



**NEUROSCIENCE
2024**

PRELIMINARY PROGRAM

CHICAGO // OCTOBER 5–9



SOCIETY *for*
NEUROSCIENCE

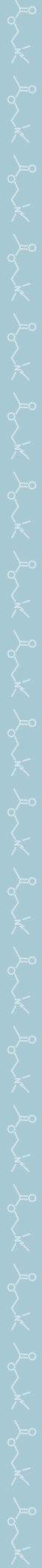
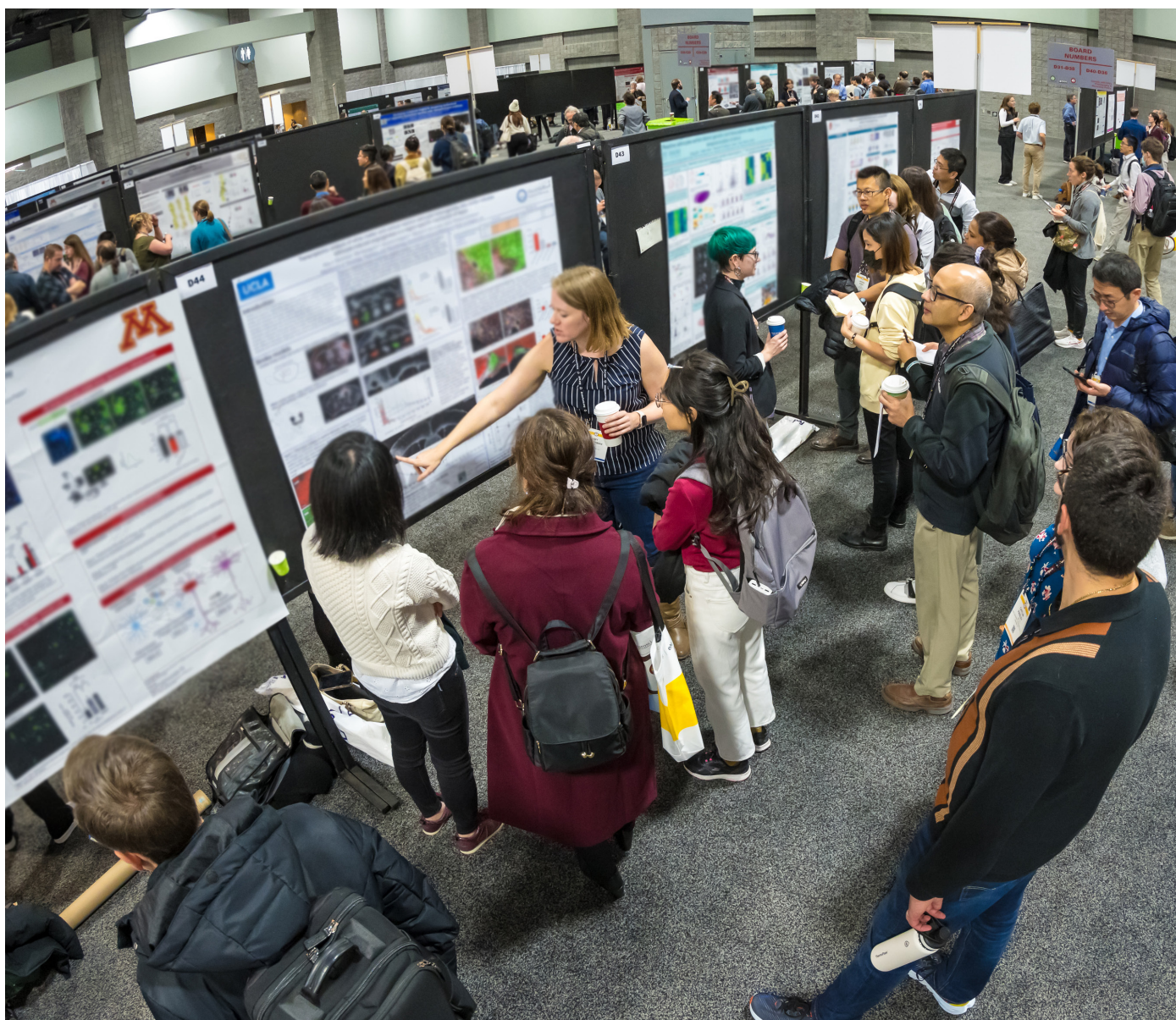


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A WORLD-CLASS SCIENTIFIC PROGRAM

Join the global neuroscience community in Chicago this October 5–9 for a meeting unlike any other.

Neuroscience 2024 features a robust scientific program with hundreds of sessions and events for scientists at any career stage. Hear from leading minds in the field, see the latest science on the poster floor, view the latest tools and technologies in the Exhibit Hall, attend professional development workshops, network with your peers, and more.

SfN Members Save More

Save up to 44% on Neuroscience 2024 registration fees by becoming a 2024 SfN member. Students, postdoctoral trainees, and residents of developing countries can receive additional discounts.

***Register by September 9
to get your best rate.***

Schedule at a Glance

▶ These sessions will be streamed live and available on demand as part of the Neuroscience 2024 Virtual Component. Registered attendees will be able to view the sessions in the virtual component platform and submit questions for the Q&A via the meeting mobile app. Recordings of the livestreamed sessions will be available to all registered attendees through the virtual component platform for 30 days after the meeting.

All times are in Central Daylight Time (CDT).

Session Date/Time	Session Title
Thursday, September 26–Friday, November 8	
Virtual Posters Open for On-Demand Viewing and Commenting	
Friday, October 4	
1–5:30 p.m.	Responsible Conduct of Research Short Course
Saturday, October 5	
8 a.m.–5 p.m.	NeuroJobs Career Center
10 a.m.–noon	Dialogues Between Neuroscience and Society ▶
Noon–2 p.m.	Graduate School Fair
Noon–2 p.m.	Professional Development Workshops
1–2 p.m.	Special Lecture ▶
1–5 p.m.	Nanosymposia/Posters/Theme J Posters
1:30–2:30 p.m.	Meet-the-Clinician-Expert Session
2–4:30 p.m.	Symposia/Minisymposia
2:30–4 p.m.	Brain Awareness Campaign Event
3–4 p.m.	SfNova Lecture ▶
3–5 p.m.	Professional Development Workshops
3:30–4:30 p.m.	Meet-the-Expert Session
5:15–6:30 p.m.	Presidential Special Lecture ▶
6:30–8:30 p.m.	Early Career Poster Session
8–9:30 p.m.	Career Development Topics: A Networking Event
Sunday, October 6	
8 a.m.–noon	Nanosymposia/Posters/Theme J Posters
8 a.m.–5 p.m.	NeuroJobs Career Center

Schedule at a Glance

Session Date/Time	Session Title
9–10 a.m.	Meet-the-Expert Session
9–10 a.m.	Special Lecture ▶
9–11 a.m.	Professional Development Workshops
9:30 a.m.–noon	Symposia/Minisymposia
9:30 a.m.–5 p.m.	Exhibits
10:30–11:30 a.m.	Clinical Neuroscience Lecture ▶
10:30 a.m.–noon	Dual Perspectives
11 a.m.–noon	Meet-the-Expert Session
Noon–1 p.m.	Special Lecture ▶
Noon–2 p.m.	Graduate School Fair
Noon–2 p.m.	Professional Development Workshops
1–2 p.m.	Meet-the-Expert Session
1–5 p.m.	Nanosymposia/Posters/Theme J Posters
1:30–2:30 p.m.	Special Lecture ▶
2–4:30 p.m.	Symposia/Minisymposia
3–4:30 p.m.	Peter and Patricia Gruber Lecture ▶
3–5 p.m.	Professional Development Workshop
5:15–6:30 p.m.	Presidential Special Lecture ▶
6:45–8:45 p.m.	SfN-Sponsored Socials
Monday, October 7	
8 a.m.–noon	Nanosymposia/Posters
8 a.m.–5 p.m.	NeuroJobs Career Center
9–10 a.m.	Meet-the-Clinician-Expert Session
9–10 a.m.	Special Lecture ▶
9–11 a.m.	Neuroscience Departments and Programs Workshop
9–11 a.m.	Professional Development Workshop
9:30 a.m.–noon	Symposia/Minisymposia
9:30 a.m.–5 p.m.	Exhibits
10–11 a.m.	Ask Anything Session
10:30–11:30 a.m.	Special Lecture ▶
10:30–noon	Basic-Translational-Clinical Roundtable

