When citing an abstract from the 2026 annual meeting, please use the format below.

[Authors]. [Abstract Title]. Program No. XXX.XX. 2026 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2026. Online.

2026 Copyright by the Society for Neuroscience all rights reserved. Permission to republish any abstract or part of any abstract in any form must be obtained in writing by SfN office prior to publication.

Information is current as of October 13, 2026. See the Neuroscience 2026 Neuroscience Meeting Planner on SfN.org for the most up-to-date information.

Minisymposium

MIN01: Regulation of Proteostasis at the Synapse in Health and Disease — Vassiliki Nikoletopoulou

Theme: Theme B – Neural Excitability, Synapses, and Glia

Location: WCC Rm 150

Time: Saturday, November 14, 2026, 2:00 PM - 4:30 PM

Description: This session will explore how synaptic proteostasis is maintained through lysosomal exocytosis, chaperone-mediated autophagy, axonal and dendritic autophagy, and mitochondrial specialization. Speakers will present new *in vivo* biosensors and circuit-level approaches revealing how these pathways regulate synaptic structure and neurotransmission, and how their disruption promotes protein aggregation and synaptic dysfunction in disease.

Time: Saturday, November 14, 2026, 2:00 PM - 4:30 PM

MIN01.01. Chair

V. Nikoletopoulou;
University of Lausanne, Lausanne, SWITZERLAND.

Time: Saturday, November 14, 2026, 2:00 PM - 4:30 PM

MIN01.02. Co Chair

T. Laviv;
Neurosciecne and Brain Disorders, Tel Aviv University, Tel Aviv, ISRAEL.

Time: Saturday, November 14, 2026, 2:05 PM - 2:28 PM

MIN01.03. Lysosomal pathways in neurons versus astrocytes

S. Maday;
Neuroscience, University of Pennsylvania, Philadelphia, PA.

Time: Saturday, November 14, 2026, 2:28 PM - 2:51 PM

MIN01.04. Axonal autophagy in control of neurotransmission

M. Kuijpers;
Donders Center for Neuroscience, Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, The Netherlands., Nijmegen, NETHERLANDS.

Time: Saturday, November 14, 2026, 2:51 PM - 3:14 PM

MIN01.05. Establishment of axonal properties through mitochondrial specialization in cortical pyramidal neurons

Y. Hirabayashi;
School of Engineering, University of Tokyo, Tokyo, JAPAN.

Time: Saturday, November 14, 2026, 3:14 PM - 3:37 PM

MIN01.06. Novel biosensor to visualize dendritic autophagy dynamics in intact cortical circuits

M. Maman;
Neuroscience and Brain Disorders, Tel Aviv University, Tel Aviv, ISRAEL.

Time: Saturday, November 14, 2026, 3:37 PM - 4:00 PM

MIN01.07. Phosphatidylserine flippase dysfunction at dystrophic neurites

J. Zhou;
Yale School of Medicine, New Haven, CT.

Time: Saturday, November 14, 2026, 4:00 PM - 4:23 PM

MIN01.08. Autophagy at the crossroads with synaptic proteostasis

V. Nikoletopoulou;
University of Lausanne, Lausanne, SWITZERLAND.

Minisymposium

MIN02: Immune Mechanisms in Parkinson's Disease — Matthew Havrda

Theme: Theme C – Neural Aging and Degeneration

Location: WCC Ballroom A

Time: Saturday, November 14, 2026, 2:00 PM - 4:30 PM

Description: Understanding of Parkinson’s Disease (PD) has evolved based on evidence of complex communication between central and peripheral immune cells that affects CNS homeostasis. Clinical observations and numerous studies implicate a pro-inflammatory milieu in the degeneration of dopamine neurons. This minisymposium aims to move beyond the observation that inflammation exists to highlight precise mechanistic advances that define how immune dysregulation drives neurodegeneration.

Time: Saturday, November 14, 2026, 2:00 PM - 4:30 PM

MIN02.01. Chair

M. C. Havrda;
Biomedical Sciences, University of New England, Portland, ME.

Time: Saturday, November 14, 2026, 2:00 PM - 4:30 PM

MIN02.02. Co Chair

J. Lee;
Department of Physiology and Pharmacology, University of Georgia, ATHENS, GA.

Time: Saturday, November 14, 2026, 2:05 PM - 2:28 PM

MIN02.03. Cholesterol availability modulates microglial response to pathological a-synuclein

E. N. Fikse;
Molecular and Systems Biology, Geisel School of Medicine at Dartmouth, Lebanon, NH.

Time: Saturday, November 14, 2026, 2:28 PM - 2:51 PM

MIN02.04. Targeting the immune system via the gut-brain axis in Parkinson's disease

R. Gordon;
Faculty of Medicine, University of Queensland - TRI, Brisbane, AUSTRALIA.

Time: Saturday, November 14, 2026, 2:51 PM - 3:14 PM

MIN02.05. Inflammatory signaling differentially changes chromatin accessibilityand gene expression of the PD- associated kinase LRRK2 betweenhuman and mice

M. R. Cookson;
Lab Neurogenetics, Natl Inst Aging, NIH, Bethesda, MD.

Time: Saturday, November 14, 2026, 3:14 PM - 3:37 PM

MIN02.06. The role of border associated macrophages in mediating neuroinflammation in PD

A. S. Harms;
Department of Neurology, University of Alabama At Birmingham, Vestavia, AL.

Time: Saturday, November 14, 2026, 3:37 PM - 4:00 PM

MIN02.07. Juvenile manganese exposure potentiates dopaminergic neurodegeneration following encephalitic arbovirus infection via astrocyte inflammatory signaling

A. J. Schuller;
ERHS, Colorado State University, Fort Collins, CO.

Time: Saturday, November 14, 2026, 4:00 PM - 4:23 PM

MIN02.08. The GPNMB Axis: Microglial Modula7on and Neuroprotec7on in Parkinson's Disease

M. Heneka;
LCSB/University of Luxembourg, University of Luxembourg, Belvaux, LUXEMBOURG.

Minisymposium

MIN03: Hidden Vision: Multiscale Foundations of the Subcortical Visual System — Sara Ajina

Theme: Theme E – Sensory Systems

Location: WCC Rm 151

Time: Saturday, November 14, 2026, 2:00 PM - 4:30 PM

Description: Subcortical nuclei are central to perception and cognition, yet their functional organisation and interactions with cortical networks remain poorly understood. This minisymposium will combine multiscale, cross-species approaches to reveal how recent discoveries from cellular circuits to network dynamics are reshaping our understanding of subcortical visual and cognitive organization.

Time: Saturday, November 14, 2026, 2:00 PM - 4:30 PM

MIN03.01. Chair

S. Ajina;
Queen Square Institute of Neurlogy, University College London, London, UNITED KINGDOM.

Time: Saturday, November 14, 2026, 2:00 PM - 4:30 PM

MIN03.02. Co Chair

N. Bhatla;
Institute for All Minds, Berkeley, CA.

Time: Saturday, November 14, 2026, 2:05 PM - 2:28 PM

MIN03.03. Subcortical visual processing in the blind field after stroke

S. Ajina;
Queen Square Institute of Neurology, University College London, London, UNITED KINGDOM.

Time: Saturday, November 14, 2026, 2:28 PM - 2:51 PM

MIN03.04. Neuronal plasticity in the primate lateral geniculate nucleus following occipital lesions

M. G. Rosa;
Department of Physiology and Biomedicine Discovery Institute, Monash University, Clayton, AUSTRALIA.

Time: Saturday, November 14, 2026, 2:51 PM - 3:14 PM

MIN03.05. A role for the hippocampus and dLGN in putatively conscious vision

N. Bhatla;
Institute for All Minds, Berkeley, CA.

Time: Saturday, November 14, 2026, 3:14 PM - 3:37 PM

MIN03.06. Magnocellular thalamus: shared principles across vision and audition

K. A. Schneider;
Psychological and Brain Sciences, University of Delaware, Newark, DE.

Time: Saturday, November 14, 2026, 3:37 PM - 4:00 PM

MIN03.07. Extrastriate visual cortical feedback to first-order thalamus: a driving input?

F. Briggs;
Laboratory of Sensorimotor Research, National Eye Institute, Bethesda, MD.

Time: Saturday, November 14, 2026, 4:00 PM - 4:23 PM

MIN03.08. A common thalamo-cortical architecture across visual tasks

X. Liu;
University of Pennsylvania, Philadelphia, PA.

Minisymposium

MIN04: The Non-canonical Hippocampus: New Findings From an Unexplored System — David Moorman

Theme: Theme G – Integrative Physiology and Behavior

Location: WCC Rm 147

Time: Saturday, November 14, 2026, 2:00 PM - 4:30 PM

Description: Despite decades of hippocampal research, three interrelated regions have been largely neglected until recently. Understanding the noncanonical hippocampus — area CA2, the fasciola cinereum, and the indusium griseum — reveals new perspectives on hippocampal regulation of cognition, emotion, physiology, and disease. This session will highlight novel research into these noncanonical hippocampal structures, providing the foundation for a new model of hippocampal structure and function.

Time: Saturday, November 14, 2026, 2:00 PM - 4:30 PM

MIN04.01. Chair

D. E. Moorman;
Psychological and Brain Sciences, University of Massachusetts Amherst, Amherst, MA.

Time: Saturday, November 14, 2026, 2:00 PM - 4:30 PM

MIN04.02. Co Chair

J. S. Farrell;
Neuroscience, Harvard Medical School, Boston, MA.

Time: Saturday, November 14, 2026, 2:05 PM - 2:28 PM

MIN04.03. The noncanonical hippocampus

J. S. Farrell;
Neurology, Harvard Medical School, Boston, MA.

Time: Saturday, November 14, 2026, 2:28 PM - 2:51 PM

MIN04.04. Neural circuit mechanism for compensating memories in the hippocampus

A. Oliva;
Neurobiology and Behavior, Cornell University, Ithaca, NY.

Time: Saturday, November 14, 2026, 2:51 PM - 3:14 PM

MIN04.05. Cross-species studies of the structure and function of the indusium griseum/anterior hippocampal continuation

D. E. Moorman;
Psychological and Brain Sciences, University of Massachusetts Amherst, Amherst, MA.

Time: Saturday, November 14, 2026, 3:14 PM - 3:37 PM

MIN04.06. Dissecting the organization and function of the fasciola cinereum

Q. Nguyen;
Vanderbilt University, Nashville, TN.

Time: Saturday, November 14, 2026, 3:37 PM - 4:00 PM

MIN04.07. Neuroanatomical and functional characterization of the mouse indusium griseum

H. N. Vélez González;
Institute for Neurosciences, Sant Joan d'Alacant, SPAIN.

Time: Saturday, November 14, 2026, 4:00 PM - 4:23 PM

MIN04.08. Regulating ‘CA2-ness’ with a stress hormone receptor: a spatial transcriptomic approach

S. M. Dudek;
Neurobiology Laboratory, National Institutes of Health, Research Triangle Park, NC.

Minisymposium

MIN05: Transforming Neuroscience Research Through AI-Driven Data Integration and Analysis — W. Jim Zheng

Theme: Theme J – Techniques

Location: WCC Rm 146AB

Time: Saturday, November 14, 2026, 2:00 PM - 4:30 PM

Description: This session will highlight recent advances in machine learning and AI, particularly deep learning, and how they are reshaping the analysis and integration of complex neuroscience data. The speakers will present AI-driven methods and discoveries that advance understanding of brain cells, circuits, and function while fostering innovation across neuroscience research.

Time: Saturday, November 14, 2026, 2:00 PM - 4:30 PM

MIN05.01. Chair

W. Zheng;
University of Texas Health Science Center at Houston, Sugar Land, TX.

Time: Saturday, November 14, 2026, 2:00 PM - 4:30 PM

MIN05.02. Co Chair

M. J. Hawrylycz;
Modeling, Analysis, and Theory, Allen Institute, Seattle, WA.

Time: Saturday, November 14, 2026, 2:05 PM - 2:28 PM

MIN05.03. Bloom: Unifying brain cell representations across modalities, contexts, and species

R. Gala;
Allen Institute, Seattle, WA.

Time: Saturday, November 14, 2026, 2:28 PM - 2:51 PM

MIN05.04. Operationalizing Marr’s levels: A framework for knowledge integration in systems neuroscience.

N. Nikbakht;
Brain and Cognitive Sciences, Massachusetts Institute of Technology, Cambridge, MA.

Time: Saturday, November 14, 2026, 2:51 PM - 3:14 PM

MIN05.05. Integrating polygenic risk with cell-type and virtual endophenotypes for in silico modeling of neuropsychiatric disorders

J. Warrell;
Yale University, New Haven, CT.

Time: Saturday, November 14, 2026, 3:14 PM - 3:37 PM

MIN05.06. A multi-modal, generative AI framework for single-cell data in mammalian brains

F. M. Krienen;
Neuroscience, Princeton University, Princeton, NJ.

Time: Saturday, November 14, 2026, 3:37 PM - 4:00 PM

MIN05.07. AI-assisted affinity probe design for scalable brain protein Mapping with reference datasets.

N. S. Maurya;
University of Texas Health Science Center at Houston, Houston, TX.

Time: Saturday, November 14, 2026, 4:00 PM - 4:23 PM

MIN05.08. AI-based characterization of Alzheimer's Disease phenotypes from population scale single cell data

C. He;
University of Wisconsin at Madison, Madison, WI.

Minisymposium

MIN06: Neural Correlates of Sickness — Jessica Osterhout

Theme: Theme D – Neuroimmunity, Neurovasculature, and Neural Injury

Location: WCC Rm 150

Time: Sunday, November 15, 2026, 9:30 AM - 12:00 PM

Description: Infection triggers adaptive physiological and behavioral symptoms. However, the mechanisms underlying these changes have, until recently, remained unclear. Recent advances indicate the brain plays a key role in generating sickness symptoms via circulating cytokines or immune-activated vagal afferents. Moreover, neural ensembles can anticipate or recall sickness to trigger symptoms. This session will highlight recent breakthroughs in our understanding of neural mechanisms of sickness symptoms.

