**SATURDAY, JUNE 5**
Arrival and Registration

**SUNDAY, JUNE 6**
Welcome and Keynote Address (Joint)
Speakers to be Announced

Disease Mechanisms and Therapeutic Targets (Joint)
- **Holly Kordasiewicz**†, Ionis Pharmaceuticals, USA
  - Targeting Neurodegeneration Using ASO
- **Joseph W. Lewcock**, Denali Therapeutics, USA
  - Therapeutic Strategies for the Treatment of Neurodegenerative Disease Based on Human Genetics
- **Morgan H. Sheng**, Broad Institute, USA
  - Severe Mental Illness: From Genes to Mechanism to Targets
- **Richard Hargreaves**, Celgene, USA
  - What is Target ID, Anyway?

Short Talks Chosen from Abstracts

Workshop 1: Integrating the "Omics" Approaches to Microglial Function and Dysfunction in Neurodegeneration (Z3)
Short Talks Chosen from Abstracts

Workshop 1: New Tools and Approaches to Track and Manipulate Immune Cells in vivo (Z4)
Short Talks Chosen from Abstracts

Genetic Contributions to Neurodegeneration (Z3)
- **Alison Goate**, Icahn School of Medicine at Mount Sinai, USA
  - Genetic Variations and Its Implications to Alzheimer's Disease
  - Speaker to be Announced
- **Christopher K. Glass**, University of California, San Diego, USA
  - Genome Wide Approaches to Define Myeloid Cell Identity and Function
  - Speaker to be Announced

Short Talks Chosen from Abstracts

Mapping Immune Cell States in Health and Disease (Z4)
- **Beth Stevens**, Boston Children's Hospital, Harvard Medical School, USA
  - Mapping Microglia State to Function in Health and Disease
- **Melanie Greter**†, University of Zurich, Switzerland
  - Cytokine Control of Myeloid Developmental State
- **Shane Antony Liddelow**, New York University Langone Medical Center, USA
  - Redefining Astrocytes States in Health and Disease

Short Talks Chosen from Abstracts

**MONDAY, JUNE 7**

From Therapeutic Targets to Clinic (Z3)
- **Charlotte J. Sumner**, Johns Hopkins School of Medicine, USA
  - The Evolving Challenges of Gene Targeted Therapeutics for SMA
- **Beverly L. Davidson**, Children's Hospital of Philadelphia and University of Pennsylvania, USA
  - Virus-Based Gene Therapy for Huntington's Disease
- **Lorenz Studer**, Memorial Sloan Kettering Cancer Center, USA
  - IPSC-Derived Dopaminergic Neurons and Parkinson's Disease Therapy

Short Talks Chosen from Abstracts

Neuroimmune Regulation of Sleep and Brain States (Z4)
- **Maiken Nedergaard**, University of Rochester, USA
  - Sleep Regulation and Disease Roles of the Glymphatic System
- **David M. Holtzman**, Washington University, USA
  - Mechanisms Linking Sleep, Innate Immunity, and Neurodegeneration
- **Marco Colonna**, Washington University School of Medicine, USA
  - ILCs and Sleep

Short Talks Chosen from Abstracts

Workshop 2: Modeling Neurodegeneration using IPSC and Organoids (Z3)
Short Talks Chosen from Abstracts

Workshop 2: Building Better Models of Human Disease (Z4)
- **Kate Monroe**, Denali Therapeutics, USA
  - *Kate Monroe*, Denali Therapeutics, USA

Short Talks Chosen from Abstracts

Cellular Pathways Targeted by Neurodegeneration (Z3)
- **Valina L. Dawson**, Johns Hopkins University School of Medicine, USA
  - Mechanism of A-Synuclein-Mediated Neurodegeneration
- **J. Wade Harper**†, Harvard Medical School, USA
  - Linking Selective Autophagy to Neurodegenerative Diseases
- **Roy R. Parker**, HHMI/University of Colorado, USA
  - Stress Granule Dynamic in Neurodegenerative Diseases

Speaker to be Announced

Short Talks Chosen from Abstracts

Neuroimmune Crosstalk at Brain Borders (Z4)
- **Jonathan Kipnis**, University of Virginia, USA
  - Lymphatic System Function and Dysfunction
Michal Schwartz, Weizmann Institute of Science, Israel
Boosting Immunity to Combat Alzheimer's Disease

Maria Lehtinen, Harvard Medical School, USA
Imaging and Probing Choroid Plexus Influence on Brain Development and Function

Richard Daneman, University of California, San Diego, USA
Control of Blood Brain Barrier Development, Function and Dysfunction

Short Talks Chosen from Abstracts

Poster Session 2

TUESDAY, JUNE 8

Phase Separation, Protein Aggregation and Transmission (Z3)
J. Paul Taylor, St. Jude Children’s Research Hospital, USA
Phase Separation of RNA Binding Proteins in Neurodegeneration
Sjors Scheres†, MRC Laboratory of Molecular Biology, UK
CryoEM Analyses of Proteinopathy in Neurodegeneration
Virginia M. Y. Lee, University of Pennsylvania School of Medicine, USA
Tau and A-Synuclein Aggregation and Spreading

Immune Mechanisms of Synapse Function and Dysfunction (Z4)
Baljit S. Khakh, David Geffen School of Medicine, UCLA, USA
Probing Neural-Glia-Immune Signaling on Synaptic Circuits in Health and Disease
Dorothy Schafer, University of Massachusetts Medical School, USA
Neuro-Immune Cross Talk and Neural Circuit Plasticity
Betty Diamond, Feinstein Institute for Medical Research, USA
Autoimmune Mechanisms of Cognitive Dysfunction

Workshop 3: Integrating Omics with Genetics to Understand Disease Mechanisms (Z4)

Short Talks Chosen from Abstracts

Workshop 3: Therapeutic Target Identification and Development - Views from Industry (Z3)

Short Talks Chosen from Abstracts

Immune Regulation of Brain Development and Behavior (Z4)
Jonathan P. Godbout, Ohio State University, USA
The Impact of Social Stress on Immune Cell Trafficking and Neurobehavior
Sonia Garel, INSERM, France
Microglia and the Crossroads of Cortical Wiring and Environmental Signals
Gloria Choi, Massachusetts Institute of Technology, USA
Neuroimmune Interactions Shaping Social Behavior

Workshop 3: Therapeutic Target Identification and Development - Views from Industry (Z3)

Short Talks Chosen from Abstracts

Impact of Peripheral Signals and the Gut-Brain Axis (Z4)

* Session Chair † Invited but not yet accepted  Program current as of March 28, 2020. Program subject to change. Meal formats are based on meeting venue. For the most up-to-date details, visit https://www.keystonesymposia.org.
Daniel Mucida, Rockefeller University, USA
*Neuronal Regulation of Innate Immune Cells*

Elaine Y. Hsiao, University of California, Los Angeles, USA
*Microbiome Interactions with the Nervous System in Health and Disease*

Henrique Veiga-Fernandes, Champalimaud Research, Portugal
*Neuronal Regulation of Innate Lymphoid Cells*

Brian Kim, Washington University School of Medicine, USA
*The Neuroimmune Basis of Chronic Itch*

Tony Wyss-Coray, Stanford University School of Medicine, USA
*How Young Blood Rejuvenates Old Brains*

**Short Talks Chosen from Abstracts**

**Meeting Wrap-Up: Outcomes and Future Directions (Organizers)**

**THURSDAY, JUNE 10**

Departure