Schedule at a Glance

Session Date/Time	Session Title
Monday, October 7 continued	
11 a.m.–noon	Meet-the-Expert Session
Noon–1 p.m.	Ask Anything Session
Noon–1 p.m.	Special Lecture ▶
Noon–2 p.m.	Graduate School Fair
Noon–2 p.m.	Professional Development Workshops
1–2 p.m.	Meet-the-Expert Session
1–2 p.m.	Chapters Workshop
1–5 p.m.	Nanosymposia/Posters
1:30–3 p.m.	Animals in Research Panel
1:30–3 p.m.	Storytelling Session
2–3 p.m.	Ask Anything Session
2–4:30 p.m.	Symposia/Minisymposia
3–4:30 p.m.	Albert and Ellen Grass Lecture ▶
3–5 p.m.	Professional Development Workshops
4–5 p.m.	Ask Anything Session
5:15–6:30 p.m.	Presidential Special Lecture ▶
6:45–8:45 p.m.	SfN-Sponsored Socials
Tuesday, October 8	
8 a.m.–noon	Nanosymposia/Posters
8 a.m.–5 p.m.	NeuroJobs Career Center
9–10 a.m.	Special Lecture ▶
9–10 a.m.	Meet-the-Expert Session
9:30 a.m.–noon	Symposia/Minisymposia
9:30 a.m.–5 p.m.	Exhibits
10–11 a.m.	Ask Anything Session
10 a.m.–noon	Celebration of Women in Neuroscience
10:30–11:30 a.m.	David Kopf Lecture on Neuroethics ▶
10:30–noon	Basic-Translational-Clinical Roundtable
11 a.m.–noon	Meet-the-Expert Session
Noon–1 p.m.	Ask Anything Session

Schedule at a Glance

Session Date/Time	Session Title
Noon–2 p.m.	Graduate School Fair
1–2 p.m.	Meet-the-Expert Session
1–5 p.m.	Nanosymposia/Posters
1:30–3 p.m.	Dual Perspectives
2–3 p.m.	Special Lecture ▶
2–3:30 p.m.	The Advocacy Forum
2–4:30 p.m.	Symposia/Minisymposia
3–5 p.m.	Advancing Early Career Neuroscientists in Publishing Series
3:30–4:30 p.m.	History of Neuroscience Lecture ▶
5:15–6:30 p.m.	Presidential Special Lecture ▶
6:45–7:30 p.m.	SfN Members' Business Meeting
6:45–8:45 p.m.	SfN-Sponsored Socials
Wednesday, October 9	
8 a.m.–noon	Nanosymposia/Posters
8 a.m.–3 p.m.	NeuroJobs Career Center
9–10 a.m.	Special Lecture ▶
9:30–noon	Symposia/Minisymposia
9:30 a.m.–5 p.m.	Exhibits
10:30–11:30 a.m.	Special Lecture ▶
10:30 a.m.–noon	Basic-Translational-Clinical Roundtable
12:30–1:30 p.m.	Special Lecture ▶
1–5 p.m.	Nanosymposia/Posters
2–3 p.m.	Special Lecture ▶
2–4:30 p.m.	Symposia/Minisymposia

Virtual Component

Included in the virtual component are livestreams and on-demand recordings of featured and special lectures, along with virtual posters. All Neuroscience 2024 registrants will have access to the virtual component one week before and 30 days after the in-person meeting. For more information, visit sfn.org/virtualcomponent.

Presidential Special Lectures



► What Does a Large Language Model Know?

L.A. Paul, PhD *Yale University*

Saturday, October 5, 5:15–6:30 p.m. CDT

Theme H: Cognition

Recent developments in machine intelligence suggest the prospect of minds that can be artificially constructed. This raises a question: could an agent with such an artificial mind be intelligent, and if so, could it know things? This lecture will raise this question with respect to large language models (LLMs) and suggest that an LLM can be thought of as realizing a certain type of mind, along with a certain type of knowledge. This lecture will then explore the way that people can infer the existence of such knowledge and how it is related to the more ordinary sort of knowledge exhibited by human beings.



► Mapping the Brain: From Cells and Circuits to Function

Rui M. Costa, DVM, PhD *The Allen Institute*

Sunday, October 6, 5:15–6:30 p.m. CDT

Theme E: Motor Systems

The lecture will discuss the Allen Institute's foundational efforts to map diverse cell types and circuits in the mammalian brain using approaches such as single-cell and spatial transcriptomics, morphological and physiological analyses, and advanced light and electron microscopy. These efforts span development stages, species, and health states and investigate the dynamics of neuronal activity across brain regions and cell types during sensing, decision-making, and movement. The data, tools, and knowledge are shared openly to accelerate discovery by all neuroscientists.

Presidential Special Lectures



► Unveiling the Nexus of Innate Immunity and Alzheimer's Disease: Insights Into Pathogenesis and Therapeutic Prospects

Nancy Y. IP, PhD *The Hong Kong University of Science and Technology*

Monday, October 7, 5:15–6:30 p.m. CDT

Theme C: Neurodegenerative Disorders and Injury

Innate immunity plays a pivotal role in the pathogenesis of Alzheimer's disease (AD). By delineating the intricate interplay between genetic predisposition, environmental influences such as aging, and immune function, this lecture aims to unravel the underpinnings of neurodegeneration and AD pathogenesis. It will delve into addressing the multifaceted impact of immunity to effectively combat the disease, presenting a roadmap for therapeutic advancements in neuroscience.



► Imaging Brain Chemistry in Brain Health and Disease: From Neurotransmitters to Neuropeptides

Markita del Carpio Landry, PhD *University of California, Berkeley*

Tuesday, October 8, 5:15–6:30 p.m. CDT

Theme I: Techniques

Neurons communicate through chemical neurotransmitter signals to modulate the activity of larger neuronal networks. Owing to the central role of brain chemistry over a range of behaviors and psychiatric disorders, real-time imaging of the brain's chemical signal spatial propagation constitutes a valuable contribution to the understanding of brain health and disease. Here, this lecture will discuss advances in — and the importance of — imaging brain chemistry at the spatial and temporal scales used by neurons to establish neurochemical communication in the brain.

► Lectures will be available in the virtual component. All meeting registrants can view the livestreams or watch the on-demand recording after the session broadcast until 30 days after the meeting.

Featured Lectures



► *Dialogues Between Neuroscience and Society Lecture*

Susan Magsamen

*International Arts + Mind Lab, Center for Applied Neuroaesthetics,
Johns Hopkins University*

NeuroArts Blueprint

Your Brain on Art: How the Arts Transform Us (2023)

Saturday, October 5, 10 a.m.–noon CDT

Theme J: History, Education, and Society

Susan Magsamen's work lies at the interdisciplinary intersection of science, art, and aesthetic experiences. Her presentation will explore the science of neuroaesthetics, the study of how the arts and aesthetic experiences measurably change the brain and body, and how to translate this knowledge into practices that advance health, well-being, learning, flourishing, and community development. The science of the arts is no longer a far-fetched idea but a tangible reality with groundbreaking research and practical applications emerging at an unprecedented pace.