Time: Sunday, November 15, 2026, 9:30 AM - 12:00 PM

MIN06.01. Chair

J. A. Osterhout;
Neurobiology, University of Utah, Salt Lake City, UT.

Time: Sunday, November 15, 2026, 9:30 AM - 12:00 PM

MIN06.02. Co Chair

I. Carcea;
Brain Health Institute, Rutgers, The State University of New Jersey, Newark, NJ.

Time: Sunday, November 15, 2026, 9:35 AM - 9:58 AM

MIN06.03. Vagus-driven inhibitory circuit plasticity promotes immune encoding

E. Favuzzi;
Yale University, New Haven, CT.

Time: Sunday, November 15, 2026, 9:58 AM - 10:21 AM

MIN06.04. Neural anticipation of virtual infection triggers an immune response

A. Serino;
University Hospital of Lausanne (CHUV), Lausanne, SWITZERLAND.

Time: Sunday, November 15, 2026, 10:21 AM - 10:44 AM

MIN06.05. Neural correlates for social choices during sickness

I. Carcea;
Brain Health Institute, Rutgers, The State University of NJ - Newark, Newark, NJ.

Time: Sunday, November 15, 2026, 10:44 AM - 11:07 AM

MIN06.06. Top-down control of pain during sickness

J. A. Osterhout;
Neurobiology, University of Utah, Salt Lake City, UT.

Time: Sunday, November 15, 2026, 11:07 AM - 11:30 AM

MIN06.07. Memory engrams as sites of neuro-immune interactions

T. J. Ryan;
Trinity College Dublin, Dublin, IRELAND.

Time: Sunday, November 15, 2026, 11:30 AM - 11:53 AM

MIN06.08. IL-1R-positive dorsal raphe neurons drive self-imposed social withdrawal in sickness

L. Yang;
Picower Institute for Learning and Memory, MIT, Cambridge, MA.

Minisymposium

MIN07: Interoception in Aging and Disease — Kara Marshall

Theme: Theme E – Sensory Systems

Location: WCC Rm 151

Time: Sunday, November 15, 2026, 9:30 AM - 12:00 PM

Description: Brain-body interactions govern the most basic physiological processes. Interoceptive sensory neurons with diverse cellular identities and functions innervate all internal organs. This session will highlight recent breakthroughs in our understanding of molecular and cellular pathways and circuits of the interoceptive nervous system, and how they are integrated in the CNS. The speakers will have a special focus on how these processes are modulated and disrupted during aging, disease, and neurodevelopmental disorders.

Time: Sunday, November 15, 2026, 9:30 AM - 12:00 PM

MIN07.01. Chair

K. L. Marshall;
Neuroscience, Baylor College of Medicine, Houston, TX.

Time: Sunday, November 15, 2026, 9:30 AM - 12:00 PM

MIN07.02. Co Chair

R. Z. Hill;
Chemical Physiology and Biochemistry, Oregon Health, Portland, OR.

Time: Sunday, November 15, 2026, 9:35 AM - 9:58 AM

MIN07.03. Mechanosensation in the urinary tract in health and disease

K. L. Marshall;
Neuroscience, Baylor College of Medicine, Houston, TX.

Time: Sunday, November 15, 2026, 9:58 AM - 10:21 AM

MIN07.04. Sensory biology of the kidneys

R. Z. Hill;
Chemical Physiology and Biochemistry, Oregon Health, Portland, OR.

Time: Sunday, November 15, 2026, 10:21 AM - 10:44 AM

MIN07.05. Interoception of the gastrointestinal tract in health and disease

G. F. De Lartigue;
Monell Chemical Senses Center and the University of Pennsylvania, Philadelphia, PA.

Time: Sunday, November 15, 2026, 10:44 AM - 11:07 AM

MIN07.06. Epithelial-Neural Interactions Dynamically Protect the Airway

L. Seeholzer;
Stanford University, Stanford, CA.

Time: Sunday, November 15, 2026, 11:07 AM - 11:30 AM

MIN07.07. Integrative Systems Neuroscience of the Body

L. Hernandez-Nunez;
Department of Molecular and Cellular Biology, Stanford University, Stanford, CA.

Time: Sunday, November 15, 2026, 11:30 AM - 11:53 AM

MIN07.08. The neural circuitry and coding of interoception

C. Ran;
Department of Neuroscience, The Scripps Research Institute, San Diego, CA.

Minisymposium

MIN08: Neural Population Geometry and Dynamics in Flexible Cognition — Cheng Xue

Theme: Theme I – Cognition

Location: WCC Ballroom B

Time: Sunday, November 15, 2026, 9:30 AM - 12:00 PM

Description: To understand flexible cognition, a major puzzle is how neuronal representation of task variables flexibly adapts to different task contexts. This session will discuss how circuits selectively route and transform population activity to drive flexible behavior. Highlighting the diverse approaches of theory, multi-region electrophysiology, and population neural analysis, speakers will demonstrate how dynamic information flow and geometric structure support flexible cognitive control.

Time: Sunday, November 15, 2026, 9:30 AM - 12:00 PM

MIN08.01. Chair

C. Xue;
Department of Neurobiology, University of Chicago, Chicago, IL.

Time: Sunday, November 15, 2026, 9:30 AM - 12:00 PM

MIN08.02. Co Chair

G. Okazawa;
Institute of Neuroscience, Chinese Academy of Sciences, Shanghai, CHINA.

Time: Sunday, November 15, 2026, 9:35 AM - 9:58 AM

MIN08.03. The geometry of flexible multi-tasking

T. Buschman;
Princeton University, Princeton, NJ.

Time: Sunday, November 15, 2026, 9:58 AM - 10:21 AM

MIN08.04. Neural population geometry and optimal coding of tasks with shared latent structure

S. Wang;
Rockville, MD

Time: Sunday, November 15, 2026, 10:21 AM - 10:44 AM

MIN08.05. Neural geometry that converts object information into decisions

G. Okazawa;
Institute of Neuroscience, Chinese Academy of Sciences, Shanghai, CHINA.

Time: Sunday, November 15, 2026, 10:44 AM - 11:07 AM

MIN08.06. Neural circuit mechanisms of belief updating

C. M. Constantinople;
Center for Neural Science, New York University, New York, NY.

Time: Sunday, November 15, 2026, 11:07 AM - 11:30 AM

MIN08.07. The geometry and dynamics of flexible perceptual inference

R. L. Goris;
University of Texas At Austin, Austin, TX.

Time: Sunday, November 15, 2026, 11:30 AM - 11:53 AM

MIN08.08. Neural simulations during planning

J. D. Wallis;
U.C. Berkeley, Berkeley, CA.

Minisymposium

MIN09: Armamentarium Towards Brain-Wide Precision Access to Cell Types — Bosiljka Tasic

Theme: Theme J – Techniques

Location: WCC Ballroom A

Time: Sunday, November 15, 2026, 9:30 AM - 12:00 PM

Description: To understand structure-function relationships in the nervous systems, neuroscientists need tools that integrate genetic, viral and molecular approaches for cell-type-specific access *in vivo*. These tools can help elucidate the structure and monitor or perturb the activity of specific cell types. This session will showcase projects funded by the NIH BRAIN Initiative Armamentarium, focusing on recent breakthroughs in approaches for cell-type-specific expression of transgenes in the nervous system.

Time: Sunday, November 15, 2026, 9:30 AM - 12:00 PM

MIN09.01. Chair

B. Tasic;
Allen Institute, Seattle, WA.

Time: Sunday, November 15, 2026, 9:30 AM - 12:00 PM

MIN09.02. Co Chair

G. Fishell;
Broad Institute, Cambridge, MA.

Time: Sunday, November 15, 2026, 9:35 AM - 9:58 AM

MIN09.03. Uncovering design rules for systemic AAV capsids with neuron-specific gene delivery

T. F. Shay;
California Institute of Technology, Pasadena, CA.

Time: Sunday, November 15, 2026, 9:58 AM - 10:21 AM

MIN09.04. Enhancer AAVs: past, present and future

Y. Ben-Simon;
Allen Institute, Seattle, WA.

Time: Sunday, November 15, 2026, 10:21 AM - 10:44 AM

MIN09.05. Enhancer-based viral tools for precise neuronal targeting

Y. Wang;
Broad Institute, Cambridge, MA.

Time: Sunday, November 15, 2026, 10:44 AM - 11:07 AM

MIN09.06. Precision targeting of brain endothelial cells using enhancer-driven AAV Vectors

E. Velazquez-Rivera;
University of California, Irvine, Irvine, CA.

Time: Sunday, November 15, 2026, 11:07 AM - 11:30 AM

MIN09.07. Optimizing enhancer-driven AAV for primate brain circuits

A. C. Bostan;
University of Pittsburgh, Pittsburgh, PA.

Time: Sunday, November 15, 2026, 11:30 AM - 11:53 AM

MIN09.08. Programmable RNA sensing for cell monitoring and manipulation

Z. Huang;
Duke University Medical Center, Durham, NC.

Minisymposium

MIN10: Voltage Imaging: From a Promising Tool to New Discoveries — Yoav Adam

Theme: Theme J – Techniques

Location: WCC Rm 147

Time: Sunday, November 15, 2026, 9:30 AM - 12:00 PM

Description: Recent advances in genetically encoded voltage indicators (GEVIs) and high-speed microscopy now enable optical measurements of membrane potential with high spatiotemporal resolution across many neurons. While this technology attracts considerable attention, it has been mostly used so far for technical demonstrations. This session will highlight new biological discoveries already emerging across models and cell types, and discuss the next opportunities for the field.

Time: Sunday, November 15, 2026, 9:30 AM - 12:00 PM

MIN10.01. Chair

Y. Adam;
Hebrew University of Jerusalem, Jerusalem, ISRAEL.

Time: Sunday, November 15, 2026, 9:30 AM - 12:00 PM

MIN10.02. Co Chair

X. Han;
Biomedical Engineering, Boston University, Boston, MA.

Time: Sunday, November 15, 2026, 9:35 AM - 9:58 AM

MIN10.03. Voltage imaging reveals how cell-type specific inhibitory dynamics underlying working memory.

P. Golshani;
UCLA Department of Neurology, Los Angeles, CA.

Time: Sunday, November 15, 2026, 9:58 AM - 10:21 AM

MIN10.04. All-optical electrophysiology reveals behavior-dependent dynamics of excitation and inhibition in the hippocampus

Y. Adam;
Hebrew University of Jerusalem, Jerusalem, ISRAEL.

Time: Sunday, November 15, 2026, 10:21 AM - 10:44 AM

MIN10.05. Demystifying the crowning enigma: Voltage dynamics of cortical layer 1 interneurons in visual function.

M. Kannan;
Neuroscience, University of Minnesota, Minneapolis, MN.

Time: Sunday, November 15, 2026, 10:44 AM - 11:07 AM

MIN10.06. Diversity of behavioral timescale synaptic plasticity across hippocampal cell types

T. Geiller;
Neuroscience, Yale University, New Haven, CT.

Time: Sunday, November 15, 2026, 11:07 AM - 11:30 AM

MIN10.07. Voltage imaging reveals rapid nanoscale electrical signaling in astrocytes

C. G. Dulla;
Neuroscience, Tufts University School of Medicine, Boston, MA.

Time: Sunday, November 15, 2026, 11:30 AM - 11:53 AM

MIN10.08. Voltage imaging development and application in mechanistic studies of circuit dynamics during behavior and clinical intervention.

X. Han;
Biomedical Engineering, Boston University, Boston, MA.

Minisymposium

MIN11: Glial Regulation of Motor Circuit Formation, Function, and Regeneration — Sarah Ackerman

Theme: Theme B – Neural Excitability, Synapses, and Glia

Location: WCC Rm 150

Time: Sunday, November 15, 2026, 2:00 PM - 4:30 PM

Description:

From simple planaria to humans, proper assembly and maintenance of motor circuits is key to organismal survival. Recent data indicate that glia, a heterogeneous group of non-neuronal cells within the nervous system, directly communicate with neurons to tune motor circuit dynamics. This minisymposium will highlight recent advances in our understanding of how diverse glial cell types promote proper formation, function, and reconstruction of the key circuits that drive motor behavior.

Time: Sunday, November 15, 2026, 2:00 PM - 4:30 PM

MIN11.01. Chair

S. D. Ackerman;
Pathology and Immunology, Washington University in St. Louis, Saint Louis, MO.

Time: Sunday, November 15, 2026, 2:00 PM - 4:30 PM

MIN11.02. Co Chair

L. Fontenas;
Biological sciences, Florida Atlantic University, Jupiter, FL.

Time: Sunday, November 15, 2026, 2:05 PM - 2:28 PM

MIN11.03. Glia-glia communication sets E/I balance to repress developmental motor plasticity

S. D. Ackerman;
Pathology and Immunology, Washington University in St. Louis, Saint Louis, MO.

Time: Sunday, November 15, 2026, 2:28 PM - 2:51 PM

MIN11.04. Mechanosensitive signaling in Schwann cells shapes motor axon function

Y. Poitelon;
Department of Neuroscience and Experimental Therapeutics, Albany Medical College, Albany, NY.

Time: Sunday, November 15, 2026, 2:51 PM - 3:14 PM

MIN11.05. Oligodendrocyte myelination of peripheral motor axons

L. Fontenas;
Biological sciences, Florida Atlantic University, Jupiter, FL.

Time: Sunday, November 15, 2026, 3:14 PM - 3:37 PM

MIN11.06. Myelin Loss Alters Cortical Dynamics to Impair Skilled Motor Control

E. G. Hughes;
Cell and Developmental Biology, University of Colorado School of Medicine, Aurora, CO.

Time: Sunday, November 15, 2026, 3:37 PM - 4:00 PM

MIN11.07. Neuroimmune modulation of spinal cord injury and repair

D. Klatt Shaw;
Biological Sciences, University of Notre Dame, Notre Dame, IN.

Time: Sunday, November 15, 2026, 4:00 PM - 4:23 PM

MIN11.08. Lesion remote astrocytes modulate neural regeneration after spinal cord injury

S. McCallum;
Cedars Sinai Medical Center, Los Angeles, CA.

Minisymposium

MIN12: Embodied Computation: How Does Embodiment Impact Sensorimotor and Cognitive Processing — Evan Schaffer

Theme: Theme F – Motor Systems

Location: WCC Rm 151

Time: Sunday, November 15, 2026, 2:00 PM - 4:30 PM

Description: This session will bring together experimental neuroscientists, computational modelers, and roboticists to identify general principles of embodied cognition. Talks will examine how sensorimotor constraints and feedback loops shape neural activity beyond classical motor circuits, influencing predictive sensory processing, learning, and decision making.

Time: Sunday, November 15, 2026, 2:00 PM - 4:30 PM

MIN12.01. Chair

E. S. Schaffer;
Neuroscience, Icahn School of Medicine at Mount Sinai, New York, NY.

Time: Sunday, November 15, 2026, 2:00 PM - 4:30 PM

MIN12.02. Co Chair

S. Saxena;
Department of Biomedical Engineering, Yale University, New Haven, CT.

Time: Sunday, November 15, 2026, 2:05 PM - 2:28 PM

MIN12.03. Multitasking recurrent networks utilize compositional strategies for control of movement

S. Saxena;
Yale University, New Haven, CT.

Time: Sunday, November 15, 2026, 2:28 PM - 2:51 PM

MIN12.04. Why NeuroAI needs NeuroAgents

A. Nayebi;
Massachusetts Institute of Technology, Cambridge, MA.

Time: Sunday, November 15, 2026, 2:51 PM - 3:14 PM

MIN12.05. Autonomous Behavior and Whole-Brain Dynamics Emerge in Embodied Zebrafish Agents with Model-based Intrinsic Motivation

X. Pitkow[1], R. Keller[2];
[1]Carnegie Mellon University, Pittsburgh, PA, [2]Neuroscience Institute, Carnegie Mellon University, Pittsburgh, PA.

