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

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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 "Omic" 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
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

MONDAY, JUNE 7
Poster Session 1

Neuroimmune Regulatorization 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

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)
*Kate Monroe, Denali Therapeutics, USA
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, Washington University School of Medicine, 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

* Session Chair † Invited but not yet accepted Program current as of August 31, 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
Short Talks Chosen from Abstracts

**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 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*

Short Talks Chosen from Abstracts

**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*

Short Talks Chosen from Abstracts

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

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*

Short Talks Chosen from Abstracts

**Epigenetics and Transcriptomics of the Aging Brain (Z3)**

Li-Huei Tsai, Massachusetts Institute of Technology, USA
*Transcriptomics of Neuron-Glia in Alzheimer's Disease*

Philip L. De Jager, Columbia University Medical Center, USA
*Epigenetics and Systems Biology of Alzheimer's Disease*

Anne Brunet, Stanford University, USA
*Single Cell Transcriptomic Analyses of the Aging Neurogenic Niches*

Short Talks Chosen from Abstracts

**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*

Short Talks Chosen from Abstracts

**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
*Inflammosome Activation in Alzheimer's Disease*

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*

Short Talks Chosen from Abstracts

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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

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