Support contributed by: The Dana Foundation



Featured Lectures



Peter and Patricia Gruber Lecture: Uncovering Principles of Nervous System Design and Function in Simple Animals

► How Fixed Circuits Give Rise to Flexible Behaviors

Cornelia I. Bargmann, PhD *The Rockefeller University*

Sunday, October 6, 3–4:30 p.m. CDT

Theme F: Integrative Physiology and Behavior

How do genes and the environment interact to generate a variety of behaviors? How do context and experience modify behavioral decisions? Neuropeptides and neuromodulators that regulate internal states have central roles in generating flexible behaviors. In the nematode *C. elegans*, one can ask how these regulatory molecules alter information flow through defined neural circuits to transiently rewire a simple nervous system.

Support contributed by: The Gruber Foundation



Peter and Patricia Gruber Lecture: Uncovering Principles of Nervous System Design and Function in Simple Animals

► Illustrating and Enhancing the Power of Connectomics

Gerald M. Rubin, PhD

Janelia Research Campus, Howard Hughes Medical Institute

Sunday, October 6, 3–4:30 p.m. CDT

Theme I: Techniques

Animals use visual information in a context-dependent manner. The speaker will describe how they used connectomics and cell-type-specific genetic tools, together with behavioral and physiological analyses, to identify multiple distinct circuit mechanisms that alter the flow of visual information when female *Drosophila* enter an aggressive state. A progress report will be presented on ongoing efforts to add information on gap junctions and neuropeptide signaling currently missing in the connectome.

Support contributed by: The Gruber Foundation



Albert and Ellen Grass Lecture

► Oxygen and the Pressure to Sleep

Gero Miesenböck, MD *University of Oxford*

Monday, October 7, 3–4:30 p.m. CDT

Theme F: Integrative Physiology and Behavior

Oxygen is a double-edged molecule. The large energy gains of aerobic metabolism were the fuse that lit the Cambrian explosion of multicellular life, during which nervous systems first appeared. However, oxygen's high reactivity invites missteps in mitochondrial electron transfers. The lecture will ask whether sleep helps to tame the dangers of aerobic metabolism, as suggested by the discovery of machinery that gears the activity of sleep-control neurons to the fate of electrons in the respiratory chain.

Support contributed by: The Grass Foundation

Featured Lectures



David Kopf Lecture On Neuroethics

► **Mixing Brains and Computers**

Gabriel Lázaro-Muñoz, PhD, JD *Harvard Medical School*

Tuesday, October 8, 10:30–11:30 a.m. CDT

Theme J: History, Education, and Society

Brain-computer interfaces (BCIs) caught the public imagination and investment interest. BCIs such as deep brain stimulation (DBS) devices can effectively manage otherwise treatment-resistant movement, seizure, and psychiatric disorders. The hope is that BCIs will help manage an increasing number of brain-based conditions. Many are also looking to expand the use of BCIs to everyday tasks such as interacting with smartphones, computers, and other devices. This lecture will highlight the pressing challenges and opportunities of the nascent BCI era.

Support contributed by: David Kopf Instruments



History of Neuroscience Lecture

► **The Short and the Long of Inhibition**

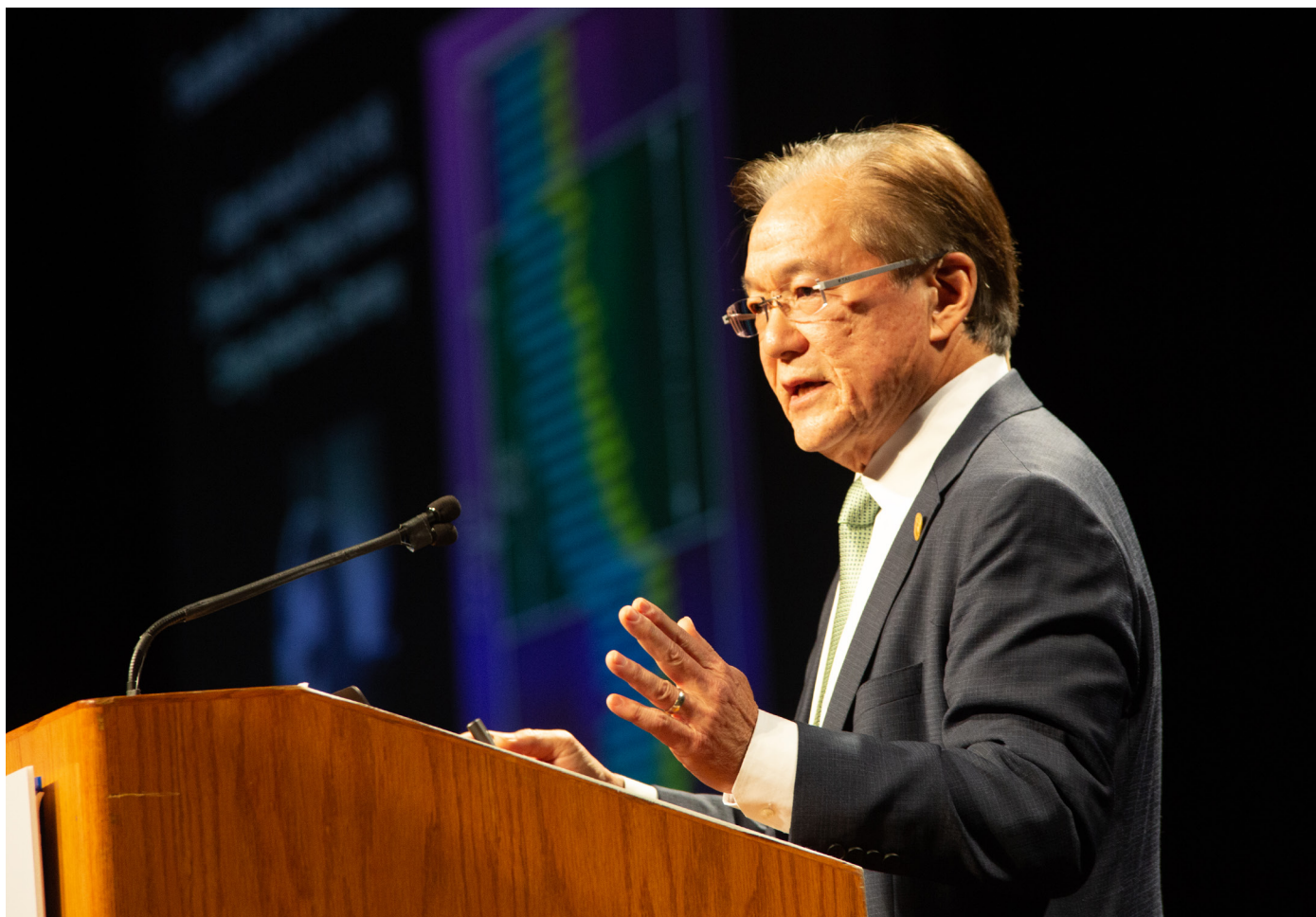
Hannah Monyer, MD

University of Heidelberg and German Cancer Research Center (DKFZ)

Tuesday, October 8, 3:30–4:30 p.m. CDT

Theme J: History, Education, and Society

GABAergic interneurons control the activity within neuronal ensembles, thus enabling complex behaviors such as perception, motor activity, and cognition. In the hippocampal formation, GABAergic interneurons support spatial coding and memory. This lecture will highlight a subclass of GABAergic cells that are “projection neurons.” Their wiring pattern constitutes a novel “leitmotiv” in the hippocampus and beyond and supports information flow and coordinated activity across distantly located brain areas.