Time: Sunday, November 15, 2026, 3:14 PM - 3:37 PM

MIN12.06. Simulating the brain and body of the fruit fly

M. McGill;
Computation and Neural Systems, California Institute of Technology, Pasadena, CA.

Time: Sunday, November 15, 2026, 3:37 PM - 4:00 PM

MIN12.07. Brain-Like Dynamics in Neural Networks Critically Depend on Both Learning Rule and Embodiment

M. G. Perich;
Université de Montréal, Montreal, QC, CANADA.

Time: Sunday, November 15, 2026, 4:00 PM - 4:23 PM

MIN12.08. Motor control as a cascade of cybernetic systems

I. M. Park;
Champalimaud Neuroscience Program, Champalimaud Foundation, Lisbon, PORTUGAL.

Minisymposium

MIN13: Parallel Claustral Networks for Behavioral Control in Health and Disease — Yavin Shaham

Theme: Theme G – Integrative Physiology and Behavior

Location: WCC Rm 147

Time: Sunday, November 15, 2026, 2:00 PM - 4:30 PM

Description:

This minisymposium will present recent advances showing that the claustrum acts as a central hub composed of parallel networks, defined by their connectivity, with differential roles in behavioral control. The speakers will also present evidence that different claustral circuits help filter information, regulate frontal cortex flexibility, influence pain sensitivity and opioid relapse, and become disrupted after exposure to alcohol.

Time: Sunday, November 15, 2026, 2:00 PM - 4:30 PM

MIN13.01. Chair

Y. Shaham;
Behavioral Neuroscience Branch, IRP/NIDA/NIH, Baltimore, MD.

Time: Sunday, November 15, 2026, 2:00 PM - 4:30 PM

MIN13.02. Co Chair

A. Citri;
Edmond and Lily Safra Center for Brain Sciences, The Hebrew University, Jerusalem, ISRAEL.

Time: Sunday, November 15, 2026, 2:05 PM - 2:28 PM

MIN13.03. The ins and outs of claustrum circuitry

G. J. Augustine;
Temasek Lifesciences Laboratory, Singapore, SINGAPORE.

Time: Sunday, November 15, 2026, 2:28 PM - 2:51 PM

MIN13.04. Cell-type-specific representations of value signals in the claustrum

S. P. Brown;
Solomon H. Snyder Department of Neuroscience & Kavli Neuroscience Discovery Institute, Johns Hopkins University School of Medicine, Baltimore, MD.

Time: Sunday, November 15, 2026, 2:51 PM - 3:14 PM

MIN13.05. Claustrum-Gated Cortical Flexibility

H. Atilgan;
DPAG, University of Oxford, Oxford, UNITED KINGDOM.

Time: Sunday, November 15, 2026, 3:14 PM - 3:37 PM

MIN13.06. Distinct claustro-cortical pathways differentially regulate pain

C. A. Faig;
University of Alberta, Edmonton, AB, CANADA.

Time: Sunday, November 15, 2026, 3:37 PM - 4:00 PM

MIN13.07. Identification of claustrum circuits critical to incubation of opioid craving after voluntary abstinence

K. Negishi;
IRP/NIDA/NIH, BALTIMORE, MD.

Time: Sunday, November 15, 2026, 4:00 PM - 4:23 PM

MIN13.08. Alcohol disrupts a distinct claustro-cortical circuit responsible for flexible reward seeking

A. B. Wulff;
University of Maryland SOM, Baltimore, MD.

Minisymposium

MIN14: Cellular and Circuit Mechanisms Underlying the Diverse Roles of the Insular Cortex in Brain-Body and Brain-Environment Interactions — Kobi Rosenblum

Theme: Theme E – Sensory Systems

Location: WCC Rm 150

Time: Monday, November 16, 2026, 9:30 AM - 12:00 PM

Description:

The insular cortex (IC) is an evolutionarily conserved associative cortex that integrates interoceptive and exteroceptive signals to support homeostasis, learning, motivation, and emotional and self-related awareness. Disrupted IC function is implicated in neuropsychiatric disorders including mood disorders, schizophrenia, and addiction. This session highlights recent transformative advances in elucidating the function and the circuit and structural principles underlying its diverse roles.

Time: Monday, November 16, 2026, 9:30 AM - 12:00 PM

MIN14.01. Chair

K. Rosenblum;
Sagol Dept Neuro, University of Haifa, Haifa, ISRAEL.

Time: Monday, November 16, 2026, 9:30 AM - 12:00 PM

MIN14.02. Co Chair

T. Mao;
Vollum Institute, Vollum Institute/Oregon Health, Portland, OR.

Time: Monday, November 16, 2026, 9:35 AM - 9:58 AM

MIN14.03. Social cells in the insular cortex

T. Takumi;
Department of Physiology and Cell Biology, Kobe University Graduate School of Medicine, Kobe, JAPAN.

Time: Monday, November 16, 2026, 9:58 AM - 10:21 AM

MIN14.04. Cortical mechanisms for taste learning

A. Maffei;
Neurobiology and Behavior, SUNY Stony Brook, Stony Brook, NY.

Time: Monday, November 16, 2026, 10:21 AM - 10:44 AM

MIN14.05. Interoceptive sensations and prediction in the insular cortex

Y. Livneh;
Weizmann Institute of Science, Rehovot, ISRAEL.

Time: Monday, November 16, 2026, 10:44 AM - 11:07 AM

MIN14.06. Neuronal architecture of the mouse insular cortex underlying its diverse functions

Y. Chen;
Vollum Institute, OHSU, Portland, OR.

Time: Monday, November 16, 2026, 11:07 AM - 11:30 AM

MIN14.07. Retrieval of conditioned immune response in male mice is mediated by an anterior-posterior insula circuit

H. Kayyal;
Neurobiology, University of Haifa, Haifa, ISRAEL.

Time: Monday, November 16, 2026, 11:30 AM - 11:53 AM

MIN14.08. Dynamic function of the human insula across the lifespan

L. Q. Uddin;
UCLA, Los Angeles, CA.

Minisymposium

MIN15: Neural Signals Into Actions: Restoring Movement and Sensation — Stephen Kemp

Theme: Theme F – Motor Systems

Location: WCC Rm 147

Time: Monday, November 16, 2026, 9:30 AM - 12:00 PM

Description: This minisymposium explores how neural signals can be translated into restored movement through advanced neural interfaces and robotics. Talks span brain, muscle, and surgical interfaces, highlighting intuitive motor control and emerging strategies for sensory restoration in individuals with limb amputation or paralysis. Together, these recent advances inform future strategies for interfacing with the nervous system, with direct implications for improving patient quality of life.

Time: Monday, November 16, 2026, 9:30 AM - 12:00 PM

MIN15.01. Chair

S. W. Kemp;
Section of Plastic Surgery, University of Michigan, Ann Arbor, MI.

Time: Monday, November 16, 2026, 9:30 AM - 12:00 PM

MIN15.02. Co Chair

N. V. Thakor;
Biomedical Engineering Department, Johns Hopkins Medical Institutions, Baltimore, MD.

Time: Monday, November 16, 2026, 9:35 AM - 9:58 AM

MIN15.03. Understanding restored thermal sensations and neural representations after amputation

L. Osborn;
Biomedical Engineering, Case Western Reserve University, Cleveland, OH.

Time: Monday, November 16, 2026, 9:58 AM - 10:21 AM

MIN15.04. Neuroprostheses for Controlling Hand and Finger Movements

C. A. Chestek;
Biomedical Engineering, University of Michigan, ANN ARBOR, MI.

Time: Monday, November 16, 2026, 10:21 AM - 10:44 AM

MIN15.05. Understanding the complexity of tuning in motor cortex to improve functional BCI arm and hand control

J. E. Downey;
Department of Neurological Surgery, University of Chicago, Chicago, IL.

Time: Monday, November 16, 2026, 10:44 AM - 11:07 AM

MIN15.06. A Novel Minimally Invasive Implantable Muscle Computer Interface

C. Glass;
Phantom Neuro, Austin, TX.

Time: Monday, November 16, 2026, 11:07 AM - 11:30 AM

MIN15.07. Regenerative Peripheral Nerve Interfaces for Functional Restoration in Individuals with Amputation

S. W. Kemp;
Section of Plastic Surgery, University of Michigan, Ann Arbor, MI.

Time: Monday, November 16, 2026, 11:30 AM - 11:53 AM

MIN15.08. The myokinetic interface: implantable permanent magnets to restore motor functions and sensations

M. Gherardini;
The Biorobotics Institute, Scuola Superiore Sant'Anna, Pisa, ITALY.

Minisymposium

MIN16: Amygdala-Centered Cortico-Subcortical Networks in Social Perception and Decision-Making — Sai Sun

Theme: Theme H – Motivation and Emotion

Location: WCC Rm 146AB

Time: Monday, November 16, 2026, 9:30 AM - 12:00 PM

Description: This symposium advances causal understanding of amygdala-centered subcortical networks underlying social perception, affective processing, and motivational decision-making. Integrating intracranial recordings, neurosurgical and neuromodulatory approaches, and computational modeling, it highlights how frontal-striatal-amygdala circuits shape emotional behavior in healthy and clinical populations.

Time: Monday, November 16, 2026, 9:30 AM - 12:00 PM

MIN16.01. Chair

S. Sun;
Frontier Research Institute for Interdisciplinary Sciences, Tohoku University, Sendai, JAPAN.

Time: Monday, November 16, 2026, 9:30 AM - 12:00 PM

MIN16.02. Co Chair

H. Wu;
University of Macau, Macau, CHINA.

Time: Monday, November 16, 2026, 9:35 AM - 9:58 AM

MIN16.03. The intersection of emotion, decision-making, and memory in the human brain.

H. Wu;
University of Macau, Macau, CHINA.

Time: Monday, November 16, 2026, 9:58 AM - 10:21 AM

MIN16.04. Decoding Brain Signals During Ultrasound Neuromodulation of Visual Cortex

L. Krisst;
Caltech, Pasadena, CA.

Time: Monday, November 16, 2026, 10:21 AM - 10:44 AM

MIN16.05. Personalized Circuit-targeted Deep Brain Stimulation for Obsessive Compulsive Disorder

R. L. Seilheimer;
UT Austin, Austin, TX.

Time: Monday, November 16, 2026, 10:44 AM - 11:07 AM

MIN16.06. Amygdala Ablation Reduces Negative Interpretation Bias and Improves PTSD Symptoms

T. Xie;
Department of Neurosurgery, Washington University School of Medicine, St. Louis, MO.

Time: Monday, November 16, 2026, 11:07 AM - 11:30 AM

MIN16.07. Neural and Causal Mechanisms of Evidence Accumulation in Social-Perceptual Decision-Making

S. Sun;
Frontier Research Institute for Interdisciplinary Sciences, Tohoku University, Sendai, JAPAN.

Time: Monday, November 16, 2026, 11:30 AM - 11:53 AM

MIN16.08. Neuronal Burst Dynamics in the Human Amygdala and Hippocampus During Memory Encoding and Retrieval

P. Chakravarthula;
Radiology, Washington University School of Medicine, Saint Louis, MO.

Minisymposium

MIN17: From Pathways to Pathology: High-Plex Spatial Proteomics From 2D Single-Cell to 3D Neuroscience — Miranda Orr

Theme: Theme J – Techniques

Location: WCC Rm 151

Time: Monday, November 16, 2026, 9:30 AM - 12:00 PM

Description:

Single-cell studies have revealed selective alterations in brain cell types during development, aging and neurodegenerative disease, but most rely on dissociated tissue and transcriptomics, losing spatial context and protein-level biology. This minisymposium highlights spatial proteomic imaging, from high-plex single-cell mapping to 3D spatial proteomics, to localize pathways in intact brain tissue and define cell- and circuit-level mechanisms.

Time: Monday, November 16, 2026, 9:30 AM - 12:00 PM

MIN17.01. Chair

M. Orr;
Neurology, WashU Medicine, St Louis, MO.

Time: Monday, November 16, 2026, 9:30 AM - 12:00 PM

MIN17.02. Co Chair

C. D. Keene;
Pathology, UCSD, San Diego, CA.

Time: Monday, November 16, 2026, 9:35 AM - 9:58 AM

MIN17.03. Spatial proteomics to delineate cellular phenotypes in neurodegeneration.

J. Boles;
Neurology, Northwestern University, Chicago, IL.

Time: Monday, November 16, 2026, 9:58 AM - 10:21 AM

MIN17.04. Cell-Type–Specific Proteomic Signatures in Alzheimer’s Disease With and Without TDP-43 Co-pathology

C. S. Latimer;
Laboratory medicine and pathology, University of Washington, SEATTLE, WA.

Time: Monday, November 16, 2026, 10:21 AM - 10:44 AM

MIN17.05. Laser-capture spatial proteomics paired with spatial transcriptomics to resolve tau pathology and neuronal vulnerability in human Alzheimer’s disease

T. J. Zwang;
Neurology, Massachusetts General Hospital, Charlestown, MA.

Time: Monday, November 16, 2026, 10:44 AM - 11:07 AM

MIN17.06. Reproducible and scalable affinity probe curation and brain atlasing with AI assistance

Z. Wu;
Neuroscience, Weill Cornell Medical College, New York, NY.

Time: Monday, November 16, 2026, 11:07 AM - 11:30 AM

MIN17.07. High-plex single-cell proteogenomic profiling reveals molecular heterogeneity of cellular senescence

X. Sun;
Neurology, Washington University in St. Louis, Saint Louis, MO.

Time: Monday, November 16, 2026, 11:30 AM - 11:53 AM

MIN17.08. Spatial multi-omics integration of the transcriptome, N-glycome and proteome in human Alzheimer's disease hippocampal neuropathology

L. E. Young;
Pharmacology, Medical University of South Carolina, Charleston, SC.

Minisymposium

MIN18: Cellular and Molecular Changes Across the Lifespan and Healthspan of Primates: Connecting Brain, Blood, and Cognitive Indices of Aging and Pathology — Melissa Edler

Theme: Theme C – Neural Aging and Degeneration

Location: WCC Rm 147

Time: Monday, November 16, 2026, 2:00 PM - 4:30 PM

Description: Aging is associated with cognitive decline and Alzheimer's disease-like pathology in the brain of humans and nonhuman primates. However, our closest evolutionary relative, the great apes, do not develop the overt neurodegenerative changes, such as neuron loss and severe cognitive decline seen in Alzheimer's disease. This session will showcase emerging research on the age-related cellular, molecular, and pathological changes that converge and diverge among primates, including humans.

Time: Monday, November 16, 2026, 2:00 PM - 4:30 PM

MIN18.01. Chair

M. K. Edler;
Department of Anthropology, School of Biomedical Sciences, and Brain Health Research Institute, Kent State University, Kent, OH.

Time: Monday, November 16, 2026, 2:00 PM - 4:30 PM

MIN18.02. Co Chair

M. T. Varghese;
George & Anne Ryan Institute for Neuroscience, Department of Biomedical & Pharmaceutical Sciences, University of Rhode Island, Kingston, RI.

Time: Monday, November 16, 2026, 2:05 PM - 2:28 PM

MIN18.03. Conserved and divergent molecular pathways of brain aging in primates

E. E. G. Guevara;
Evolutionary Anthropology, Duke University, Durham, NC.

Time: Monday, November 16, 2026, 2:28 PM - 2:51 PM

MIN18.04. Effects of aging and pathological markers on the brain of great apes and humans: insights from electron microscopy

B. Hrvoj Mihic;
Department of Anthropology and Center for the Advanced Study of Human Paleobiology, The George Washington University, Washington, DC.

Time: Monday, November 16, 2026, 2:51 PM - 3:14 PM

MIN18.05. Plasma and brain biomarkers of aging and Alzheimer's disease in nonhuman primates

M. K. Edler;
Department of Anthropology, School of Biomedical Sciences, and Brain Health Research Institute, Kent State University, Kent, OH.

