SATURDAY, JUNE 5
Arrival and Registration

SUNDAY, JUNE 6
Welcome and Keynote Address (Joint)
Speakers to be Announced
Christopher K. Glass, University of California, San Diego, USA
Exploiting Dynamic Enhancer Landscapes to Infer Pathogenic Mechanisms in Neurodegenerative Diseases

Disease Mechanisms and Therapeutic Targets (Joint)
Holly Kordasiewicz, Ionis Pharmaceuticals, USA
is Antisense Oligonucleotide Therapeutics for Neurodegenerative Diseases
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: New Tools and Approaches to Track and Manipulate Immune Cells in vivo (Z4)

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

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
Christopher K. Glass, University of California, San Diego, USA
Genome Wide Approaches to Define Myeloid Cell Identity and Function
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
Genetic Contributions to Neurodegeneration (Z3)
Alison Goate, Icahn School of Medicine at Mount Sinai, USA
Genetic Variations and Its Implications to Alzheimer's Disease
Chris Shaw†, UK Dementia Research Institute, UK
Talk Title to be Announced
Jennifer Yokoyama, University of California, San Francisco, USA
Immune Contributions to Early-onset Neurodegenerative Disease

Short Talks Chosen from Abstracts
Poster Session 1

MONDAY, JUNE 7
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, Inflammation, and Neurodegeneration
Marco Colonna, Washington University School of Medicine, USA
ILCs and Sleep

Short Talks Chosen from Abstracts
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
Workshop 2: Building Better Models of Human Disease (Z4)

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

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

* Session Chair † Invited but not yet accepted  Program current as of May 2, 2020. Program subject to change. Meal formats are based on meeting venue. For the most up-to-date details, visit https://www.keystonesymposia.org.
**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

Roy R. Parker, HHMI/University of Colorado, USA  
Stress Granule Dynamic in Neurodegenerative Diseases

Speaker to be Announced

**Poster Session 2**

**TUESDAY, JUNE 8**

**Immune Mechanisms of Synapse Function and Dysfunction (Z4)**

Baljit S. Khakh, David Geffen School of Medicine, UCLA, USA  
Probing Neuronal-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

**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

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

**Poster Session 3**

**WEDNESDAY, JUNE 9**

**T Cell Brain Communication (Z4)**

Burkhard Becher, University of Zurich, Switzerland  
The T Cell-Myeloid Axis in Neuroinflammation

Anthony J. Filiano, Duke University, USA  
T Cell-Neural Interactions in Health and Disease

Frauke Zipp†, Johannes-Gutenberg-Universität Mainz, Germany  
Immune-CNS Crosstalk in Brain Injury and Repair

**Glial Contributions to Neurodegeneration (Z3)**

Marco Prinz, University of Freiburg, Germany  
Talk Title to be Announced

Ádám Dénes†, Hungarian Academy of Sciences, Hungary  
Talk Title to be Announced

Anne Schaefer, Mount Sinai School of Medicine, USA  
Epigenetic Regulation of Microglia in Alzheimer's Disease

Michael T. Heneka, German Center for Neurodegenerative Diseases, Germany  
Inflammasome Activation in Alzheimer's Disease

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

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Short Talks Chosen from Abstracts

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

**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*

Modeling Neuro-Immune Interactions in Neurodegeneration (Z3)

**Fred H. Gage**, The Salk Institute for Biological Studies, USA
*Cerebral Organoids and Neurodegeneration*

**Hui-Hsin Tsai**, Biogen, USA
*Modeling Neuro Immune Interaction in Organotypic Brain Slices*

**Mathew M. Blurton-Jones**, University of California, Irvine, USA
*Neuro-Immune Interactions in AD Models*

Meeting Wrap-Up: Outcomes and Future Directions (Organizers) (Z4)

Meeting Wrap-Up: Outcomes and Future Directions (Organizers) (Z3)

THURSDAY, JUNE 10

Departure