AND REGENERATION

Chair: Shahin Rafii, MD – Weill Cornell Medical College

9:35 AM Mayumi Ito, PhD – New York University School of Medicine
Hair follicle neogenesis in adult skin

10:00 AM Noriyuki Tsumaki, MD, PhD – Kyoto University
Application of iPS cells to regenerate articular cartilage damage and model skeletal dysplasia

10:25 AM – 10:50 AM BREAK

RECAPITULATING DISEASE IN A DISH

Sponsored by: STEMCELL Technologies

Chair: Ruth Lehmann, PhD – New York University School of Medicine

10:50 AM Gordana Vunjak-Novakovic, PhD – Columbia University
Human microphysiological tissue platforms

11:15 AM Shuibing Chen, PhD – Weill Cornell Medical College
NYSCF – Robertson Investigator Alumna
A human pluripotent stem cell-based platform to evaluate the role of genetic and environmental factors in diabetes progression

11:40 AM Stephen Waxman, MD, PhD – Yale University School of Medicine
“Pain-in-a-dish” en route to the clinic: iPSC- and other cell-based models as a prelude to first-in-human clinical studies

12:05 PM Joseph Wu, MD, PhD – Stanford University School of Medicine
Stem cells and genomics for precision cardiovascular medicine
12:30 – 2:00 PM COMPLIMENTARY LUNCH  
Sponsored by: NYCEDC

KEYNOTE ADDRESS

Chair: Susan L. Solomon, JD – The NYSCF Research Institute

2:00 PM  Francis S. Collins, MD, PhD – National Institutes of Health

2:40 PM  Fireside Conversation

3:00 – 3:30 PM BREAK

BLOOD, IMMUNOLOGY, AND CANCER

Chair: Emmanuelle Passegué, PhD – Columbia University Medical Center

3:30 PM  Michel Sadelain, MD, PhD – Memorial Sloan Kettering Cancer Center  
CAR T cells: from synthetic receptors to synthetic cells

3:55 PM  Jeffrey Bluestone, PhD – University of California, San Francisco  
Treg biology to understand and treat disease

4:20 PM  Kateri Moore, DVM – Icahn School of Medicine at Mount Sinai  
Programming hematopoiesis

4:45 PM  Ulrich Steidl, MD, PhD – Albert Einstein College of Medicine  
Targeting the stem cell origins of MDS and AML

POSTER SESSION

5:10 – 7:00 PM
Wednesday, October 24, 2018

8:30 AM REGISTRATION AND COMPLIMENTARY BREAKFAST

9:00 AM Introduction: Susan L. Solomon, JD – The NYSCF Research Institute

NEURODEGENERATION AND THE BRAIN

Chair: Eric Nestler, MD, PhD – Icahn School of Medicine at Mount Sinai

9:10 AM Paola Arlotta, PhD – Harvard University
NYSCF – Robertson Investigator Alumna
Understanding human brain development and disease: from the embryo to brain organoids

9:35 AM Stefano Pluchino, MD, PhD – University of Cambridge
Signaling properties of neural stem cells and their cargo vesicles

10:00 AM Jeffrey Rothstein, MD, PhD – Johns Hopkins University
Precision brain health: answer ALS is a population based multi-omics program to identify ALS subgroups, biomarkers and druggable pathways

10:25 – 11:00 AM BREAK

STEM CELL APPLICATIONS IN THERAPEUTICS

11:00 AM Richard M. Eglen, PhD – Corning
Advances in three-dimensional cell culture for research, drug discovery, and biologic manufacture

11:20 AM Uma Lakshimipathy, PhD – Thermo Fisher Scientific
Generation of iPSC with integrated methods for comprehensive characterization designed for clinical and translational research

11:40 AM Philip Nelson – Google
Accelerating life sciences discovery with machine learning

12:00 – 1:30 PM COMPLIMENTARY LUNCH
Sponsored by: NYCEDC
RESOLVING DISEASE GENETICS USING STEM CELLS

Chair and Moderator: Kristen Brennand, PhD -- Icahn School of Medicine at Mount Sinai

1:30 PM  Kevin Eggan, PhD – Harvard University
Reducing noise and bias from studies of disease-implicated genetic variation through massively-mosaic stem cell systems

1:40 PM  Kelly Frazer, PhD – University of California, San Diego
Integrated large-scale study identifies non-genetic inherent differences across iPSC lines that impact cardiac lineage cell fate determination

1:50 PM  Scott Noggle, PhD – The NYSCF Research Institute
iPSC technology to elucidate the genetic basis of neurodegenerative disease

2:00 PM  Panel discussion

SHORT TALKS SELECTED FROM ABSTRACTS

2:40 PM  Raphael Lis, PhD – Weill Cornell Medical College
NYSCF – Druckenmiller Fellowship Alumnus
There will be blood – generating hematopoietic stem cells from adult endothelial cells

2:50 PM  David Hay, PhD – University of Edinburgh
Supporting mammalian liver function with tissue derived from human pluripotent stem cells

3:00 PM  Janelle Drouin-Ouellet, PhD – University of Montreal
Can directly induced neurons derived from patients be useful to study sporadic Parkinson’s disease?

3:15 – 3:45 PM BREAK

SPECIAL PRESENTATION

Chair: Susan L. Solomon, JD – The NYSCF Research Institute

3:45 PM  Peter Marks, MD, PhD – Food and Drug Administration (FDA)
FDA’s Efforts to Advance the Development of Stem Cell Therapies
EXPRESSWAY TO THE CLINIC

Chair: Malin Parmar, PhD – Lund University
NYSCF – Robertson Stem Cell Investigator

4:20 PM  Lorenzo Studer, MD – Memorial Sloan Kettering Cancer Center
Towards a pluripotent-based cell therapy for Parkinson’s disease

4:45 PM  Kapil Bharti, PhD – National Eye Institute
National Institutes of Health
Autologous iPS cell therapy for macular degeneration: from bench-to-bedside

CLOSING REMARKS
5:10 PM