Time: Monday, November 16, 2026, 3:14 PM - 3:37 PM

MIN18.06. Brain and cognitive correlates of plasma biomarkers of aging and Alzheimer's disease in nonhuman primates

M. M. Mulholland;
Department of Comparative Medicine, The University of Texas MD Anderson Cancer Center, Bastrop, TX.

Time: Monday, November 16, 2026, 3:37 PM - 4:00 PM

MIN18.07. Spatial changes to glial phenotypes proximal to Alzheimer's disease pathology

M. T. Varghese;
George & Anne Ryan Institute for Neuroscience, Department of Biomedical & Pharmaceutical Sciences, University of Rhode Island, Kingston, RI.

Time: Monday, November 16, 2026, 4:00 PM - 4:23 PM

MIN18.08. Squirrel monkeys as a translational model of sporadic cerebral amyloid angiopathy pathology

H. Scholtzova;
Department of Neurology, New York University Grossman School of Medicine, New York, NY.

Minisymposium

MIN19: Metabolic Interactions in Neurovascular Coupling — Philip O'Herron

Theme: Theme D – Neuroimmunity, Neurovasculature, and Neural Injury

Location: WCC Ballroom A

Time: Monday, November 16, 2026, 2:00 PM - 4:30 PM

Description: While it has long been assumed that neurovascular coupling serves the metabolic needs of activated neural tissue, the interaction between neural activity, blood flow changes, and metabolite function is not well understood. This session will highlight recent discoveries on the mutual interdependence of brain states and metabolic states and how they interact with the vasculature, including challenges to conventional understanding about the driving forces in neuro-vascular-metabolic coupling.

Time: Monday, November 16, 2026, 2:00 PM - 4:30 PM

MIN19.01. Chair

P. J. O'Herron;
Physiology, Augusta University, Augusta, GA.

Time: Monday, November 16, 2026, 2:00 PM - 4:30 PM

MIN19.02. Co Chair

P. Mächler;
Neurosciences, UCSD, La Jolla, CA.

Time: Monday, November 16, 2026, 2:05 PM - 2:28 PM

MIN19.03. Changes in tissue glucose and lactate during spontaneous and evoked activity using electrochemistry

S. L. Narayanan;
University of Pittsburgh, Pittsburgh, PA.

Time: Monday, November 16, 2026, 2:28 PM - 2:51 PM

MIN19.04. Norepinephrine induces aerobic glycolysis independent of vascular dynamics in cortex of awake mice

P. Machler;
Neurosciences, UCSD, La Jolla, CA.

Time: Monday, November 16, 2026, 2:51 PM - 3:14 PM

MIN19.05. Neurovascular coupling is independent of lactate metabolism

E. Than Trong;
Neurophotonics, Sorbonne University, Paris, FRANCE.

Time: Monday, November 16, 2026, 3:14 PM - 3:37 PM

MIN19.06. Diurnal and brain-state differences in cerebral microvascular blood flow and oxygenation

S. Sakadzic;
Radiology, Massachusetts General Hospital, Charlestown, MA.

Time: Monday, November 16, 2026, 3:37 PM - 4:00 PM

MIN19.07. Astrocytes mechanosense arterioles to regulate mitochondria-mediated calcium and cerebral blood flow

G. R. Gordon;
Department of Physiology and Pharmacology, Grant Gordon, Calgary, AB, CANADA.

Time: Monday, November 16, 2026, 4:00 PM - 4:23 PM

MIN19.08. Functional hyperemia is not necessary to sustain neural function

P. J. O'Herron;
Physiology, Augusta University, Augusta, GA.

Minisymposium

MIN20: Postnatal Development of Sensory Circuits Supporting Lifelong Social Behaviors — Megan Kirchgessner

Theme: Theme E – Sensory Systems

Location: WCC Rm 150

Time: Monday, November 16, 2026, 2:00 PM - 4:30 PM

Description: Sensory circuits undergo both age- and experience-dependent changes over development, yet little is known about how early sensory plasticity influences, or is influenced by, an animal’s interactions with its social environment. This minisymposium will showcase cutting-edge manipulations and measurements of sensory circuits in developing animals to

understand the complex interplay between sensory processing and social behaviors, both in typical neurodevelopment and neurodevelopmental disorders.

Time: Monday, November 16, 2026, 2:00 PM - 4:30 PM

MIN20.01. Chair

M. A. Kirchgessner;
Neuroscience, NYU School of Medicine, New York, NY.

Time: Monday, November 16, 2026, 2:00 PM - 4:30 PM

MIN20.02. Co Chair

A. Che;
Psychiatry, Yale University School of Medicine, new haven, CT.

Time: Monday, November 16, 2026, 2:05 PM - 2:28 PM

MIN20.03. Developmental maturation and plasticity of vocalization encoding in the mouse auditory cortex

M. A. Kirchgessner;
Neuroscience, NYU School of Medicine, New York, NY.

Time: Monday, November 16, 2026, 2:28 PM - 2:51 PM

MIN20.04. A critical role for oxytocin in the emergence of social touch representation

A. Che;
Psychiatry, Yale University School of Medicine, New Haven, CT.

Time: Monday, November 16, 2026, 2:51 PM - 3:14 PM

MIN20.05. Ontogeny of social behavior and the brain across precocial and altricial rodent species

A. Clemens;
University of Edinburgh, Edinburgh, UNITED KINGDOM.

Time: Monday, November 16, 2026, 3:14 PM - 3:37 PM

MIN20.06. When touch goes awry: developmental circuit mechanisms linking sensation and social behavior

L. L. Orefice;
Molecular Biology / Genetics, Massachusetts General Hospital / Harvard Medical School, Boston, MA.

Time: Monday, November 16, 2026, 3:37 PM - 4:00 PM

MIN20.07. Wiring a social sense: early olfactory circuit organization in the clonal raider ant

D. D. Frank, III;
Kronauer Lab, Rockefeller University, New York, NY.

Time: Monday, November 16, 2026, 4:00 PM - 4:23 PM

MIN20.08. Transient circuits, lasting change: reprogramming the sensory developing cortex

G. Pouchelon;
Cold Spring Harbor Laboratory, Cold Spring Harbor, NY.

Minisymposium

MIN21: Opioid Signaling in Habenula Circuits: An Emerging Substrate for Opioid Addiction — Thomas Hnasko

Theme: Theme H – Motivation and Emotion

Location: WCC Rm 146AB

Time: Monday, November 16, 2026, 2:00 PM - 4:30 PM

Description: The medial and lateral habenula (Hb) are critical to the regulation of affect, avoidance, and coping behaviors, and play pivotal roles in the expression of depression and addiction. High levels of mu-opioid receptors (MOR) were identified in Hb a generation ago and recent studies have begun to identify the functional effects of acute and chronic opioid signaling on Hb cells and synapses. This session will explore how opioids act on Hb circuits to regulate affect and adaptive and maladaptive behaviors.

Time: Monday, November 16, 2026, 2:00 PM - 4:30 PM

MIN21.01. Chair

T. S. Hnasko;
Neurosciences, UC San Diego, La Jolla, CA.

Time: Monday, November 16, 2026, 2:00 PM - 4:30 PM

MIN21.02. Co Chair

E. Darcq;
Strasbourg Translational Neuroscience, INSERM, Strasbourg, FRANCE.

Time: Monday, November 16, 2026, 2:05 PM - 2:28 PM

MIN21.03. Multi-omic spatial mapping of the human habenula reveals molecularly distinct and topographically organized cell types

K. R. Maynard;
Molecular Neuroanatomy, Lieber Institute for Brain Development; Departments of Psychiatry and Neuroscience, Johns Hopkins University School of Medicine, Baltimore, MD.

Time: Monday, November 16, 2026, 2:28 PM - 2:51 PM

MIN21.04. Unique Lateral Habenula Neural Ensembles Encode Drug Seeking Decisions During Punished Fentanyl Self-Administration

K. Coffey;
Psychiatry and Behavioral Science, University of Washington School of Medicine, Seattle, WA.

Time: Monday, November 16, 2026, 2:51 PM - 3:14 PM

MIN21.05. Mu opioid receptors control specific circuits through the habenula

E. B. Margolis;
Neurology, UCSF, San Francisco, CA.

Time: Monday, November 16, 2026, 3:14 PM - 3:37 PM

MIN21.06. Unusual effects of mu-opioid receptor on medial habenula and interpeduncular nucleus cells and synapses

T. S. Hnasko;
Neurosciences, UC San Diego, La Jolla, CA.

Time: Monday, November 16, 2026, 3:37 PM - 4:00 PM

MIN21.07. Implications of Habenular Opioid Responsive Neurons in Negative Affect of Opioid Withdrawal

E. Darcq;
Strasbourg Translational Neuroscience, INSERM, Strasbourg, FRANCE.

Time: Monday, November 16, 2026, 4:00 PM - 4:23 PM

MIN21.08. GPR151-MOR Interactions in the Habenula: Circuit Mechanisms of Opioid Modulation

I. Ibanez-Tallon;
The Rockefeller University, New York, NY.

Minisymposium

MIN22: Circuitry and Computational Mechanisms of Habitual Control — Ignacio Obeso

Theme: Theme I – Cognition

Location: WCC Rm 151

Time: Monday, November 16, 2026, 2:00 PM - 4:30 PM

Description: This minisymposium brings together circuit neuroscience, computational modelling, ecological measures, and clinical research to examine how habits influence the learning of action initiation and inhibition, its arbitration and how these processes break down in disease. The speakers will examine how stress, control, and individual differences in arbitration

between goal-directed and habitual systems are shaped along fronto-striatal circuits in rodent, controls and clinical samples.

Time: Monday, November 16, 2026, 2:00 PM - 4:30 PM

MIN22.01. Chair

I. Obeso;
Systems and Computational Neuroscience, Cajal Neuroscience Centre - CSIC, Madrid, SPAIN.

Time: Monday, November 16, 2026, 2:00 PM - 4:30 PM

MIN22.02. Co Chair

R. Gera;
Neuroscience, Caltech University, Pasadena, CA.

Time: Monday, November 16, 2026, 2:05 PM - 2:28 PM

MIN22.03. Brain circuits of stress, agency, and habit.

K. M. Wassum;
Psychology, UCLA, Los Angeles, CA.

Time: Monday, November 16, 2026, 2:28 PM - 2:51 PM

MIN22.04. Characterizing heterogeneity in human reinforcement learning and the arbitration of behavioral control

J. Cockburn;
Psychological and Brain Sciences, University of Iowa, Iowa City, CA.

Time: Monday, November 16, 2026, 2:51 PM - 3:14 PM

MIN22.05. Automatic Brakes: Behavioral and Neural Mechanisms of Habitual Inhibition

I. Obeso;
Systems and Computational Neuroscience, Cajal Neuroscience Centre - CSIC, Madrid, SPAIN.

Time: Monday, November 16, 2026, 3:14 PM - 3:37 PM

MIN22.06. Causal Fronto-Striatal Circuit Dynamics Regulating Avoidance Behavior in Obsessive-Compulsive Disorder

R. Tadayon Nejad;
Psychiatry, UCLA, Los Angeles, CA.

Time: Monday, November 16, 2026, 3:37 PM - 4:00 PM

MIN22.07. Validating an experimental paradigm for inducing and measuring habits

S. Oh;
University of California, Berkeley, Berkeley, CA.

Time: Monday, November 16, 2026, 4:00 PM - 4:23 PM

MIN22.08. Harnessing real-time digital tools to identify behavioral, neural, and psychophysiological predictors of habits in everyday life

R. Gera;
Neuroscience, Caltech, Pasadena, CA.

Minisymposium

MIN23: Views and Approaches to the Neural Substrates of Reading: Theory, Brain, and Behavioral Data in View of Clinical Findings — Sharon Gilaie-Dotan

Theme: Theme A – Development

Location: WCC Rm 151

Time: Tuesday, November 17, 2026, 9:30 AM - 12:00 PM

Description: Most researchers agree that reading relies on neural substrates that were evolutionarily specialized for other functions, but it is still debatable what these functions are. Understanding these mechanisms and transformations is key for developing effective treatments for the vast types of reading difficulties that exist. This session will present a diversity of views about how reading developed from theories to brain and behavioral data, in light of practical knowledge in the field.

Time: Tuesday, November 17, 2026, 9:30 AM - 12:00 PM

MIN23.01. Chair

S. Gilaie-Dotan;
School of Optometry and Vision Science, Bar-Ilan University, Ramat Gan, ISRAEL.

Time: Tuesday, November 17, 2026, 9:35 AM - 9:58 AM

MIN23.02. Deciphering the neural code for invariant word recognition: Simulating reading acquisition in monkeys

S. Dehaene;
INSERM-CEA, Paris, FRANCE.

Time: Tuesday, November 17, 2026, 9:58 AM - 10:21 AM

MIN23.03. Collaborative and competitive dynamics in category-selective cortical (re)organization over development

M. Behrmann;
Department of Ophthalmology, University of Pittsburgh, Pittsburgh, PA.

Time: Tuesday, November 17, 2026, 10:21 AM - 10:44 AM

MIN23.04. Rethinking Cortical Recycling in High Level Visual Cortex

K. Grill-Spector;
Psychology, Stanford University, Stanford, CA.

Time: Tuesday, November 17, 2026, 10:44 AM - 11:07 AM

MIN23.05. Why 'vision-for-motor-expertise' recycles to 'vision-for-reading': A neurofunctional model

S. Gilaie-Dotan;
School of Optometry and Vision Science, Bar-Ilan University, Ramat Gan, ISRAEL.

Time: Tuesday, November 17, 2026, 11:07 AM - 11:30 AM

MIN23.06. How learning through the hands shapes the developing brain for symbol perception

S. Vinci-Booher;
University of Notre Dame, Notre Dame, IN.

Time: Tuesday, November 17, 2026, 11:30 AM - 11:53 AM

MIN23.07. Plasticity and stability of the reading circuitry in dyslexia

J. D. Yeatman;
Stanford University, Stanford, CA.

Minisymposium

MIN24: Formation and Function of Electrical Synapses — Elizabeth Martin

Theme: Theme B – Neural Excitability, Synapses, and Glia

Location: WCC Rm 150

Time: Tuesday, November 17, 2026, 9:30 AM - 12:00 PM

Description: Fast synaptic transmission is either electrical, mediated by gap junction channels, or chemical, mediated by neurotransmitters/receptors. It is often suggested that electrical synapses simply pre-pattern the nervous system in early development, to later be replaced by chemical synapses in mature circuits. However, recent findings make it clear this dogma is oversimplified. This session will explore new relationships between electrical and chemical synapses in neural circuit assembly and function

Time: Tuesday, November 17, 2026, 9:30 AM - 12:00 PM

MIN24.01. Chair

E. A. Martin;
Institute of Neuroscience, University of Iowa, Iowa City, IA.

Time: Tuesday, November 17, 2026, 9:35 AM - 9:58 AM

MIN24.02. The components of the electrical synapse

A. E. Pereda;
Albert Einstein College of Medicine, Bronx, NY.

Time: Tuesday, November 17, 2026, 9:58 AM - 10:21 AM

MIN24.03. Uncovering the molecular overlap between electrical and chemical synapses

E. A. Martin;
Department of Biology, University of Iowa, Iowa City, IA.

Time: Tuesday, November 17, 2026, 10:21 AM - 10:44 AM

MIN24.04. Photomapping of electrically coupled networks: insights from thalamus and cortex

J. S. Haas;
Department of Biological Sciences, Lehigh University, Bethlehem, PA.

Time: Tuesday, November 17, 2026, 10:44 AM - 11:07 AM

MIN24.05. Mapping cross-modality interaction in the mammalian retina: Mixed (electrical + chemical) synapses and other emergent circuit topologies.