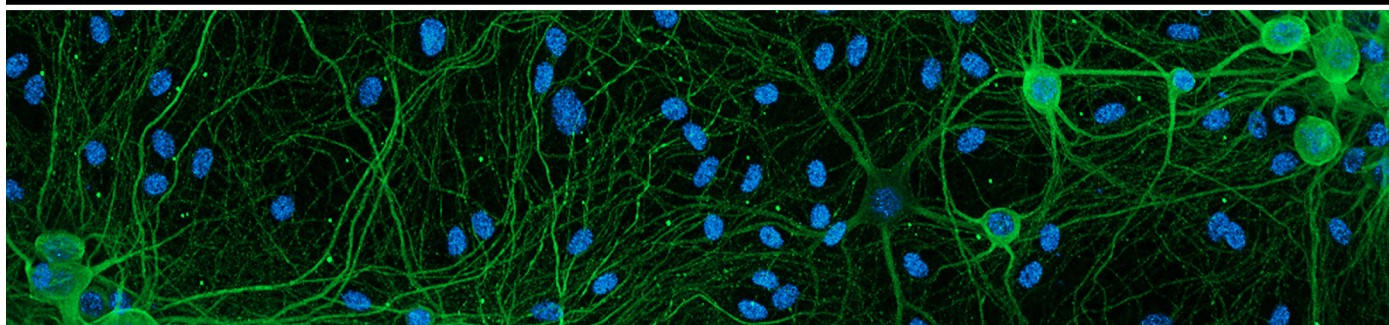


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Special Lectures



SfNova Lecture

► How Origin and Environment Shape Neural Development and Career Trajectories

Corey C. Harwell, PhD *University of California, San Francisco*

Saturday, October 5, 3–4 p.m. CDT

Theme A: Development

Diversity in the form and function of cell types in the nervous system is essential for the complex circuit computations that govern cognition and behavior. The Harwell lab aims to understand the mechanisms governing the emergence and generation of cell-type diversity in the mammalian brain. This lecture will discuss how the complex interplay between intrinsic and extrinsic factors shapes neural cell type specialization and influences research direction and career choices.



SfNova Lecture

► Evolution of Neural Circuits: Lessons From the Fly

Lucia L. Prieto Godino, PhD *The Francis Crick Institute*

Saturday, October 5, 3–4 p.m. CDT

Theme F: Integrative Physiology and Behavior

The wide variety of animal behaviors we observe today arose through the evolution of their underlying neural circuits. Advances in understanding the mechanisms through which neural circuits change over evolutionary timescales lag behind our knowledge of circuit function and development. However, recent research — including the speaker's — is starting to shed light on this fascinating topic. This lecture will highlight key questions in the evolution of neural circuits, how researchers are working to address them, and what they learned so far.



Clinical Neuroscience Lecture

► Implanted Systems to Regulate Autonomic and Motor Functions

Jocelyne Bloch, MD *Lausanne University Hospital (CHUV)*

Sunday, October 6, 10:30–11:30 a.m. CDT

Theme C: Neurodegenerative Disorders and Injury

Identification of the mechanisms through which electrical stimulation applied over the spinal cord or into the brain regulates specific neuronal subpopulations steers the development of implantable systems and precise neuromodulation therapies that harness this understanding to regulate impaired neurological functions. These mechanism-driven systems improved motor functions and reestablished hemodynamic instability in people with spinal cord injury or neurodegenerative diseases such as PD.

Special Lectures



► Exploring Sex-Specific Neural Architecture in Animal Social Behavior

Tali Kimchi, PhD *Weizmann Institute of Science*

Saturday, October 5, 1–2 p.m. CDT

Theme F: Integrative Physiology and Behavior

The lecture will explore the distinct differences in social behaviors between males and females, focusing on mating, nursing, and aggression. A complex interplay of genetic, neural, and environmental factors shapes these behaviors. This lecture will delve into the journey of uncovering the specific neural circuits and molecular mechanisms underpinning these sex-typical social behaviors in both sexes. Additionally, the speaker will discuss the emerging use of naturalistic settings, highlighting their potential to deepen understanding of social behavior and sex differences.



► Organelle Quality Control in Neuronal Homeostasis and Neurodegeneration

Erika L. F. Holzbaur, PhD *University of Pennsylvania Perelman School of Medicine*

Sunday, October 6, 9–10 a.m. CDT

Theme B: Neural Excitability, Synapses, and Glia

Neuronal homeostasis relies on organelle quality control pathways. Chronic or acute damage to intracellular organelles activates response mechanisms that lead to their targeted degradation by autophagy. Genetic and pathological evidence links autophagic dysfunction to diseases including Parkinson's and ALS. This lecture will discuss scientists' progress in understanding the mechanisms regulating mitochondrial and lysosomal quality control and the links between defective autophagy and neurodegeneration.



► Towards a Unified View of Hippocampal Function

Elizabeth A. Buffalo, PhD *University of Washington*

Sunday, October 6, noon–1 p.m. CDT

Theme H: Cognition

Humanity's understanding of the hippocampus is framed by two landmark discoveries: the discovery by Scoville and Milner that hippocampal damage causes profound amnesia and the discovery of hippocampal place cells by O'Keefe and Dostrovsky. This lecture will review recent progress in the field toward reconciling the spatial and mnemonic views of the hippocampus, with a focus on new insights from large-scale recordings in the non-human primate.

Special Lectures



► Disease-Modifying Therapies of Alzheimer's Disease

Takeshi Iwatsubo, MD, PhD *University of Tokyo*

Sunday, October 6, 1:30–2:30 p.m. CDT

Theme C: Neurodegenerative Disorders and Injury

The recent emergence of disease-modifying therapies (DMT) targeting amyloid β (A β) in early Alzheimer's disease (AD), e.g. lecanemab and donanemab, opened up a new era for AD therapies. AD Neuroimaging Initiative (ADNI) studies in North America and Japan have delineated the early natural course of AD and facilitated the development of biomarkers. Secondary prevention trials in amyloid-positive asymptomatic elderly individuals are currently underway. These clinical activities will pave the way toward the development of AD therapies targeting its very early stages.



► Identifying Neural Mechanisms for Natural Behavior Through Computational Ethology

Sandeep Robert Datta, MD, PhD *Harvard Medical School*

Monday, October 7, 9–10 a.m. CDT

Theme E: Motor Systems

The brain allows animals to successfully interact with the world through behavior. But how does the brain compose natural behaviors — the kinds of behaviors expressed by animals when they are unrestrained and free to act based on their own motivations? And how do sex, age, internal state, and individual identity coalesce into a context-appropriate pattern of behavior at any given moment? This lecture will describe recent developments in computational ethology and highlight how these emerging approaches can shed new light on how the brain endows natural behavior with meaning.



► Neural Circuit Adaptation Underlying Behavioral Learning

Fritjof Helmchen, PhD *University of Zurich*

Monday, October 7, 10:30–11:30 a.m. CDT

Theme I: Techniques

How do neural circuits reorganize to adapt behavior to a new task? What are the principles and mechanisms of learning algorithms in the brain? With modern tools for tracking neural activity chronically during learning—from local to brainwide scale—and for manipulating specific circuit components, these fundamental questions can be illuminated anew. This lecture will discuss experimental results and theoretical concepts of how predictions are formed and how prediction errors are used to adjust behavior, aiming at a deeper understanding of learning-related brain dynamics.

Special Lectures



► Liftoff: Neuropsychiatry With Functional MRI Comes of Age

Damien A. Fair, PhD *University of Minnesota*

Monday, October 7, noon–1 p.m. CDT

Theme A: Development

Functional MRI has long promised deep insights into the inner workings of the human brain. The ‘Era of Big Data,’ and decades of fMRI research have ignited a series of transformative breakthroughs that have reshaped the fundamental understanding of the brain’s functional neuroanatomy — unveiling intricate cortical systems previously unknown. This lecture will highlight how these revelations revolutionize the characterization of many developmental processes and mental health disorders and how they provide personalized therapeutic targets for several neuromodulation strategies.



► The Mind-Body Connection: A Neuroimmune Perspective

Asya Rolls, PhD *Technion, Israel Institute of Technology*

Tuesday, October 8, 9–10 a.m. CDT

Theme F: Integrative Physiology and Behavior

The mind-body connection, highlighted in stress-induced disorders and the placebo effect, is not fully understood. This lecture’s research aims to uncover the neural pathways that mediate this connection. Through genetic and functional manipulations, we explore how the brain represents and regulates our main defense mechanism, the immune system. Unraveling this essential aspect of physiology can transform our understanding and treatment of psychosomatic disorders and harness the brain’s therapeutic potential.



