

RETURN TO THE [NYSCF CONFERENCE WEBSITE](#)

Tuesday, October 18, 2022

- 8:00 AM** **REGISTRATION AND COMPLIMENTARY BREAKFAST**
9:00 AM Introduction: **Derrick Rossi, PhD** – The NYSCF Research Institute
9:05 AM Tribute to NYSCF Co-Founder Susan L. Solomon
9:10 AM Welcome Remarks: **Richard P. Lifton, MD, PhD** – The Rockefeller University

ADVANCED ORGANOID MODELS FOR DISEASE RESEARCH

Chair: **Dimitris G. Placantonakis, MD, PhD** – NYU School of Medicine

- 9:15 AM** **Paola Arlotta, PhD** – Harvard University, NYSCF – Robertson Stem Cell Investigator Alumna
Understanding human neurodevelopmental disease: from embryos to brain organoids
9:40 AM **Mandë Holford, PhD** – CUNY Hunter College
Out of the sea and into the well: Studying venom in marine mollusks to discover pain and cancer therapies
10:05 AM **Samira Musah, PhD** – Duke University
Ex vivo patterning of glomerular tissues to advance therapeutic discovery for kidney disease

10:30 – 11:00 AM BREAK

NEXT-GENERATION CANCER IMMUNOTHERAPIES

Sponsored by Goodwin

Chair: **Roberta Zappasodi, PhD** – Weill Cornell Medicine

- 11:15 AM** **Michael C. Milone, MD, PhD** – University of Pennsylvania
Enhancing T cell-based Immunity to Cancer through receptor engineering
11:40 AM **Siddhartha Mukherjee, MD, DPhil** – Columbia University
Gene-edited hematopoietic stem cells to enable CAR-T and antibody therapy for myeloid malignancies
12:05 PM **Lili Yang, PhD** – University of California, Los Angeles
Engineer stem cell-derived off-the-shelf iNKT cells for cancer immunotherapy

SHORT TALKS SELECTED FROM ABSTRACTS

12:30 PM – 1:00 PM

Chair: **Raeka Aiyar, PhD** – The NYSCF Research Institute

- 12:30 – 12:35 PM** **Mikayla Richter** – University of California, San Francisco
Modeling and treating chemotherapy-induced gastrointestinal neurotoxicity
12:35 – 12:40 PM **Francesco Limone** – Harvard University
Neuronal Proteostatic Stress and Microglial Dysfunction in ALS Revealed by Single-nucleus RNA-sequencing and Human iPSC Modelling
12:40 – 12:45 PM **Xiaohuan Sun** – Drexel University College of Medicine
Probing mechanisms for axonal degeneration in Primary Tauopathy using patient derived cerebral organoids
12:45 – 12:50 PM **Charles Ayemoba** – University of Illinois Chicago
Platelet factor 4 regulates leukemia stem cells expansion
12:50 – 12:55 PM **Hiroko Nobuta, PhD** – Rutgers University, NYSCF – Druckenmiller Fellowship Alumna
Engineered Human Oligodendrocytes for Drug Discovery Pipeline

1:00 – 2:00 PM COMPLIMENTARY LUNCH – *Sponsored by Goodwin*

PANEL: THE VALUE OF DIVERSITY, EQUITY, INCLUSION, AND BELONGING FOR OUR COMMUNITY

Sponsored by JDRF

2:00 PM – 3:00 PM

Moderator: Raeka Aiyar, PhD – The NYSCF Research Institute

Johnna M. Frierson, PhD – Duke University

Ashton Murray, PhD – The Rockefeller University

Eric J. Nestler, MD, PhD – Icahn School of Medicine at Mount Sinai

Christina Termini, PhD – Fred Hutchinson Cancer Center

3:00 – 3:30 PM BREAK

TECHNOLOGY SHOWCASE

3:30 PM – 4:15 PM

Chair: Simi Ahmed, PhD — The NYSCF Research Institute

3:30 – 3:40 PM **Erin Knock, PhD** — STEMCELL Technologies

Physiological medium and co-culture protocols for human pluripotent stem cell-derived neurons and glia

3:40 – 3:50 PM **Qimin Quan, PhD** – NanoMosaic

MosaicNeedles: High-sensitivity, High-throughput Technology for Large-scale Proteomics