C. L. Sigulinsky;
Ophthalmology, University of Pittsburgh, Pittsburgh, PA.

Time: Tuesday, November 17, 2026, 11:07 AM - 11:30 AM

MIN24.06. Elucidating Configuration and Regulation of Electrical Synapses: One Layer at a Time

A. Bhattacharya;
Tata Institute of Fundamental Research, National Centre for Biological Sciences, BENGALURU, INDIA.

Time: Tuesday, November 17, 2026, 11:30 AM - 11:53 AM

MIN24.07. Synchronous firing of a single neuron type is required for backward walking circuit function

K. Lee;
University of Oregon, Eugene, OR.

Minisymposium

MIN25: Novel Synaptic Mechanisms Underlying Antidepressant-Like Behaviors — Zhenzhong Ma

Theme: Theme H – Motivation and Emotion

Location: WCC Rm 147

Time: Tuesday, November 17, 2026, 9:30 AM - 12:00 PM

Description: Novel antidepressants, such as ketamine and psilocybin, produce rapid and sustained therapeutic effects in patients with depression. Neuroplasticity, characterized by adaptive changes in synaptic strength, spinogenesis, and circuit plasticity across multiple brain regions, is essential for antidepressant and stress responses. This minisymposium highlights recent advances in elucidating these critical synaptic mechanisms, which may inform the development of improved antidepressant therapies.

Time: Tuesday, November 17, 2026, 9:30 AM - 12:00 PM

MIN25.01. Chair

Z. Z. Ma;
Pharmacology, Vanderbilt University, Nashville, TN.

Time: Tuesday, November 17, 2026, 9:30 AM - 12:00 PM

MIN25.02. Co Chair

J. Kim;
Psychiatry, Weill Cornell Medicine, New York, NY.

Time: Tuesday, November 17, 2026, 9:35 AM - 9:58 AM

MIN25.03. Beyond glutamatergic disinhibition: How prefrontal GABAergic dynamics enable sustained stress recovery

M. Fogaca;
Pharmacology and Physiology, University of Rochester Medical Center, Rochester, NY.

Time: Tuesday, November 17, 2026, 9:58 AM - 10:21 AM

MIN25.04. Synaptic and Circuit Mechanisms Triggering Ketamine’s Antidepressant Effects

H. Munguba;
Neuroscience, University College London, London, UNITED KINGDOM.

Time: Tuesday, November 17, 2026, 10:21 AM - 10:44 AM

MIN25.05. Effects of chronic stress and psilocybin on frontal cortical dendritic spines and behavior

S. C. Woodburn;
Biomedical Engineering, Cornell University, Ithaca, NY.

Time: Tuesday, November 17, 2026, 10:44 AM - 11:07 AM

MIN25.06. Ketamine rescues anhedonia by cell-type and input specific adaptations in the Nucleus Accumbens

M. Pignatelli;
Psychiatry, Washington University, ST. LOUIS, MO.

Time: Tuesday, November 17, 2026, 11:07 AM - 11:30 AM

MIN25.07. Presynaptic NMDA receptors mediate fast synaptic actions of ketamine

J. Platholi;
Anesthesiology, Weill Cornell Medicine, New York, NY.

Time: Tuesday, November 17, 2026, 11:30 AM - 11:53 AM

MIN25.08. Targeting Hippocampal Synaptic Plasticity To Sustain Antidepressant Effects of Ketamine

Z. Z. Ma;
Pharmacology, Vanderbilt University, Nashville, TN.

Minisymposium

MIN26: Integrating Time, Space, and Memory: Multiscale Insights Into a Cognitive Map — Mayank Mehta

Theme: Theme I – Cognition

Location: WCC Ballroom A

Time: Tuesday, November 17, 2026, 9:30 AM - 12:00 PM

Description:

The hippocampus and entorhinal cortex are essential for spatial navigation and memory. While place and grid cells long defined the field, new research reveals the cognitive map is a dynamic, multidimensional construct, encoding time, context, and experience. This symposium brings together pioneers redefining this concept. This session will explore how brain states and environment shape spatial representations across scales, from single neurons to network dynamics.

Time: Tuesday, November 17, 2026, 9:30 AM - 12:00 PM

MIN26.01. Chair

M. R. Mehta;
Departments of: Physics, UCLA, Los Angeles, CA.

Time: Tuesday, November 17, 2026, 9:30 AM - 12:00 PM

MIN26.02. Co Chair

C. miao;
Peking University, Beijing, CHINA.

Time: Tuesday, November 17, 2026, 9:35 AM - 9:58 AM

MIN26.03. Hippocampal spatial representations in complex environments

D. A. Dombeck;
Neurobiology, Northwestern University, Evanston, IL.

Time: Tuesday, November 17, 2026, 9:58 AM - 10:21 AM

MIN26.04. Neural computations in support of working memory

S. Leutgeb;
Neurobiology, Univ of California San Diego, La Jolla, CA.

Time: Tuesday, November 17, 2026, 10:21 AM - 10:44 AM

MIN26.05. Learning from Inhibition: Inhibitory Control of Goal Learning in the Hippocampus

A. C. Singer;
Coulter Department of Biomedical Engineering, Georgia Institute of Technology, Atlanta, GA.

Time: Tuesday, November 17, 2026, 10:44 AM - 11:07 AM

MIN26.06. Shaping Cognitive Maps with Novel Sensory Cue in time

M. R. Mehta;
Departments of: Physics, UCLA, Los Angeles, CA.

Time: Tuesday, November 17, 2026, 11:07 AM - 11:30 AM

MIN26.07. Remote spatial representations are internally accessible for action planning and execution

L. M. Frank;
Departments of Physiology and Psyciatry, UC San Francisco and HHMI, San Francisco, CA.

Time: Tuesday, November 17, 2026, 11:30 AM - 11:53 AM

MIN26.08. Representation of cognitive map in time and complex behavior

C. miao;
Peking University, Beijing, CHINA.

Minisymposium

MIN27: Leveraging Non-Mammalian Systems to Investigate the Biology of Neurodevelopmental Disorders — Ellen Hoffman

Theme: Theme A – Development

Location: WCC Rm 147

Time: Tuesday, November 17, 2026, 2:00 PM - 4:30 PM

Description: This minisymposium presents cutting-edge research leveraging scalable non-mammalian systems, including zebrafish, Xenopus, *C. elegans*, and *Drosophila*, to investigate biological mechanisms underlying neurodevelopmental disorders (NDDs), particularly autism spectrum disorders (ASDs). The speakers will present studies highlighting the unique advantages of these systems for high-throughput analyses of risk genes, pharmacological screens, and *in vivo* visualization of neural circuits underlying basic behaviors.

Time: Tuesday, November 17, 2026, 2:00 PM - 4:30 PM

MIN27.01. Chair

E. J. Hoffman;
Child Study Center, Neuroscience, Yale University, New Haven, CT.

Time: Tuesday, November 17, 2026, 2:00 PM - 4:30 PM

MIN27.02. Co Chair

R. N. Arey;
Center for Precision Environmental Health, Baylor College of Medicine, Houston, TX.

Time: Tuesday, November 17, 2026, 2:05 PM - 2:28 PM

MIN27.03. Genomics-informed Behavioral Screening in C. elegans reveals Novel NDD-risk Genes

R. N. Arey;
Center for Precision Environmental Health, Baylor College of Medicine, Houston, TX.

Time: Tuesday, November 17, 2026, 2:28 PM - 2:51 PM

MIN27.04. Studying NDD and Autism-associated Gene Function in C. elegans Circuits and Behaviors

M. P. Hart;
University of Pennsylvania, Philadelphia, PA.

Time: Tuesday, November 17, 2026, 2:51 PM - 3:14 PM

MIN27.05. Functional Mapping of an Autism Risk Gene CHD2-Dependent Signaling Network in Homeostatic Plasticity

T. Wang;
Pharmacology and Physiology, Georgetown University, Washington, DC.

Time: Tuesday, November 17, 2026, 3:14 PM - 3:37 PM

MIN27.06. Behavioral screen reveals autism and intellectual disability genes influence working memory in zebrafish

B. L. Bastien;
Genetics, University of Massachusetts Chan School of Medicine, Worcester, MA.

Time: Tuesday, November 17, 2026, 3:37 PM - 4:00 PM

MIN27.07. Pharmaco-behavioral Profiling Identifies Suppressors of Autism Gene-Associated Phenotypes in Zebrafish

E. J. Hoffman;
Child Study Center, Neuroscience, Yale University, New Haven, CT.

Time: Tuesday, November 17, 2026, 4:00 PM - 4:23 PM

MIN27.08. Making the Leap: Translating Autism Genetics into Patient-relevant Insights using Frog Models

B. Graziano;
University of Miami, Miami, FL.

Minisymposium

MIN28: Integrating Cytoskeletal Systems in Neurons and Glia: Dynamic Orchestration of Structure and Function — Bettina Winckler

Theme: Theme B – Neural Excitability, Synapses, and Glia

Location: WCC Rm 150

Time: Tuesday, November 17, 2026, 2:00 PM - 4:30 PM

Description: Cells in the nervous system rely on multiple cytoskeletal systems — microtubules, actin, intermediate filaments, spectrin, and septins — that have traditionally been studied in isolation. Recent advances now reveal extensive coordination among these systems. This session will bring together experts on distinct cytoskeletal polymers to define unique features as well as cross-talk of different cytoskeletal systems to shape neuronal and glial morphology and function in health and disease.

Time: Tuesday, November 17, 2026, 2:00 PM - 4:30 PM

MIN28.01. Chair

B. R. Winckler;
Cell Biology, University of Virginia, Charlottesville, VA.

Time: Tuesday, November 17, 2026, 2:00 PM - 4:30 PM

MIN28.02. Co Chair

M. Fu;
Department of Molecular & Cellular Biology (MCB), University of California, Berkeley, Berkeley, CA.

Time: Tuesday, November 17, 2026, 2:05 PM - 2:28 PM

MIN28.03. Cytoskeletal organization in astrocytes

M. Fu;
Neurobiology, University of California, Berkeley, Berkeley, CA.

Time: Tuesday, November 17, 2026, 2:28 PM - 2:51 PM

MIN28.04. The mechanism of neurofilament accumulation in neurodegenerative disease

H. Bailey;
Ohio State University, Columbus, OH.

Time: Tuesday, November 17, 2026, 2:51 PM - 3:14 PM

MIN28.05. Microtubule lattice dynamics in neuronal organisation

H. York;
Aix Marseille Université, Marseille, FRANCE.

Time: Tuesday, November 17, 2026, 3:14 PM - 3:37 PM

MIN28.06. Interplay between microtubule and motor regulation in human synaptic development

J. E. Aiken;
University of Colorado Anschutz Medical Campus, Denver, CO.

Time: Tuesday, November 17, 2026, 3:37 PM - 4:00 PM

MIN28.07. Spatial regulation of neurite formation and outgrowth by the septin cytoskeleton

E. T. Spiliotis;
Cell Biology, University of Virginia School of Medicine, Charlottesville, VA.

Time: Tuesday, November 17, 2026, 4:00 PM - 4:23 PM

MIN28.08. Mechanisms governing axonal transport at junctions along the axon

S. Tymanskyj;
Biological Sciences, Augusta University, Augusta, GA.

Minisymposium

MIN29: Neural Mechanisms of Multisystem Interoception in Humans — Galia Avidan

Theme: Theme I – Cognition

Location: WCC Rm 151

Time: Tuesday, November 17, 2026, 2:00 PM - 4:30 PM

Description: This minisymposium highlights recent advances in human interoception, examining how signals from multiple body systems are represented, integrated and regulated. Speakers will address cardiac, respiratory, gastrointestinal, and immune processes, illustrating how these mechanisms support emotion and cognition and how their dysregulation contributes to mental and physical illness. Together, the talks emphasize a multisystem framework for understanding brain–body function in health and disease

Time: Tuesday, November 17, 2026, 2:00 PM - 4:30 PM

MIN29.01. Chair

G. Avidan;
Psychology, Ben-Gurion University of the Negev, Beer Sheva, ISRAEL.

Time: Tuesday, November 17, 2026, 2:00 PM - 4:30 PM

MIN29.02. Co Chair

L. Rozenkrantz;
Bar-Ilan University The Azrieli Faculty of Medicine, Safed, ISRAEL.

Time: Tuesday, November 17, 2026, 2:05 PM - 2:28 PM

MIN29.03. The new neuroscience of interoception: Towards causal and computational approaches

M. G. Allen;
Aarhus University, Aarhus, DENMARK.

Time: Tuesday, November 17, 2026, 2:28 PM - 2:51 PM

MIN29.04. Interoceptive attention as a mechanism of immune regulation

L. Rozenkrantz;
The Azrieli Faculty of Medicine, Bar-Ilan University, Safed, ISRAEL.

Time: Tuesday, November 17, 2026, 2:51 PM - 3:14 PM

MIN29.05. The interoceptive origin of reward

F. H. Petzschner;
Department of Cognitive and Psychological Sciences, Brown University, Providence, RI.

Time: Tuesday, November 17, 2026, 3:14 PM - 3:37 PM

MIN29.06. Gut feelings: The role of gastric and metabolic state in emotion, decision-making, and mental health

C. Nord;
University of Cambridge, Cambridge, UNITED KINGDOM.

Time: Tuesday, November 17, 2026, 3:37 PM - 4:00 PM

MIN29.07. A network approach to studying the interplay between gastric electrical signals, interoceptive perception, and dynamic functional brain connectivity

G. Avidan;
Department of Psychology, Ben-Gurion University of the Negev, Beer Sheva, ISRAEL.

Time: Tuesday, November 17, 2026, 4:00 PM - 4:23 PM

MIN29.08. From visceral signals to symptoms: Integrating multisystem interoception in human health and disease

S. S. Khalsa;
UCLA Department of Psychiatry, Los Angeles, CA.

Minisymposium

MIN30: Brain Tumors and the Neural Stem Cell Niche — Hugo Guerrero Cazares

Theme: Theme D – Neuroimmunity, Neurovasculature, and Neural Injury

Location: WCC Rm 147

Time: Wednesday, November 18, 2026, 9:30 AM - 12:00 PM

Description: At first diagnosis, approximately half of aggressive brain tumors contact the subventricular zone (SVZ) stem cell niche by the lateral ventricles. Patients with these "contacting" tumors have earlier tumor recurrence and shorter overall survival, yet the biological reasons for these outcomes remain elusive. This session will explore how stem cell niche contact is linked to behavior of cancer, neural, and immune cells in aggressive brain tumors and how this understanding can change treatment.