► Adolescent Neurocognitive Specialization: Shaping Adult Trajectories

Beatriz Luna, PhD *University of Pittsburgh*

Tuesday, October 8, 2–3 p.m. CDT

Theme A: Development

During adolescence, the foundation of adult neurocognitive trajectories is established. The scientists behind this lecture investigated the shape of cognitive development and reward processing and applied multimodal neuroimaging to measure concomitant developmental changes in neural activity (EEG/MEG), myelination (MRI R1), neurotransmitter (MRSI) evidence of E/I balance in prefrontal cortex, dopaminergic function (striatal tissue iron) in limbic systems and their connectivity informing a model of developmental specialization.

Special Lectures



► Tentonins (TMEM150), Mechanosensory Channels With Unique Property and Functions

Uhtae Oh, PhD *Korea Institute of Science and Technology*

Wednesday, October 9, 9–10 a.m. CDT

Theme D: Sensory Systems

Mechanically-activated (MA) channels mediate fundamental cellular and physiological functions. Tentonin 3 (TTN3/TMEM150C) is an MA channel with slow inactivation kinetics. TTN3 is known to mediate the baroreceptor reflex, proprioception, and insulin release from the pancreas. TTN3 is a pore-forming subunit with a unique structure. In the lecture, the biophysical and pharmacological differences between TTNs and Piezo1, as well as their involvement in other sensory transductions, will be introduced.



► The Predictive Coding of Voluntary Self-Motion: Circuits for Action and Perception

Kathleen E. Cullen, PhD *Johns Hopkins University*

Wednesday, October 9, 10:30–11:30 a.m. CDT

Theme E: Motor Systems

Integrating sensory with motor signals during voluntary behavior is essential for distinguishing stimuli that are a consequence of intended actions from those that are externally generated. This ability enables the brain to flexibly fine-tune motor actions based on sensory feedback, a computation necessary for subjective awareness of the effects of movements. The lecture will explore the neural circuits that perform this computation, highlighting the cerebellum's role in building predictive models of self-generated movement as individuals explore the world.



► The Heart and Mind of Anxiety and Anhedonia: A Frontal Lobe Perspective

Angela C. Roberts, PhD *University of Cambridge*

Wednesday, October 9, 12:30–1:30 p.m. CDT

Theme G: Motivation and Emotion

Anxiety and anhedonia (loss of pleasure) are major symptoms of psychiatric and neurological disorders with highly variable treatment outcomes. This lecture will highlight their multiple aetiologies within prefrontal and anterior cingulate circuits; as revealed by chemogenetic, neuroimaging, and cardiovascular studies of reward and threat-related behaviors in a non-human primate. The differential sensitivity of these circuits to antidepressants provides translational insights into treatment variability.

Special Lectures



► The Functional Logic of a Cognitive Brain System

Gaby Maimon, PhD *The Rockefeller University*

Wednesday, October 9, 2–3 p.m. CDT

Theme F: Integrative Physiology and Behavior

Over the past decade, notable progress was made in delineating the functional logic of the insect central complex. This lecture will discuss how this central brain region operates as a microcomputer that calculates the values of angles and two-dimensional vectors important for navigational behavior. This work provides an atypically explicit framework for understanding how spatial memories are built, stored, and guide behavior. How these insights were made in *Drosophila* suggests a roadmap for reaching a similar level of understanding in mammalian cognition down the road.



Symposia and Minisymposia

Theme A: Development

Symposium:

Advancing Organoids: Synergizing Tissue Engineering and Neurotechnology Development

Chair: Duygu Kuzum, PhD

Co-Chair: Grace M. Hwang, PhD

Minisymposium:

Brainstem Development and Functioning: An Understudied Clue in the Understanding and Management of Autism and Related Disorders (ASD)

Chair: Eric B. London, MD

Symposium:

Developing Brain: Cell Types, Models, and Disease Implications

Chair: Tomasz Nowakowski, PhD

Co-Chair: Aparna Bhaduri, PhD

Minisymposium:

From Womb to Words: Pre-linguistic Neurodevelopment of Language

Chair: Huw Swanborough

Co-Chair: Alejandra M. Husser, PhD

Minisymposium:

Molecular and Cellular Mechanisms of Motor Circuit Development

Chair: Paschalis Kratsios, PhD

Co-Chair: Polyxeni Philippidou, PhD

Minisymposium:

Synapse Formation and Refinement: To Prune or Not to Prune?

Chair: Gregg Wildenberg, PhD

Co-Chair: Joseph V. Gogola, PhD

Theme B: Neural Excitability, Synapses, and Glia

Symposium:

Extracellular Vesicle-Mediated Neuron-Glia Communications in the CNS

Chair: Tsuneya Ikezu, MD, PhD

Co-Chair: Eva-Maria Krämer-Albers, PhD

Minisymposium:

From Synapses to Ensembles: Studying the Synaptic Engram

Chair: F. Javier Rubio, PhD

Co-Chair: Leslie A. Ramsey, PhD

Minisymposium:

Glial Control of Critical Windows for Experience-Dependent Neuronal Plasticity

Chair: Wendy Xin, PhD

Co-Chair: Travis E. Faust, PhD

Minisymposium:

Glial Lipids and Metabolism

Chair: Holly K. Gildea, PhD

Minisymposium:

Of Mice and Humans: Neuronal Diversity in the Hippocampus Across Species

Chair: Jayeeta Basu, PhD

Co-Chair: Kenneth A. Pelkey, PhD

Minisymposium:

Seizure and Epilepsy: New Opportunities for Detection and Treatment

Chair: Ruth A. Roberts, PhD

Co-Chair: Jennifer B. Pierson

Theme C: Neurodegenerative Disorders and Injury

Minisymposium:

Altered Protein Palmitoylation as Disease Mechanism in Neurodegenerative Disorders

Chair: Karin Hochrainer, PhD

Co-Chair: Jakub Wlodarczyk, PhD

Symposium:

Biomarkers for Cerebrovascular Contributions to Neurodegeneration: Genetic, Biofluid, and Imaging

Chair: Jane S. Paulsen, PhD

Symposia and Minisymposia

Symposium:

LRRK2 and Parkinson's Disease

Chair: Jie Shen, PhD

Minisymposium:

Metabolic Axon-Glia Interactions in the Peripheral Nervous System

Chair: Bogdan Beirovski, MD, PhD

Minisymposium:

Microglia and Peripheral Immunity in Alzheimer's Disease and Related Disorders

Chair: Oleg Butovsky, PhD

Co-Chair: Michael T. Heneka, MD

Symposium:

Neurogenic Bowel and Bladder: Advancing Understanding and Novel Electrical Therapies

Chair: Tracey L. Wheeler, PhD

Co-Chair: Audrey N. Kusiak, PhD

Symposium:

What Does the Microbiome Tell Us About Prevention and Treatment of Alzheimer's Disease (AD)/ Alzheimer's Disease Related Dementias (ADRD)?

Chair: David A. Jett, PhD

Theme D: Sensory Systems

Symposium:

Brain Implants That Use Electrical Stimulation to Restore Rudimentary Forms of Vision for Blind People

Chair: Denise Oswald, PhD

Minisymposium:

Central and Peripheral Neurobiological Mechanisms of Neuropathic Pain in Multiple Sclerosis

Chair: Bradley K. Taylor, PhD

Minisymposium:

Development of Higher-Level Vision

Chair: Kristina J. Nielsen, PhD

Co-Chair: Michael J. Arcaro, PhD

Minisymposium:

Neural Encoding of Bodies for Primate Social Perception

Chair: Rufin Vogels, PhD

Co-Chair: Beatrice De Gelder, PhD

Symposium:

The Neurobiology of Behavioral Responses to Temperature Change

Chair: Marco Gallio, PhD

Co-Chair: Elena O. Gracheva, PhD

Minisymposium:

Sensory Neuroprostheses: Clinical Benefits, Tradeoffs, and Translation

Chair: Emily L. Graczyk, PhD

Theme E: Motor Systems

Symposium:

Cortical Neural Circuits for Motor Learning at Spine, Dendrite, and Network Level

Chair: Yoshiyuki Kubota, PhD

Co-Chair: Jackie Schiller, PhD

Minisymposium:

The Dialogue Between the Cerebellum and the Rest of the Brain: Learning to Make Predictions That Result in Better Movements and Better Decisions

Chair: Reza Shadmehr, PhD

Minisymposium:

Insights Into Sensorimotor Neural Circuit Dynamics via Electrical and Optogenetic Manipulation

Chair: Maria C. Dadarlat, PhD

Co-Chair: Yujiao Sun, PhD

Symposium:

Is There Anything the Superior Colliculus Doesn't Do?