3:50 – 4:00 PM **Marinna Madrid, PhD** – Cellino

Building the first technology platform to scale personalized cell therapy-based medicines

4:00 – 4:10 PM **Kristina Bieker, PhD** – Goodwin

From bench to bedside: a 10 minute road tour

4:15 – 4:45 PM BREAK

4:45 PM ANNOUNCEMENT OF 2022 NYSCF – ROBERTSON INVESTIGATORS

KEYNOTE ADDRESS

4:50 - 5:25 PM **Janet Rossant, PhD, FRS, FRSC** – University of Toronto

Stem cells, embryos and embryo models

POSTER SESSION

5:30 PM – 7:30 PM

Wednesday, October 19, 2022

8:00 AM REGISTRATION AND COMPLIMENTARY BREAKFAST

9:00 AM Introduction

PLENARY LECTURE

9:05 AM **Michael Snyder, PhD** – Stanford University School of Medicine
Organoid models of human disease

PANEL: ACCELERATING PRECISION MEDICINE WITH GENOMICS AND STEM CELLS

9:35 – 10:20 AM

Moderator: **Karen Akinsanya, PhD** – Schrödinger

Srilakshmi Raj, PhD – Albert Einstein College of Medicine

Daniel Paull, PhD – The NYSCF Research Institute

Michael Snyder, PhD – Stanford University School of Medicine

Feng Zhang, PhD – Massachusetts Institute of Technology, NYSCF – Robertson Stem Cell Investigator Alumna

10:20 – 10:50 AM BREAK

THERAPEUTIC STRATEGIES FOR DIABETES AND AUTOIMMUNITY

Sponsored by Cellino

Chair: **Kevan Herold, MD** – Yale University

10:50 AM **Cherie Stabler, PhD** – University of Florida
Engineering biomaterials for improving cell therapy in type 1 diabetes

11:15 AM **Qizhi Tang, PhD** – University of California, San Francisco
Overcoming ischemia and immune rejection in beta cell replacement therapy for type 1 diabetes

11:40 AM **Megan Levings, PhD** – BC Children's Hospital Research Institute
Regulating immunity with Tregs

12:05 PM – 1:30 PM COMPLIMENTARY LUNCH – *Sponsored by Goodwin*

MODELING COMPLEX NEUROLOGICAL DISEASES

Sponsored by NanoMosaic

Chair: **Kelsey Martin, MD, PhD** – The Simons Foundation

1:30 PM **Scott Noggle, PhD** – The NYSCF Research Institute
Advancing population-scale iPSC models of neurological disease

1:55 PM **Kristen Brennand, PhD** – Yale University, NYSCF – Robertson Stem Cell Investigator Alumna
Using Stem Cells to Explore the Genetics Underlying Brain Disease

2:20 PM **Vikram Khurana, MD, PhD** – Brigham and Women's Hospital
NYSCF – Robertson Stem Cell Investigator
Stem cells and alpha-synuclein: from molecular maps to Parkinson's disease therapeutics

2:45 – 3:15 PM BREAK

EMERGING CELL THERAPIES

Sponsored by STEMCELL Technologies

Chair: **Lorenz Studer, MD** – Memorial Sloan Kettering Cancer Center

3:15 PM **Malin Parmar, PhD** – Lund University, NYSCF – Robertson Stem Cell Investigator Alumna
Using single-cell omics to guide development of second generation stem cell derived DA neurons for cell therapy in PD

3:40 PM **Mathew Blurton-Jones, PhD** – University of California, Irvine
Harnessing iPSC-microglia to deliver therapeutic proteins to the brain

4:05 PM **Kapil Bharti, PhD** – National Eye Institute
A phase I/IIA trial to test safety and feasibility of an autologous IPS cell-derived retinal pigment epithelium patch in age-related macular degeneration patients

4:30 – 5:00 PM BREAK

KEYNOTE ADDRESS

5:00 PM **Feng Zhang, PhD** – Massachusetts Institute of Technology
NYSCF – Robertson Stem Cell Investigator Alumnus
Exploration of Biological Diversity

5:35 PM **CLOSING REMARKS**