

Symposia

THEME A: Development

Advances in Studying Human Cortical Development CME

Chair: Arnold Kriegstein, MD, PhD

Cellular and Molecular Mechanisms of Neural Regeneration CME

Chair: Zhigang He, PhD

Co-Chair: Jeffrey Goldberg, MD, PhD

Evolution of Neural Circuits: From Axon Guidance Genes to Spoken Language CME

Chair: Alain Chedotal, PhD

Oligodendrocyte and Myelin Plasticity and Its Impact on the Function of Neural Circuits and Behavior CME

Chair: Gabriel Corfas, PhD

THEME B: Neural Excitability, Synapses, and Glia: Cellular Mechanisms

Aerobic Glycolysis in the Brain: Emerging Roles of Lactate in Synaptic Plasticity and Axonal Function CME

Chair: Pierre J. Magistretti, MD, PhD

More Than a Pore: Ion Channel Signaling Complexes CME

Chair: Amy Lee, PhD

THEME C: Disorders of the Nervous System

C9orf72: A Repeat Disease That Underlies Dementia and Neurodegeneration CME

Chair: Jeffrey D. Rothstein, MD, PhD

Co-Chair: Laura P.W. Ranum, PhD

Nature, Nurture, and Trajectories to Mental Health CME

Chair: Takao K. Hensch, PhD

Gut Microbes and the Brain: Paradigm Shift in Neuroscience CME

Chair: Emeran A. Mayer, MD

Co-Chair: Rob Knight, PhD

Infiltration of Innate Immune Cells into the Injured, Infected, or Inflamed Brain CME

Chair: Charles L. Howe, PhD

Repairing and Piloting Neuronal Networks to Control Epilepsy CME

Chair: Christophe Bernard, PhD

Co-Chair: Ivan Soltesz, PhD

Target Validation in Huntington's Disease: Advances through the Development and Use of Animal Models CME

Chair: M. Flint Beal, MD

Co-Chair: X. William Yang, MD, PhD

The Latest on the Ubiquitin Pathway and CNS Disease CME

Chair: Tauseef R. Butt, PhD

THEME D: Sensory and Motor Systems

Auditory Cortical Processing in Real-World Listening CME

Chair: Israel Nelken, PhD

Co-Chair: Jennifer Bizley, PhD

Implicit Processes in Action Control CME

Chair: Patrick Haggard, PhD

Co-Chair: Hiroaki Gomi, PhD

OdorSpace: Deciphering Stimulus Space in Olfaction CME

Chair: Noam Sobel, PhD

EMPIRICAL APPROACHES TO NEUROSCIENCE AND SOCIETY SYMPOSIUM

Improving Animal Models of Neuropsychiatric Disorders CME

Chair: Trevor Robbins, PhD

Saturday, Nov. 15, 1:30–4 p.m.

The relative lack of success of big pharma in producing new drugs for psychiatric disorders has focused attention in part on improving animal models. This symposium focuses on recent examples of innovative molecular, genetic, and behavioral approaches to animal models of schizophrenia and depression. The symposium also will provide an industrial perspective and suggest new ways of advancing collaboration and development of this field to achieve more effective translation to the clinic.



Peripheral Gating of Pain Signals by Endogenous Lipid Mediators CME

Chair: Daniele Piomelli, PhD

Co-Chair: Andrea Hohmann, PhD

The Effects of Hearing Loss on Neural Processing, Plasticity, and Aging CME

Chair: Arthur Wingfield, PhD

Co-Chair: Jonathan Peelle, PhD

THEME E: Integrative Systems: Neuroendocrinology, Neuroimmunology, and Homeostatic Challenge

Exercise, Energy Intake, and the Brain CME

Chair: Mark P. Mattson, PhD

Co-Chair: Henriette van Praag, PhD

Neural and Immune Mechanisms Regulating Resilience to Stress CME

Chair: Seema Bhatnagar, PhD

Co-Chair: Scott Russo, PhD

THEME F: Cognition and Behavior

Attention, Reward, and Information Seeking CME

Chair: Jacqueline Gottlieb, PhD

Co-Chair: Antonio Rangel, PhD

Neuroscience of Implicit Cognition and Learning: Current Theories and Methods CME

Chair: Richard Ivry, PhD

Co-Chair: Dezso Nemeth, PhD

Studying Human Cognition with Intracranial EEG and Electrical Brain Stimulation CME

Chair: Josef Parvizi, MD, PhD

Co-Chair: Robert T. Knight, MD

Toward Naturalistic Interactive Neuroimaging CME

Chair: Talma Hendler, MD, PhD

Co-Chair: Gadi Gilam

THEME G: Novel Methods and Technology

Development

Enhancing Reproducibility of Neuroscience Studies CME

Chair: Story Landis, PhD

Co-Chair: Thomas Insel, MD