Chair: Flóra Takács

Co-Chair: Philip Coen, PhD

Symposia and Minisymposia

Theme E: Motor Systems *continued*

Minisymposium:

Speech Neuroprostheses

Chair: Sergey D. Stavisky, PhD

Co-Chair: Christian Herff, PhD

Minisymposium:

Unveiling the Neural Dynamics Underlying Movement and Respiration in the Spinal Cord and Medulla

Chair: Chethan Pandarinath, PhD

Co-Chair: Rune W. Berg, PhD

Theme F: Integrative Physiology and Behavior

Minisymposium:

Beyond Birth Control: The Neuroscience of Hormonal Contraceptives

Chair: Benedetta Leuner, PhD

Co-Chair: Jesse M. Lacasse, PhD

Symposium:

The Brain's Best Kept Secret Is Its Degenerate Structure

Chair: Eve E. Marder, PhD

Minisymposium:

Cerebellar Predictive Encoding in Health and Disease

Chair: Alice Doubliez

Co-Chair: Patricia Gil-Paterna

Minisymposium:

Functions of Neuromodulatory Signaling During Sleep

Chair: Ada Eban-Rothschild, PhD

Minisymposium:

Neural Mechanisms of Satiety and Satiation

Chair: Alexander R. Nectow, MD, PhD

Co-Chair: Stephen X. Zhang, PhD

Minisymposium:

The Noradrenergic System: New Insights from Circuit Regulation to Behavior Modulation

Chair: Thiago Arzua, PhD

Co-Chair: Gina R. Poe, PhD

Theme G: Motivation and Emotion

Minisymposium:

Control of Adaptive Behavior by Neuronal Circuits in the Central Nucleus of the Amygdala

Chair: Jonathan P. Fadok, PhD

Co-Chair: Melissa A. Herman, PhD

Minisymposium:

The Effects of Food Consumption on the Circuitry of Reward and Decision-Making

Chair: Maxime Chevee, PhD

Co-Chair: Miriam Bocarsly, PhD

Symposium:

Emotional Well-Being: Health Impacts and Neural Insights

Chair: Kuan H. Wang, PhD

Co-Chair: Erin B. Quinlan, PhD

Symposium:

Frustrative Nonreward: Behavior, Circuits, Neurochemistry, and Disorders

Chair: Mauricio R. Papini, PhD

Minisymposium:

Molecular and Functional Organization of the Lateral Septum

Chair: Dionnet L. Bhatti Mazo

Symposium:

Unraveling the Mysteries of Thyroid Hormone in Neuropsychiatric Disorders

Chair: Deena M. Walker, PhD

Co-Chair: Catherine Jensen Peña, PhD

Symposia and Minisymposia

Theme H: Cognition

Minisymposium:

From Environment to Neural Dynamics: On the Interaction Between Rhythmic Sensation and Neural Oscillations

Chair: Benedikt Zoefel, PhD

Co-Chair: Sivarao V. Digavalli, PhD

Symposium:

Monoamine Neuromodulators: Cell Types, Physiology, Computation, and Behavior

Chair: Jeremiah Y. Cohen, PhD

Minisymposium:

Neurobiological Substrates Supporting the Construction and Modulation of Empathy: A Translational Perspective

Chair: William C. Mobley, MD, PhD

Minisymposium:

Neuronal Translation: From mRNA Localization to Long-Term Memory Consolidation

Chair: Mauricio M. Oliveira, PhD

Co-Chair: Ezgi Hacisuleyman, PhD

Symposium:

Neuron-Glial Interactions: Implications for Plasticity, Behavior, and Cognition

Chair: Mauricio Rangel-Gomez, PhD

Co-Chair: Aleksandra Vicentic, PhD

Minisymposium:

Sex Differences in Typically Overlooked Modulators of Memory: Towards Sex-Specific Therapies for Memory Dysfunction

Chair: Karyn M. Frick, PhD

Theme I: Techniques

Minisymposium:

Advancing Brain Imaging Frontiers: Recent Breakthroughs in Functional Ultrasound Imaging Methods for Preclinical and Clinical Research

Chair: Zsolt Lenkei, MD, PhD

Co-Chair: Mickael Tanter, PhD

Symposium:

Developing Genome Editing Therapies for Disorders of the Central Nervous System: From Single Diseases to a Platform Approach

Chair: Kiran Musunuru, MD, PhD

Co-Chair: Timothy LaVaute, PhD

Minisymposium:

Development and Application of Fluorescence Lifetime Based Biosensors for *In Vivo* Imaging of Neuronal Function

Chair: Tal Laviv, PhD

Co-Chair: Eric R. Schreiter, PhD

Minisymposium:

Large-Scale Mechanistic Models of Brain Circuits With Biophysically- and Morphologically-Detailed Neurons

Chair: Salvador Dura-Bernal, PhD

Co-Chair: Anton Arkhipov, PhD

Symposium:

Nanomedicine in the Peripheral and Central Nervous Systems

Chair: Kelly A. Langert, PhD

Co-Chair: Rachael W. Sirianni, PhD

Symposium:

Synthetic Approaches to Modulating and Rewiring Neural Circuits

Chair: Sangkyu Lee, PhD

Co-Chair: Michael Z. Lin, MD, PhD

Featured Panel Sessions

Basic-Translational-Clinical Roundtables

Miracles Can Happen: Recent Advances in the Restoration of Vision, Hearing, and Touch

Chair: José-Alain Sahel, MD

Monday, October 7, 10:30 a.m.–noon CDT

Theme D: Sensory Systems

Sex as a Biological Variable in Traumatic Brain Injury and Stroke Research

Chair: Grace S. Griesbach, PhD

Tuesday, October 8, 10:30 a.m.–noon CDT

Theme C: Neurodegenerative Disorders and Injury

Cortical Interneurons: From the Developing Brain to the Operating Room

Chair: Derek G. Southwell, MD, PhD

Wednesday, October 9, 10:30 a.m.–noon CDT

Theme A: Development

Dual Perspectives

Exploring Emotions: A Dual Perspective Debate

Moderator: Luiz Pessoa, PhD

Sunday, October 6, 10:30 a.m.–noon CDT

Theme G: Motivation and Emotion

Connectomics: Opportunities and Limitations

Moderator: Davi Bock, PhD

Tuesday, October 8, 1:30–3 p.m. CDT

Theme D: Sensory Systems

Storytelling Session

How Storytelling Through Engagement and Advocacy Can Change Approaches to Neuroscience Research