Time: Wednesday, November 18, 2026, 9:30 AM - 12:00 PM

MIN30.01. Chair

H. Guerrero Cazares;
Neurosurgery, Mayo Clinic, Jacksonville, FL.

Time: Wednesday, November 18, 2026, 9:30 AM - 12:00 PM

MIN30.02. Co Chair

S. G. Piccirillo;
University of New Mexico Health Sciences Center, Albuquerque, NM.

Time: Wednesday, November 18, 2026, 9:35 AM - 9:58 AM

MIN30.03. Glioblastoma and the subventricular zone: multiomic evidence for tumor origins

L. Whaley Powers;
Duke University, Durham, NC.

Time: Wednesday, November 18, 2026, 9:58 AM - 10:21 AM

MIN30.04. The adult subventricular zone microenvironment and its role in glioblastoma cell behavior and tumor progression

V. Neirinckx;
Preclinical and Pharmaceutical Science, University of Liège - GIGA Institute, Liège, BELGIUM.

Time: Wednesday, November 18, 2026, 10:21 AM - 10:44 AM

MIN30.05. Single-nucleus and spatial multiomic analysis of the subventricular zone in human glioblastoma

S. G. Piccirillo;
University of New Mexico Health Sciences Center, Albuquerque, NM.

Time: Wednesday, November 18, 2026, 10:44 AM - 11:07 AM

MIN30.06. Instruction of suppressive macrophages in niche-contacting brain tumors

R. A. Ihrie;
Pediatrics - Neurology, University of Colorado Anschutz Medical Campus, Aurora, CO.

Time: Wednesday, November 18, 2026, 11:07 AM - 11:30 AM

MIN30.07. When tumors age the brain: glioblastoma-induced senescence in the subventricular zone

H. Guerrero Cazares;
Neurosurgery, Mayo Clinic, Ponte Vedra Beach, FL.

Time: Wednesday, November 18, 2026, 11:30 AM - 11:53 AM

MIN30.08. Neural progenitor cells, tumor control and cognitive sequelae of brain radiation therapy

K. J. Redmond;
Johns Hopkins, Baltimore, MD.

Minisymposium

MIN31: Conserved and Divergent Principles of Limb Control Across Species — Akira Nagamori

Theme: Theme F – Motor Systems

Location: WCC Rm 150

Time: Wednesday, November 18, 2026, 9:30 AM - 12:00 PM

Description: Across the animal kingdom, limbed animals have evolved to perform a wide range of behaviors. How do evolutionally conserved and divergent features of the nervous system collectively control vastly different biomechanical systems to achieve these behaviors? Leveraging unique methodological advantages offered by different model organisms (fly, mouse, bat, monkey, human), this session will explore control strategies that are conserved as well as diverged across evolution.

Time: Wednesday, November 18, 2026, 9:30 AM - 12:00 PM

MIN31.01. Chair

A. Nagamori;
MNL-E, Salk Institute for Biological Studies, La Jolla, CA.

Time: Wednesday, November 18, 2026, 9:35 AM - 9:58 AM

MIN31.02. Imitating Learning of Mouse Forelimb Reaching Dynamics using Musculoskeletal Modeling

E. J. Leonardis;
Cognitive Science, Salk Institute for Biological Studies, San Diego, CA.

Time: Wednesday, November 18, 2026, 9:58 AM - 10:21 AM

MIN31.03. Behavioral and biomechanical manipulations to define the granularity of human motoneuron control

C. F. Gibbs;
Imperial College London, London, UNITED KINGDOM.

Time: Wednesday, November 18, 2026, 10:21 AM - 10:44 AM

MIN31.04. Mapping the spatiotemporal structure of motor cortical neurons and populations

R. Canfield;
Bioengineering, University of Washington, Seattle, WA.

Time: Wednesday, November 18, 2026, 10:44 AM - 11:07 AM

MIN31.05. Motor Cortical Computations Underlying Free Flight in Bats

B. STYR;
University of California, Berkeley, Berkeley, CA.

Time: Wednesday, November 18, 2026, 11:07 AM - 11:30 AM

MIN31.06. Central and proprioceptive contributions to the generation of a coordinated walking pattern in Drosophila

N. Sapkal;
Max Planck Florida Institute for Neuroscience, Jupiter, FL.

Time: Wednesday, November 18, 2026, 11:30 AM - 11:53 AM

MIN31.07. High-dimensional control of individual forelimb muscles underlies dexterous forelimb movements

A. Nagamori;
MNL-E, Salk Institute for Biological Studies, La Jolla, CA.

Minisymposium

MIN32: Development of Distributed Neural Circuits and the Impact on Emerging Behaviors — Laura DeNardo

Theme: Theme H – Motivation and Emotion

Location: WCC Rm 146AB

Time: Wednesday, November 18, 2026, 9:30 AM - 12:00 PM

Description: Functional interactions between far-reaching brain systems including neuromodulatory systems, frontal areas, and the limbic system are key substrates of healthy cognition and their developmental disruption is a major risk factor for mental disorders. Yet, the understanding of how these circuits mature is limited. This session will discuss new work identifying the genetic programs that wire complex brain circuits and how the organization and function of these circuits controls behavior across the lifespan.

Time: Wednesday, November 18, 2026, 9:30 AM - 12:00 PM

MIN32.01. Chair

L. A. DeNardo;
Physiology, UCLA, Los Angeles, CA.

Time: Wednesday, November 18, 2026, 9:30 AM - 12:00 PM

MIN32.02. Co Chair

J. REN;
Neurobiology division, MRC Laboratory of Molecular Biology, Cambridge, UNITED KINGDOM.

Time: Wednesday, November 18, 2026, 9:35 AM - 9:58 AM

MIN32.03. Assembly of social interaction in neonates

X. Jin;
Scripps Research, San Diego, CA.

Time: Wednesday, November 18, 2026, 9:58 AM - 10:21 AM

MIN32.04. Neural circuits for infant behaviors

M. O. Dietrich;
Comparative Medicine, Yale University, New Haven, CT.

Time: Wednesday, November 18, 2026, 10:21 AM - 10:44 AM

MIN32.05. Forgetting as a form of adaptive plasticity in early life

S. E. Canetta;
Columbia University Medical Center, New York, NY.

Time: Wednesday, November 18, 2026, 10:44 AM - 11:07 AM

MIN32.06. The impact of early life adversity on developing frontolimbic circuits

L. A. DeNardo;
Physiology, UCLA, Los Angeles, CA.

Time: Wednesday, November 18, 2026, 11:07 AM - 11:30 AM

MIN32.07. Roles of neurexins in serotonergic system development and social behavior

K. Futai;
Department of Neurobiology, University of Massachusetts Chan Medical School, Worcester, MA.

Time: Wednesday, November 18, 2026, 11:30 AM - 11:53 AM

MIN32.08. Critical Windows for Serotonin Circuit Assembly: Multimodal Mapping and Links to Psychiatric Genetic Risk

J. REN;
Neurobiology division, MRC Laboratory of Molecular Biology, Cambridge, UNITED KINGDOM.

Minisymposium

MIN33: Placental-Neural Crosstalk: Biological Mechanisms Shaping Brain Architecture — Hanna Stevens

Theme: Theme A – Development

Location: WCC Rm 150

Time: Wednesday, November 18, 2026, 2:00 PM - 4:30 PM

Description: Impacts of placental function on normal and pathological brain processes and supported behavior is an integrative research area dubbed “neuroplacentology.” This session will provide an up-to-date introduction to this emerging field. Mechanistic links between variations in placental structure and function and features of human and animal brain development and function will be discussed, clarifying basic biological connections and highlighting new targets to prevent clinical impairments.

Time: Wednesday, November 18, 2026, 2:00 PM - 4:30 PM

MIN33.01. Chair

H. E. Stevens;
University of Iowa, Iowa City, IA.

Time: Wednesday, November 18, 2026, 2:00 PM - 4:30 PM

MIN33.02. Co Chair

A. A. Penn;
Pediatrics, Columbia University, New York, NY.

Time: Wednesday, November 18, 2026, 2:05 PM - 2:28 PM

MIN33.03. Disruption of placental structure and neurovascular development by inflammation lead to life-long neurological disorders

A. Bonnin;
Pathology, Keck School of Medicine of USC - CHLA, Los Angeles, CA.

Time: Wednesday, November 18, 2026, 2:28 PM - 2:51 PM

MIN33.04. Neuroimaging findings associated with placental pathological evidence of fetal inflammatory responses in preterm infants

I. N. Mir;
University of Texas Southwestern Medical Center, Dallas, TX.

Time: Wednesday, November 18, 2026, 2:51 PM - 3:14 PM

MIN33.05. Placental Neuroactive Steroids Shape Brain Development: Influence of Sex and Therapeutic Potential

C. M. Vacher;
Pediatrics, Columbia University Medical Center, New York, NY.

Time: Wednesday, November 18, 2026, 3:14 PM - 3:37 PM

MIN33.06. Maternal wellbeing and the placenta: implications for the developing brain

E. S. Nichols;
Applied Psychology, Western University, London, ON, CANADA.

Time: Wednesday, November 18, 2026, 3:37 PM - 4:00 PM

MIN33.07. Brain vascular alterations in offspring of preeclampsia

C. A. Escudero;
Universidad del Bio-Bio, Chillán, CHILE.

Time: Wednesday, November 18, 2026, 4:00 PM - 4:23 PM

MIN33.08. A multi-omic view of the placenta-maternal brain axis in preeclampsia

S. B. Gumusoglu;
University of Iowa, Iowa City, IA.

Minisymposium

MIN34: Illuminating the Mechanisms of Hibernation via Thermoregulatory Research — Wei Shen

Theme: Theme E – Sensory Systems

Location: WCC Rm 151

Time: Wednesday, November 18, 2026, 2:00 PM - 4:30 PM

Description: This session will focus on the neural mechanisms of thermoregulation and hibernation, two tightly linked processes essential for energy balance and survival. By highlighting recent breakthroughs in hypothalamic circuitry and molecular regulators, this session will clarify how the brain controls body temperature and torpor, and how these discoveries may open new therapeutic avenues for metabolic and neurological diseases.

Time: Wednesday, November 18, 2026, 2:00 PM - 4:30 PM

MIN34.01. Chair

w. shen;
SLST, Shanghaitech University, Shanghai, CHINA.

Time: Wednesday, November 18, 2026, 2:00 PM - 4:30 PM

MIN34.02. Co Chair

J. Siemens;
Physio & Molec and Cellular Pharmacol, Heidelberg University, Heidelberg, GERMANY.

Time: Wednesday, November 18, 2026, 2:05 PM - 2:28 PM

MIN34.03. A heat acclimation-induced neuronal pacemaker that drives heat tolerance

J. Siemens;
Physio & Molec and Cellular Pharmacol, Heidelberg University, Heidelberg, GERMANY.

Time: Wednesday, November 18, 2026, 2:28 PM - 2:51 PM

MIN34.04. Central Neuronal Pathways Controlling Thermoregulatory Inversion

D. Tupone;
Neurosurgery, OHSU \ UNIBO, Portland, OR.

Time: Wednesday, November 18, 2026, 2:51 PM - 3:14 PM

MIN34.05. Preoptic neurons that regulate hibernation

S. Hrvatin;
Biology, Whitehead Institute and MIT, Cambridge, MA.

Time: Wednesday, November 18, 2026, 3:14 PM - 3:37 PM

MIN34.06. Parabrachial cold-responsive neurons orchestrate integrated homeostatic responses

S. Kim;
Institute of Molecular Biology and Genetics, Seoul National University, Seoul, KOREA, REPUBLIC OF.

Time: Wednesday, November 18, 2026, 3:37 PM - 4:00 PM

MIN34.07. Hibernation biology of the visual system and its potential applications

W. Li;
Shanghai Jiao Tong University School of Medicine, SANS Institute for Neuroscience and Vision Research, Shanghai, CHINA.

Time: Wednesday, November 18, 2026, 4:00 PM - 4:23 PM

MIN34.08. The neurophysiology of hypothalamic neurons from mammalian species with alternative thermoregulatory strategies.

D. H. Brager;
School of Life Sciences, Univ. of Nevada, Las Vegas, Las Vegas, NV.

Minisymposium

MIN35: Paired Neuroimaging and Brain Omics From the Same Individuals for Disease Mechanisms and Diagnostics — Chris Gaiteri

Theme: Theme G – Integrative Physiology and Behavior

Location: WCC Rm 147

Time: Wednesday, November 18, 2026, 2:00 PM - 4:30 PM

Description: Neuroscience lacks an understanding of how molecular and the tissue-level states of the brain relate. New cohorts with paired neuroimaging and brain omics show person-specific synchronization between brain molecular states, electrophysiology and structural and functional neuroimaging, which change our understanding of basic brain biology, aging, and Alzheimer's and Parkinson's diseases. This session will show how paired data enables whole-brain modeling, diagnostics and targeted disease treatment.

Time: Wednesday, November 18, 2026, 2:00 PM - 4:30 PM

MIN35.01. Chair

C. Gaiteri;
SUNY Upstate Medical University, Syracuase, NY.

Time: Wednesday, November 18, 2026, 2:00 PM - 4:30 PM

MIN35.02. Co Chair

J. H. Herskowitz;
Neurology, University of Alabama at Birmingham, Birmingham, AL.

Time: Wednesday, November 18, 2026, 2:05 PM - 2:28 PM

MIN35.03. Tracking tau spread dynamics within and across brain regions using personalized fMRI

J. H. Herskowitz;
Neurology, University of Alabama at Birmingham, Birmingham, AL.

Time: Wednesday, November 18, 2026, 2:28 PM - 2:51 PM

MIN35.04. Investigating Alzheimer's mechanisms with paired functional neuroimaging and brain transcriptomics

B. Ng;
Rush University, Chicago, IL.

Time: Wednesday, November 18, 2026, 2:51 PM - 3:14 PM

MIN35.05. Paired Neuroimaging and Transcriptomics in the Same Individuals Reveal Region-Specific Molecular Correlates of Brain Structure

S. Tripathy;
Psychiatry, University of Toronto, Toronto, ON, CANADA.

Time: Wednesday, November 18, 2026, 3:14 PM - 3:37 PM

MIN35.06. Plasma proteomics from thousands of individuals can predict brain omics and neuropathology.

S. Tasaki;
Rush Alzheimer's Disease Center, Rush University, Chicago, IL.

Time: Wednesday, November 18, 2026, 3:37 PM - 4:00 PM

MIN35.07. Establishing the relationship between brain cellular senescence and brain structure.

N. D. Beckmann;
Icahn School of Medicine at Mount Sinai School of Medicine, New York, NY.

Time: Wednesday, November 18, 2026, 4:00 PM - 4:23 PM

MIN35.08. Deriving insights into neurodegenerative disease biology by combining CSF and plasma proteomics with neuroimaging

J. W. Vogel;
Department of Clinical Science, Lund University, Lund, SWEDEN.

Symposium

SYM01: Mechanisms Sculpting Corticolimbic Dopamine Maturation and Neurobehavioral Trajectories From Adolescence to Adulthood — Ashley Parr

Theme: Theme A – Development

Location: WCC Ballroom B

Time: Saturday, November 14, 2026, 2:00 PM - 4:30 PM

Description: The dopamine (DA) system in tandem with the corticolimbic network undergo dynamic specialization across development, with adolescence marking a critical window that shapes neurobehavioral trajectories into adulthood. This symposium showcases animal and human neurobiological breakthroughs revealing a cross-species perspective of how experiences sculpt brain maturation across development, relating DA-sensitive circuit development to cognition, reward learning, and health-risk behaviors.

Time: Saturday, November 14, 2026, 2:00 PM - 4:30 PM

SYM01.01. Chair

A. C. Parr;
Psychiatry, University of Pittsburgh, Pittsburgh, PA.

Time: Saturday, November 14, 2026, 2:05 PM - 2:40 PM

SYM01.02. Developmental Mechanisms Driving Prefrontal Corticolimbic Circuit Maturation

K. Y. Tseng;
Anatomy and Cell Biology / Neuroscience, University of Illinois Chicago - College of Medicine, Chicago, IL.

Time: Saturday, November 14, 2026, 2:40 PM - 3:15 PM

SYM01.03. Experience-Dependent Dopamine Axon Pathfinding in Adolescence

C. Flores;
Psychiatry, McGill University, Montreal, QC, CANADA.

Time: Saturday, November 14, 2026, 3:15 PM - 3:50 PM

SYM01.04. Dopamine-driven maturation of mesocorticolimbic circuits supporting reward and cognitive trajectories in adolescence

B. Luna;
Department of Psychiatry, University of Pittsburgh, Pittsburgh, PA.

Time: Saturday, November 14, 2026, 3:50 PM - 4:25 PM

SYM01.05. Neurocognitive Development of Reinforcement learning across Adolescence

C. A. Hartley;
Psychology, New York University, New York, NY.

Symposium

SYM02: How Survival Circuits Drive Metabolic Diseases: Integrating Metabolism, Reward, and Pain — Hyung Jin Choi

Theme: Theme G – Integrative Physiology and Behavior

Location: WCC Rm 146AB

Time: Sunday, November 15, 2026, 9:30 AM - 12:00 PM

Description: Survival depends on the brain’s ability to constantly arbitrate between competing drives. While energy homeostasis, pain processing, and reward seeking are often studied in isolation, recent evidence demonstrates that these systems are inextricably linked. This symposium explores "Survival Circuits" integrating metabolic states with valence to regulate feeding, locomotion, and analgesia, and their dysregulation in obesity, diabetes, anorexia, and anhedonia.

Time: Sunday, November 15, 2026, 9:30 AM - 12:00 PM

SYM02.01. Chair

H. Choi;
Seoul National University, Seoul, KOREA, REPUBLIC OF.

Time: Sunday, November 15, 2026, 9:30 AM - 12:00 PM

SYM02.02. Co Chair

Q. Tong;
IMM, University of Texas Health Science Center, Houston, Houston, TX.

Time: Sunday, November 15, 2026, 9:35 AM - 10:10 AM

SYM02.03. Neural Control of Metabolic Health: Brain–Body Interactions in Obesity and Glucose Regulation

M. Serlie;
Endocrinology and Metabolism, Yale School of Medicine, New Haven, CT.

Time: Sunday, November 15, 2026, 10:10 AM - 10:45 AM

SYM02.04. Neural Circuits for Food Preference and Aversion

H. Choi;
Seoul National University, Seoul, KOREA, REPUBLIC OF.

Time: Sunday, November 15, 2026, 10:45 AM - 11:20 AM

SYM02.05. Hypothalamic Circuits to Modify Pain and Gain

G. M. Leinninger;
Physiology, Michigan State University, East Lansing, MI.

Time: Sunday, November 15, 2026, 11:20 AM - 11:55 AM

SYM02.06. A Neural Basis for Anorexia That Integrates Stress and Survival

Q. Tong;
IMM, University of Texas Health Science Center, Houston, Houston, TX.

Symposium

SYM03: Cholesterol Dyshomeostasis as an Upstream Driver of Neurodegeneration in Alzheimer's Disease — Cory Funk

Theme: Theme C – Neural Aging and Degeneration

Location: WCC Ballroom A

Time: Sunday, November 15, 2026, 2:00 PM - 4:30 PM

Description: Disruptions in cholesterol homeostasis are consistently observed across genetic, cellular, and human studies of Alzheimer's disease (AD). This session will explore how cholesterol dyshomeostasis and limited glial lipid handling may act upstream of amyloid and tau pathology to drive disease progression, including the roles of apolipoprotein E4 (APOE4) and other AD risk genes in impaired cholesterol efflux, Lands cycle remodeling, and astrocytic

cholesterol ester accumulation, and how these processes disrupt astrocyte-neuronal lactate shuttling (ANLS) coupling and promote neurodegeneration.

Time: Sunday, November 15, 2026, 2:00 PM - 4:30 PM

SYM03.01. Chair

C. C. Funk;
Institute for Systems Biology, Seattle, WA.

Time: Sunday, November 15, 2026, 2:05 PM - 2:40 PM

SYM03.02. Immune metabolic dysregulation in iAstrocytes mediated by Alzheimer's risk mutant ApoE4

R. van der Kant;
Vrije Universiteit Amsterdam, Amsterdam, NETHERLANDS.

Time: Sunday, November 15, 2026, 2:40 PM - 3:15 PM

SYM03.03. The role of endogenous nanoparticles in Alzheimer's disease: an extracellular cholesterol storage disorder.

L. B. McIntire;
Weill Cornell Medicine, New York, NY.

Time: Sunday, November 15, 2026, 3:15 PM - 3:50 PM

SYM03.04. Lipid Metabolism Disruption: A Key Driver Of Alzheimer's Disease Risk Genes

L. Tsai;
Massachusetts Institute of Technology, Cambridge, MA.

Time: Sunday, November 15, 2026, 3:50 PM - 4:25 PM

SYM03.05. When Cholesterol Handling Reaches Its Limits: Glial Lipid Overload, Metabolic Decoupling, and Neurodegeneration

C. C. Funk;
Institute for Systems Biology, Seattle, WA.

Symposium

SYM04: Maternal Inflammation in Health and Disease: Decoding Mechanisms Across Biological Scales and Developmental Trajectories — Arghya Mukherjee

Theme: Theme D – Neuroimmunity, Neurovasculature, and Neural Injury

Location: WCC Ballroom B

Time: Sunday, November 15, 2026, 2:00 PM - 4:30 PM

Description: Prenatal inflammation is a major risk factor for neuropsychiatric conditions such as autism and schizophrenia. This session will bring together researchers studying how maternal inflammation disrupts brain development across molecular, circuit, and behavioral scales. Speakers will share findings from rodents, non-human primates, and humans on changes in transcriptomic, immune-brain signaling, and circuit-based pathways linking early-life inflammation to cognitive and metabolic deficits.

Time: Sunday, November 15, 2026, 2:00 PM - 4:30 PM

SYM04.01. Chair

A. Mukherjee;
Neuroscience, Children's Hospital of Philadelphia and the University of Pennsylvania, Philadelphia, PA.

Time: Sunday, November 15, 2026, 2:00 PM - 4:30 PM

SYM04.02. Co Chair

A. Sawa;
Psychiatry, Johns Hopkins University, Baltimore, MD.

Time: Sunday, November 15, 2026, 2:05 PM - 2:40 PM

SYM04.03. Maternal Immune Activation Targets the Kynurenine-Astrocyte Pathway in Cognitive Dysfunction

U. Meyer;
University of Zurich, Zurich, SWITZERLAND.

Time: Sunday, November 15, 2026, 2:40 PM - 3:15 PM

SYM04.04. Maternal immune activation: microglia blunting, alteration in proinflammatory cytokines, and their impacts on hippocampal and striatal circuits.

A. Sawa;
Psychiatry, Johns Hopkins University, Baltimore, MD.

Time: Sunday, November 15, 2026, 3:15 PM - 3:50 PM

SYM04.05. Influence of maternal immune activation on nonhuman primate offspring neurodevelopmental outcomes

M. D. Bauman;
Univ California, Davis, Sacramento, CA.

Time: Sunday, November 15, 2026, 3:50 PM - 4:25 PM

SYM04.06. Investigating the impact of in utero COVID-19 exposure on neurodevelopment

R. A. Hill;
Psychiatry, Monash University, Clayton, AUSTRALIA.

Symposium

SYM05: Spinal Cord Injury: Novel Concepts for Clinical Trials — Frank Bradke

Theme: Theme F – Motor Systems

Location: WCC Rm 146AB

Time: Sunday, November 15, 2026, 2:00 PM - 4:30 PM

Description: Mechanisms underlying nerve fiber regeneration and circuit plasticity in the injured adult spinal cord and brain have been elucidated over the last 35 years. The symposium shows that the goal of a clinical translation of these findings is finally coming into sight and will present different approaches ranging from antibodies and a receptor blocking peptide electrical stimulation paradigms and gabapentinoids. The novel concepts of the clinical trials will be discussed.

Time: Sunday, November 15, 2026, 2:00 PM - 4:30 PM

SYM05.01. Chair

F. Bradke;
Senior group leader, DZNE e.V., Bonn, GERMANY.

Time: Sunday, November 15, 2026, 2:00 PM - 4:30 PM

SYM05.02. Co Chair

A. Curt;
Spinal cord injury unit, Balgrist, Zurich, SWITZERLAND.

Time: Sunday, November 15, 2026, 2:05 PM - 2:40 PM

SYM05.03. Regeneration enhancing anti-Nogo-A antibodies lead to improved functional recovery in acute spinal cord injury patients

M. E. Schwab;
Institute of Regenerative Medicine, University of Zurich, Zurich, SWITZERLAND.

Time: Sunday, November 15, 2026, 2:40 PM - 3:15 PM

SYM05.04. Gabapentinoids and neurological recovery after spinal cord injury

J. Kramer;
ICORD, Vancouver, BC, CANADA.

Time: Sunday, November 15, 2026, 3:15 PM - 3:50 PM

SYM05.05. Hebbian Stimulation and Molecular Therapies for Spinal Cord Injury

M. A. Perez;
Center for Neural plasticity, Arms, Shirley Ryan Abilitylab, Chicago, IL.

Time: Sunday, November 15, 2026, 3:50 PM - 4:25 PM

SYM05.06. Neuromodulation of motor and autonomic systems for recovery after spinal cord injury.

S. J. Harkema;
Kessler Foundation, West Orange, NJ.

Symposium

SYM06: Astrocytes in Learning and Memory: From Astrocytic Engrams to Behavior — Inbal Goshen

Theme: Theme B – Neural Excitability, Synapses, and Glia

Location: WCC Ballroom B

Time: Monday, November 16, 2026, 9:30 AM - 12:00 PM

Description: The role of astrocytes in high brain function has been demonstrated in the last decade. The speakers led this revolution, and now will present novel findings showing the role of astrocytes in learning in health and disease, in the hippocampus, amygdala and striatum, from engrams to spatial memory. Furthermore, this session highlights emerging evidence that astrocytes form sparse, learning-linked ensembles whose reactivation can drive recall, and discusses neuronal–astrocytic engrams in memory.

Time: Monday, November 16, 2026, 9:30 AM - 12:00 PM

SYM06.01. Chair

I. Goshen;
Hebrew University of Jerusalem, Jerusalem, ISRAEL.

Time: Monday, November 16, 2026, 9:30 AM - 12:00 PM

SYM06.02. Co Chair

M. Navarrete;
Cajal Institute/Cajal Neuroscience Center (CNC-CSIC), MADRID, SPAIN.

Time: Monday, November 16, 2026, 9:35 AM - 10:10 AM

SYM06.03. The astrocytic ensemble as a multiday trace that stabilizes memory

J. Nagai;
RIKEN Center for Brain Science, Saitama, JAPAN.

Time: Monday, November 16, 2026, 10:10 AM - 10:45 AM

SYM06.04. ASTROENGRAMS: Discovering the Power of Activated Astrocyte Ensembles in Learning and Memory

M. Navarrete;
Cajal Institute/Cajal Neuroscience Center (CNC-CSIC), MADRID, SPAIN.

Time: Monday, November 16, 2026, 10:45 AM - 11:20 AM

SYM06.05. Astrocyte subpopulations in brain plasticity and memory

M. R. Williamson;
SickKids Research Institute and University of Toronto, Toronto, ON, CANADA.

Time: Monday, November 16, 2026, 11:20 AM - 11:55 AM

SYM06.06. Astrocytes in (normal and abnormal) high brain function.

I. Goshen;
Hebrew University of Jerusalem, Jerusalem, ISRAEL.

Symposium

SYM07: Mechanisms of Reserve and Resilience in the Aging Brain: An Interdisciplinary Approach — Thomas Wolbers

Theme: Theme C – Neural Aging and Degeneration

Location: WCC Ballroom A

Time: Monday, November 16, 2026, 9:30 AM - 12:00 PM

Description: This symposium will examine the functional mechanisms underlying superior cognitive performance in old age. Integrating animal and human research, the talks span neuromodulatory, circuit, and systems-level approaches to reserve and resilience, including preserved hippocampal-entorhinal function, social and novelty processing, and large-scale connectivity, and introduce STARRRS, a new open-science resource of longitudinal, multimodal rodent data to accelerate mechanistic discovery.

Time: Monday, November 16, 2026, 9:30 AM - 12:00 PM

SYM07.01. Chair

T. Wolbers;
Aging, Cognition & Technology, German Center For Neurodegenerative Diseases, Magdeburg, GERMANY.

Time: Monday, November 16, 2026, 9:35 AM - 10:10 AM

SYM07.02. Age-related differences in behavior-driven cell activity in the entorhinal cortex

C. A. Barnes;
Evelyn F. McKnight Brain Institute, University of Arizona, Tucson, AZ.

Time: Monday, November 16, 2026, 10:10 AM - 10:45 AM

SYM07.03. Brain Structure and Function of Superagers

B. A. Strange;
Laboratory for Clinical Neuroscience, UPM, Madrid, SPAIN.

Time: Monday, November 16, 2026, 10:45 AM - 11:20 AM

SYM07.04. How do entorhinal computations support exceptional memory in old age?

T. Wolbers;
Aging, Cognition & Technology, German Center For Neurodegenerative Diseases, Magdeburg, GERMANY.

Time: Monday, November 16, 2026, 11:20 AM - 11:55 AM

SYM07.05. Resources for Discovery Science on Mechanisms of Successful Cognitive Aging

P. R. Rapp;
Neurocognitive Aging Section, NIH, National Institute on Aging, Baltimore, MD.

Symposium

SYM08: Molecular Mechanisms Governing Cerebral Cortex Formation and Their Disruption in Human Developmental Disorders — Linda Richards

Theme: Theme A – Development

Location: WCC Ballroom B

Time: Monday, November 16, 2026, 2:00 PM - 4:30 PM

Description: The development of the earliest stages of cerebral cortex formation is critical for establishing the correct number and types of neurons, and precise areas and circuits devoted to processing different types of information. Recent advances in the transcriptional pathways regulating these early processes will be addressed, highlighting how these mechanisms allow a

deeper understanding of the etiology of congenital malformations and neurodevelopmental disorders of the human cerebral cortex.