Chair: Mark M. Rasenick, PhD

Monday, October 7, 1:30–3 p.m. CDT

Theme J: History, Education, and Society



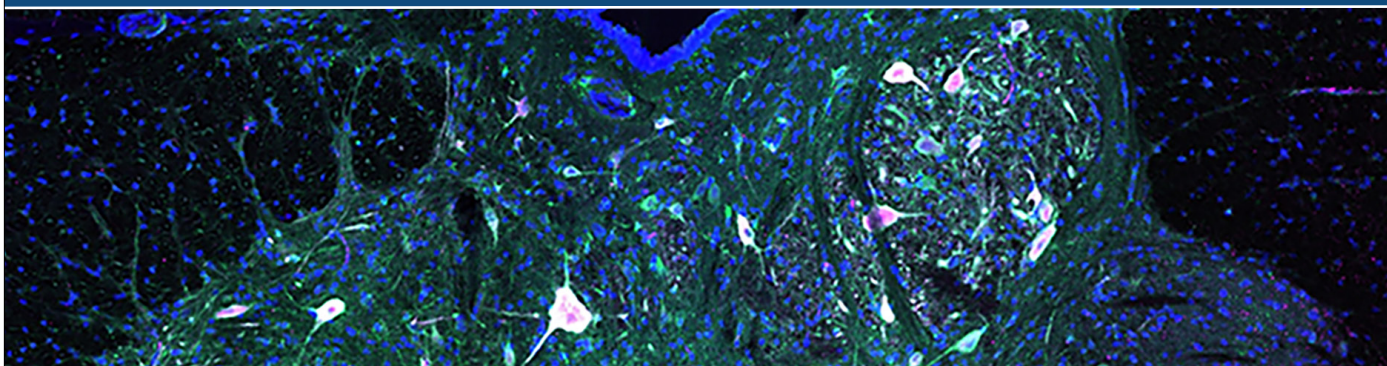
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Meet-the-Expert and Meet-the-Clinician-Expert Sessions

Understanding Complex Systems: Leveraging a Background in Math to Tackle Problems in Psychiatry

Vikaas S. Sohal, MD, PhD

Saturday, October 5, 1:30–2:30 p.m. CDT

Theme H: Cognition

Meet-the-Clinician-Expert

Unlocking the Mystery of Alzheimer's Disease: The APOE Connection

Guojun Bu, PhD

Saturday, October 5, 3:30–4:30 p.m. CDT

Theme C: Neurodegenerative Disorders and Injury

Bridging Genes and Biology: Exploring Neuroimmune Mechanisms Behind Synapse Loss and Dysfunction

Beth Stevens, PhD

Sunday, October 6, 9–10 a.m. CDT

Theme A: Development

Support contributed by: Thorlabs, Inc.

Love, Death, and Oxytocin

Robert C. Froemke, PhD

Sunday, October 6, 11 a.m.–noon CDT

Theme D: Sensory Systems

Maximizing Flexibility: Ultra-Thin Polymer Electrodes for Large-Scale, Long-Lasting, Bi-Directional Neural Interface

Lan Luan, PhD

Sunday, October 6, 1–2 p.m. CDT

Theme I: Techniques

Mechanisms to Medicines in Neurodegeneration

Giovanna Mallucci, MD, PhD

Monday, October 7, 9–10 a.m. CDT

Theme C: Neurodegenerative Disorders and Injury

Meet-the-Clinician-Expert

Support contributed by: Thorlabs, Inc.

Transforming Early Adversity Into Insights at the Nexus of Neuroscience and AI

David Sussillo, PhD

Monday, October 7, 11 a.m.–noon CDT

Theme H: Cognition

Exploration of Local Synaptic Interactions Guided by Global Experiences

Yukiko Goda, PhD

Monday, October 7, 1–2 p.m. CDT

Theme B: Neural Excitability, Synapses, and Glia

Support contributed by: Thorlabs, Inc.

Multimodal Behavioral AI: Enhancing Human Care With Intelligent Systems

Zakia Hammal, PhD

Tuesday, October 8, 9–10 a.m. CDT

Theme G: Motivation and Emotion

Finding Balance Outside the Box: Neuromechanics of Skilled and Impaired Movements

Lena H. Ting, PhD

Tuesday, October 8, 11 a.m.–noon CDT

Theme E: Motor Systems

A Different Take on Uptake: An Unexpected Journey in Flux

Susan G. Amara, PhD

Tuesday, October 8, 1–2 p.m. CDT

Theme F: Integrative Physiology and Behavior

Ask Anything Sessions

The NeuroBioBank: A Worldwide Resource Hosts: Tish Hevel and Daniel Miller, PhD	Monday, October 7, 10–11 a.m. CDT
How to Navigate Graduate School Applications with Project SHORT Mentors Hosts: Maria Luisa Valle, PhD and Taissa Lytchenco	Monday, October 7, noon–1 p.m. CDT
How the NIH Encourages Entrepreneurship Hosts: Annette Gilchrist, PhD and Vicki Cattani, PhD	Monday, October 7, 2–3 p.m. CDT
Neuroscience Opportunities at National Primate Research Centers Hosts: Michele Basso, PhD and Corinna Ross, PhD	Monday, October 7, 4–5 p.m. CDT
Rampant Retractions: An Ask Anything About Record Breaking Retractions Host: Ferric Fang, MD	Tuesday, October 8, 10–11 a.m. CDT
The Past, Present, and Future of Dementia Research Hosts: Bruce Lamb, PhD and Maria Carrillo, PhD	Tuesday, October 8, noon–1 p.m. CDT

Contact: profdev@sfn.org



Short Course

The Responsible Conduct of Research (RCR) Short Course

The RCR Short Course is sponsored by the Society. This course is a preconference session and occurs prior to the start of the annual meeting. Preregistration is required. To attend, add the course to your annual meeting registration.

Short Course Fees

Student Member	\$95
Student Non-Member	\$135
Postdoctoral Member	\$140
Faculty Member	\$190
Faculty Non-Member	\$275

RCR Short Course

The Responsibility of Being Transparent: Science Communication, Sharing, and Publishing

Friday, October 4, 1–5:30 p.m. CDT

Organizer: Lique Coolen, PhD

*Support contributed by: National Institute of
Neurological Disorders and Stroke*

Contact: training@sfn.org



Professional Development Workshops

Professional Development Workshop Tracks

Professional Development Workshops are categorized by track to help attendees quickly identify the workshops that are of the greatest interest to them. Contact: profdev@sfn.org (unless noted otherwise)

■ Career | ◆ Diversity and Inclusion | ● Education | ★ Research

Neuroscience Beyond the Classroom: Incorporating Community-Based Learning Projects into Neuroscience Courses ●

Saturday, October 5, noon–2 p.m. CDT

Organizer: Sarah Cassella, PhD

Working With and Working for AI ■

Saturday, October 5, noon–2 p.m. CDT

Organizer: Mathew Abrams, PhD

National Institutes of Health: Improving the Review of Research Project Grant and Fellowship Applications ■

Saturday, October 5, 3–5 p.m. CDT

Organizer: Bruce Reed, PhD

Team-Based Learning in Neuroscience Education: An Interactive Demonstration and Exploration of Evidence-Based Findings and Real-World Classroom Experiences ●

Saturday, October 5, 3–5 p.m. CDT

Organizers: Thomas M. Newpher, PhD and Minna Ng, PhD

Demystifying the Scholarship of Teaching ●

Sunday, October 6, 9–11 a.m. CDT

Organizer: David Donley, PhD

International Partnerships in Neuroscience ■

Sunday, October 6, 9–11 a.m. CDT

Organizer: Claudio Da Cunha, PhD

Plan for Enhancing Diverse Perspectives: How to Enhance Inclusivity and Diverse Perspectives in Your NIH Grant ◆

Sunday, October 6, noon–2 p.m. CDT

Organizer: Crystal Lantz, PhD

Building Bridges: Latinx Workshop for Networking and Mentorship ◆

Sunday, October 6, 3–5 p.m. CDT

Organizer: Sergio Crespo-Flores

Neuroscience Departments and Programs Workshop

Neuroscience Undergraduate and Graduate Curricula and Training Programs for the Future

Sunday, October 6, 3–5 p.m. CDT

Organizer: Lique Coolen, PhD

Contact: training@sfn.org

The NIH Funding Support for Neuroscience Research and Training on the Health and Well-Being of Members of LGBTQI+ Communities ◆

Monday, October 7, 9–11 a.m. CDT

Organizer: Irene Avila, PhD

“Building Up the Nerve” to Develop an Effective Career Roadmap ■

Monday, October 7, noon–2 p.m. CDT

Organizer: Michelle Jones-London, PhD

Opening the File Drawer: What to Do With Unsexy Data? ★

Monday, October 7, noon–2 p.m. CDT

Organizer: Benedict Kolber, PhD

Advancing Your Career Through Effective Science Writing for the Public and Creating Clear, Eye-Catching Research Statements ★