Time: Monday, November 16, 2026, 2:00 PM - 4:30 PM

SYM08.01. Chair

L. J. Richards;
Department of Neuroscience, Washington University, Saint Louis, MO.

Time: Monday, November 16, 2026, 2:00 PM - 4:30 PM

SYM08.02. Co Chair

C. Ohtaka-Maruyama;
Neural Network Project, Tokyo Metropolitan Institute of Medical Science, Setagaya-ku, JAPAN.

Time: Monday, November 16, 2026, 2:05 PM - 2:40 PM

SYM08.03. Formation of the cortical plate and human disorders associated with radial glial development

L. J. Richards;
Department of Neuroscience, Washington University, Saint Louis, MO.

Time: Monday, November 16, 2026, 2:40 PM - 3:15 PM

SYM08.04. Radial glial development and its significance in congenital brain abnormalities

N. Osumi;
Graduate School of Medicine, Tohoku University, Sendai, JAPAN.

Time: Monday, November 16, 2026, 3:15 PM - 3:50 PM

SYM08.05. Development of Cajal-Retzius cells and their function in human disease.

A. Pierani;
INSERM, INSERM U1266 Institut de Psychiatrie et Neurosciences de Paris, Imagine Institute, Paris, FRANCE.

Time: Monday, November 16, 2026, 3:50 PM - 4:25 PM

SYM08.06. Emergence of the cortical subplate in mouse and human cerebral cortex.

C. Ohtaka-Maruyama;
Neural Network Project, Tokyo Metropolitan Institute of Medical Science, Setagaya-ku, JAPAN.

Symposium

SYM09: Cerebrospinal Fluid: Form, Flow, and Function — Laura Lewis

Theme: Theme D – Neuroimmunity, Neurovasculature, and Neural Injury

Location: WCC Ballroom B

Time: Tuesday, November 17, 2026, 9:30 AM - 12:00 PM

Description: Recent work has ushered in a new era for the cerebrospinal fluid (CSF), revealing many opportunities for investigating, diagnosing, and potentially treating brain disorders. However, CSF production, circulation, and functions represent some of the least understood areas in neuroscience. This session will bring together an interdisciplinary group of scientists to share recent discoveries and conceptual advancements in this emerging field.

Time: Tuesday, November 17, 2026, 9:30 AM - 12:00 PM

SYM09.01. Chair

L. D. Lewis;
MIT, Cambridge, MA.

Time: Tuesday, November 17, 2026, 9:35 AM - 10:10 AM

SYM09.02. Choroid plexus - CSF regulation of brain development

A. Hochstetler;
Indiana University Indianapolis, Indianapolis, IN.

Time: Tuesday, November 17, 2026, 10:10 AM - 10:45 AM

SYM09.03. Decoding brain waste

J. Kipnis;
Pathology/Immunology, WashU Medicine, Saint Louis, MO.

Time: Tuesday, November 17, 2026, 10:45 AM - 11:20 AM

SYM09.04. Neuromodulation of brain fluid dynamics across attentional and arousal states

L. D. Lewis;
MIT, Cambridge, MA.

Time: Tuesday, November 17, 2026, 11:20 AM - 11:55 AM

SYM09.05. Why sleep promotes glymphatic clearance

M. Nedergaard;
Center for Translational Neuromedicine, University of Rochester, Rochester, NY.

Symposium

SYM10: Learning to Navigate a Changing World: From Neural Systems to Novel Algorithms — J. Quinn Lee

Theme: Theme G – Integrative Physiology and Behavior

Location: WCC Rm 146AB

Time: Tuesday, November 17, 2026, 9:30 AM - 12:00 PM

Description: The ability to learn and remember how to achieve goals in a changing world is necessary for survival of natural organisms. Yet, modern algorithms in artificial intelligence (AI) struggle to learn and remember in changing environments. This session will highlight advances in our understanding of neurobiological mechanisms and systems interactions that enable efficient learning and memory in changing environments, and novel brain-inspired algorithm development to achieve adaptive behavior in AI.

Time: Tuesday, November 17, 2026, 9:30 AM - 12:00 PM

SYM10.01. Chair

J. Q. Lee;
Psychology, University of Alberta, Edmonton, AB, CANADA.

Time: Tuesday, November 17, 2026, 9:35 AM - 10:10 AM

SYM10.02. Hippocampal representations of action plans during goal-directed navigation

I. Zutshi;
Neuroscience and Cell Biology, Rutgers University, New Brunswick, NJ.

Time: Tuesday, November 17, 2026, 10:10 AM - 10:45 AM

SYM10.03. Neural representations for navigation and memory in non-stationary environments

J. Q. Lee;
Psychology, University of Alberta, Edmonton, AB, CANADA.

Time: Tuesday, November 17, 2026, 10:45 AM - 11:20 AM

SYM10.04. Emergent predictive navigation in real and artificial neural networks

A. S. Alexander;
Psychological and Brain Sciences, UC Santa Barbara, Goleta, CA.

Time: Tuesday, November 17, 2026, 11:20 AM - 11:55 AM

SYM10.05. Behavioral algorithms for efficient inference and rapid spatial learning

A. M. Hermundstad;
Janelia Research Campus, Ashburn, VA.

Symposium

SYM11: Failure of Brain Clearance: A Converging Mechanism in Neurodegeneration and Vascular Dementia — Wenzhen Duan

Theme: Theme C – Neural Aging and Degeneration

Location: WCC Ballroom B

Time: Tuesday, November 17, 2026, 2:00 PM - 4:30 PM

Description: This session will highlight how dysfunction of the glymphatic and meningeal lymphatic systems actively drives neurodegeneration and vascular dementia. Integrating recent advances in astrocyte biology, vascular dynamics, neuroimmunology, and translational imaging, it will provide mechanistic insight into how impaired brain clearance accelerates protein aggregation, neuroinflammation, neuronal loss, and discuss emerging therapeutic strategies to restore brain clearance across multiple disorders.

Time: Tuesday, November 17, 2026, 2:00 PM - 4:30 PM

SYM11.01. Chair

W. Duan;
Psychiatry, Neuroscience, Johns Hopkins University, Baltimore, MD.

Time: Tuesday, November 17, 2026, 2:05 PM - 2:40 PM

SYM11.02. When the Brain's Waste Disposal System Fails: Decoupling Drainage Networks in Vascular Dementia

K. Xu;
Yale University, New Haven, CT

Time: Tuesday, November 17, 2026, 2:40 PM - 3:15 PM

SYM11.03. Evidence for the contribution of glymphatic dysfunction to Alzheimer’s disease

J. J. Iliff;
Psychiatry and Behavioral Science, University of Washington, Seattle, WA.

Time: Tuesday, November 17, 2026, 3:15 PM - 3:50 PM

SYM11.04. Effects of APOE4 on the brain's innate immune-lymphatic functional crosstalk

S. Da Mesquita;
Department of Neuroscience, Mayo Clinic, Jacksonville, FL.

Time: Tuesday, November 17, 2026, 3:50 PM - 4:25 PM

SYM11.05. Glymphatic Dysfunction in Huntington’s Diseases: Translational Mechanistic Insights

W. Duan;
Psychiatry, Neuroscience, Johns Hopkins University, Baltimore, MD.

Symposium

SYM12: Thermosensation Across Scales: Neural Circuits, Perception, and the Sense of Self — Solaiman Shokur

Theme: Theme F – Motor Systems

Location: WCC Ballroom A

Time: Tuesday, November 17, 2026, 2:00 PM - 4:30 PM

Description: Restoration of touch and proprioception has been a major focus in neurorehabilitation, neuroprosthetics, and cognitive neuroscience. In contrast, thermosensation has received less attention, despite its key role in interoception and bodily self-awareness. Altered thermal perception occurs in neurological disorders, including multiple sclerosis and amputation. This session will examine thermosensation across neural, perceptual, and clinical scales.

Time: Tuesday, November 17, 2026, 2:00 PM - 4:30 PM

SYM12.01. Chair

S. Shokur;
STI, EPFL, Genève, SWITZERLAND.

Time: Tuesday, November 17, 2026, 2:00 PM - 4:30 PM

SYM12.02. Co Chair

M. Bassolino;
University of Applied Sciences, Sion, SWITZERLAND.

Time: Tuesday, November 17, 2026, 2:05 PM - 2:40 PM

SYM12.03. Neural circuits of thermal perception.

J. F. Poulet;
Max Delbrück Center, Berlin, GERMANY.

Time: Tuesday, November 17, 2026, 2:40 PM - 3:15 PM

SYM12.04. Population encoding of temperature in the peripheral nervous system.

C. J. Whitmire;
The University of Queensland, St. Lucia, AUSTRALIA.

Time: Tuesday, November 17, 2026, 3:15 PM - 3:50 PM

SYM12.05. Subjective changes in temperature perception of affected body parts after stroke and multiple sclerosis

M. Bassolino;
University of Applied Sciences, Sion, SWITZERLAND.

Time: Tuesday, November 17, 2026, 3:50 PM - 4:25 PM

SYM12.06. Shaping the Self through thermosensory signals, from survival to awareness.

G. Salvato;
University of Pavia, Pavia, ITALY.

Symposium

SYM13: Hormonal Effects During the Reproductive Years on Brain and Behavior: From Molecular Discovery to Promising Therapeutics for Women's Mental Health — Sarah Wijtenburg

Theme: Theme H – Motivation and Emotion

Location: WCC Rm 146AB

Time: Tuesday, November 17, 2026, 2:00 PM - 4:30 PM

Description: Women experience twice the rate of mood disorders than men, and this vulnerability persists throughout life. Changes in brain circuitry that develop in females during the reproductive years are not well understood. Factors such as early adverse life events interact with sex hormones that may underlie the timing of mood disorders. This session will present recent breakthroughs in our understanding of mechanisms that led to promising therapeutics for mood disorders during the reproductive years.

Time: Tuesday, November 17, 2026, 2:00 PM - 4:30 PM

SYM13.01. Chair

S. A. Wijtenburg;
Division of Translational Research, National Institute of Mental Health, Rockville, MD.

Time: Tuesday, November 17, 2026, 2:00 PM - 4:30 PM

SYM13.02. Co Chair

T. Lewis Johnson;
Office for Disparities Research and Workforce Development, National Institute of Mental Health, NIH, Rockville, MD.

Time: Tuesday, November 17, 2026, 2:05 PM - 2:40 PM

SYM13.03. Neuroendocrine Risk and Resilience Across the Lifespan

J. Sacher;
Clinic of Cognitive Neurology, University Hospital Leipzig, Leipzig, GERMANY.

Time: Tuesday, November 17, 2026, 2:40 PM - 3:15 PM

SYM13.04. The Long-Term Impact of Pregnancy on Prefrontal Cortex Function: A Role for Late Gestation Allopregnanolone

R. Shansky;
Department of Psychology, Northeastern University, Boston, MA.

Time: Tuesday, November 17, 2026, 3:15 PM - 3:50 PM

SYM13.05. Longitudinal Multimodal Neuroimaging of Hormone-Linked Brain Plasticity across Pregnancy

K. L. Humphreys;
Department of Psychology and Human Development, Vanderbilty University, Nashville, TN.

Time: Tuesday, November 17, 2026, 3:50 PM - 4:25 PM

SYM13.06. How Hormones Disrupt Emotional Control — and How Neuromodulation Can Restore It

A. D. Neacsiu;
Department of Psychiatry and Behavioral Sciences, Duke University, Durham, NC.

Symposium

SYM14: Cross-Species Approaches to Understanding Human Cognition — Elizabeth Buffalo

Theme: Theme I – Cognition

Location: WCC Rm 151

Time: Wednesday, November 18, 2026, 9:30 AM - 12:00 PM

Description: Recent advances in optogenetics and large-scale neural recording in model organisms, combined with intracranial recording in neurosurgical patients, have yielded unprecedented insights into cognitive processes. Yet translating findings from model systems to human understanding remains challenging. This symposium will highlight integrated approaches bridging this gap through matched behavioral paradigms and shared analytical frameworks to reveal principles governing human cognition.

Time: Wednesday, November 18, 2026, 9:30 AM - 12:00 PM

SYM14.01. Chair

E. A. Buffalo;
Neurobiology and Biophysics, University of Washington, Seattle, WA.

Time: Wednesday, November 18, 2026, 9:30 AM - 12:00 PM

SYM14.02. Co Chair

M. Sabri;
NIDCD/NIH, National Institutes of Health/National Institute on Deafness and Other Communication Disorders, Bethesda, MD.

Time: Wednesday, November 18, 2026, 9:35 AM - 10:10 AM

SYM14.03. Attention control in the primate brain

S. Kastner;
Princeton Neuroscience Institute, Princeton University, Princeton, NJ.

Time: Wednesday, November 18, 2026, 10:10 AM - 10:45 AM

SYM14.04. Neurophysiology of working memory in monkeys and humans

C. Constantinidis;
Biomedical Engineering, Vanderbilt University, Nashville, TN.

Time: Wednesday, November 18, 2026, 10:45 AM - 11:20 AM

SYM14.05. Primate ventral frontal cortex contributions to decision-making

P. H. Rudebeck;
Neuroscience, Icahn School of Medicine At Mount Sinai, New York, NY.

Time: Wednesday, November 18, 2026, 11:20 AM - 11:55 AM

SYM14.06. Neurophysiologically inspired methods for characterizing decision-making behavior in health and disease

M. R. Cohen;
Neurobiology, University of Chicago, Chicago, IL.

Symposium

SYM15: Focused Ultrasound Neuromodulation: Biophysical Mechanisms, Neural Effects, and Clinical Translation — Li Min Chen

Theme: Theme J – Techniques

Location: WCC Rm 146AB

Time: Wednesday, November 18, 2026, 2:00 PM - 4:30 PM

Description: Low-intensity transcranial focused ultrasound (TUS) has gained traction as a noninvasive neuromodulation tool capable of modulating neuronal activity in both cortical and deep brain regions. This capability enables the dissection of brain circuits, interrogation of causal relationships between distributed brain networks, and the development of novel therapeutic

approaches. This session will highlight recent advances in underlying mechanisms of action and progress toward clinical translation.

Time: Wednesday, November 18, 2026, 2:00 PM - 4:30 PM

SYM15.01. Chair

L. Chen;
Radiology and Radiological Sciences and Vanderbilt University Institute of Imaging Science, Vanderbilt University Medical Center, Nashville, TN.

Time: Wednesday, November 18, 2026, 2:00 PM - 4:30 PM

SYM15.02. Co Chair

B. He;
Department of Biomedical Engineering, Carnegie Mellon University, Pittsburgh, PA.

Time: Wednesday, November 18, 2026, 2:05 PM - 2:40 PM

SYM15.03. Remote control of neuronal activity and brain circuits with focused ultrasonic waves

J. Kubanek;
Biomedical Engineering, Washington University, Saint Louis, MO.

Time: Wednesday, November 18, 2026, 2:40 PM - 3:15 PM

SYM15.04. From biophysics to circuit interrogation

S. Shoham;
NYU Grossman school of medicine, New York, NY.

Time: Wednesday, November 18, 2026, 3:15 PM - 3:50 PM

SYM15.05. Neuromodulatory effects of transcranial focused ultrasound in humans, as measured by EEG source imaging

B. He;
Department of Biomedical Engineering, Carnegie Mellon University, PIttsburgh, PA.

Time: Wednesday, November 18, 2026, 3:50 PM - 4:25 PM

SYM15.06. Low-Intensity Focused Ultrasound Neuromodulation Across Scales: From Mechanisms to Circuits to Translation

W. Legon;
Fralin Biomedical Research Institute, Roanoke, VA.