Monday, October 7, 3–5 p.m. CDT

Organizer: Eduardo Rosa-Molinar, PhD

Community for Rigor: A Tool for Teaching the Principles of Rigorous Research ★

Monday, October 7, 3–5 p.m. CDT

Organizer: Konrad Kording, PhD

Networking, Public Outreach, and Advocacy



Professional Development



Networking



Public Outreach/Advocacy

NeuroJobs Career Center

Saturday, October 5–Tuesday, October 8,

8 a.m.–5 p.m. CDT

Wednesday, October 9, 8 a.m.–3 p.m. CDT

Contact: neurojobs@sfn.org

Graduate School Fair



Saturday, October 5–Tuesday, October 8,

noon–2 p.m. CDT

Contact:

training@sfn.org (attendees);

gsfexhibits@sfn.org (exhibitors)

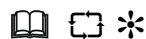
Brain Awareness Campaign Event



Saturday, October 5, 2:30–4 p.m. CDT

Contact: baw@sfn.org

Early Career Poster Session



Saturday, October 5, 6:30–8:30 p.m. CDT

Contact: training@sfn.org

Support contributed by: BrightFocus Foundation, Burroughs Wellcome Fund, Chan Zuckerberg Initiative, Tianqiao and Chrissy Chen Institute, Developmental Studies Hybridoma Bank, Gatsby Charitable Foundation, National Institute of Neurological Disorders and Stroke, James L. Roberts Fund, Science Translational Medicine/AAAS, John I. Simpson Fund, Society for Neuroscience, Nancy Rutledge Zahniser Fund

Career Development Topics: A Networking Event



Saturday, October 5, 8–9:30 p.m. CDT

Contact: profdev@sfn.org

sfn.org/am2024

Animals in Research Panel



Lifesaving Clinical Advances Stemming From Animal Research

Monday, October 7, 1:30–3 p.m. CDT

Organizer: Katalin M. Gothard, MD, PhD

Contact: advocacy@sfn.org

Support contributed by: The National Primate Research Centers

Chapters Workshop

Monday, October 7, 1–2 p.m. CDT

Contact: chapters@sfn.org

Celebration of Women in Neuroscience



Tuesday, October 8, 10 a.m.–noon CDT

Moderator: Fiona Ducotterd, PhD

Contact: profdev@sfn.org

The Advocacy Forum

From Awareness to Action: The Role of Advocacy in Advancing Addiction Research and Policies



Tuesday, October 8, 2–3:30 p.m. CDT

Organizer: Lori McMahon, PhD

Contact: advocacy@sfn.org

Advancing Early Career Neuroscientists in Publishing Series

Tuesday, October 8, 3–5 p.m. CDT

Support contributed by: Elsevier and SfN Journals (eNeuro, JNeurosci)

SfN Members' Business Meeting

Tuesday, October 8, 6:45–7:30 p.m. CDT

Contact: governance@sfn.org

Exhibit Hall and Product Theater

Exhibit Hall

The [Neuroscience 2024 Exhibit Hall](#) is a bustling marketplace. Exhibitors include government and independent research institutes, nonprofit organizations, publishers, and a wealth of biotech, pharmaceutical, and other commercial companies. Reserve time to visit the exhibits. There will be something new and interesting to discover each day.

The online Exhibit Hall will help you prepare to navigate the Exhibit Hall. It includes the names, products, and booth numbers of all Neuroscience 2024 exhibitors, as well as a helpful floor plan. Contact information for each exhibitor is also included.

Exhibit Days and Hours: Sunday, October 6–Wednesday, October 9, 9:30 a.m.–5 p.m.

Product Theater

Join exhibitors for a 30-minute presentation about their products, services, and research. The Product Theater is located in the Exhibit Hall.

Preliminary list as of April 17, 2024.

Sunday, October 6		
10 a.m. CDT	Overcoming the High Multiplexing Barrier: 3D Spatial Omics in One Go, Powered by Leica Microsystems	Leica Microsystems
11:30 a.m. CDT	Connect, Scale, Explore! Your New Inscopix Miniscope Ecosystem	Bruker Corporation
2:30 p.m. CDT	Experimental Refinement in Neuroscience Research: A Cornerstone for Holistic Investigation and Increased Translation	Harvard Bioscience
Monday, October 7		
10 a.m. CDT	The Single-Cell Era, Scaled: Achieve Maximum Throughput at Minimal Cost With Scale Biosciences	Scale Biosciences
11:30 a.m. CDT	Rigorous and Reproducible Western Blots: A How-To Guide for Protein Quantification	MilliporeSigma
1 p.m. CDT	Microscoop: A Subcellular Pickable Microscope for Proteomic Discovery	Syncell, Inc.
2:30 p.m. CDT	Simple Western Capillary Immunoassays: A Game Changer in Elucidating Intracellular Signaling in Alzheimer's Disease	Bio-Techne

SfN-Sponsored Socials

Sunday, October 6, 6:45–8:45 p.m. CDT
Alzheimer's Disease and Related Dementias Social
Black in Neuro Social
Development of the Cerebral Cortex: From Embryos to Organoids Social
Dignity Neuroscience Social
Diversity in STEM Research Social
Eye Movements Social
Faculty for Undergraduate Neuroscience (FUN) Social
Neuroethology Social
New Faculty Diversity Social
Open-Source Technology Social
Yes and!: Engaging Neuroscientists and Society Through Improv Theater Social
Monday, October 7, 6:45–8:45 p.m. CDT
Cerebellum Social
The Confound Hour: Let's Make Some Noise! Social
Glia Social
Global Neuroscience Social
Latin American Women in Neuroscience: Empowerment Through Collaboration Social
LGBTQIA2S+ Social
Marmoset Social
Non-traditional Academic Careers Social
Official Paraventricular Nucleus of the Thalamus (PVT) Social
Social Neuroscience Social
Tuesday, October 8, 6:45–8:45 p.m. CDT
Arabs in Neuro Social
Art of Neuroscience Social
Chemosensory Science Social: Come Smell and Taste! Social
Childhood Adversity Social
LGBTQI+ Neuroscience Workforce Social
Locus Coeruleus Social
Natives in Neuroscience Social
Psychopharmacology Social
Somatosensation and Interoception Social

Satellite Events

Preliminary list. All times are in Central Daylight Time (CDT).

Wednesday, October 2–Friday, October 4 // Pre-Meeting Multi-Day Events	
BrightFocus Alzheimer’s Fast Track 2024	Wednesday, October 2–Friday, October 4, 8 a.m.–5 p.m.
MCCS — Molecular and Cellular Cognition Society Annual Meeting Poster Session	Thursday, October 3, 6–9 p.m.
MCCS — Molecular and Cellular Cognition Society Annual Meeting Symposium	Friday, October 4, 8 a.m.–6 p.m.
Friday, October 4	
Data Analysis Applications for Neuroscience	9 a.m.–noon
Saturday, October 5	
Leveraging Simulation Neuroscience Using Blue Brain’s Open Platform	9–10 a.m.
International Brain Initiative Social	6:30–8 p.m.
FTD Social	6:30–8:30 p.m.
Tackling Autoimmune Disease in the Brain	6:30–9 p.m.
g.tec Brain Computer Interface (BCI) Workshop	6:30–9 p.m.
Sunday, October 6	
Christian Neuroscience Society	7–8 a.m.
Middle Eastern Neuroscientists Social	6:30–8 p.m.
Tissue IF/IHC Workshop with Expert Panel and Networking Reception	6:30–8:30 p.m.
University of Chicago Neuroscience Reception	6:30–8:30 p.m.
Monday, October 7	
ALBA-IBRO Social for Diversity and Inclusion in Neuroscience	6:30–8:30 p.m.
Neurorehabilitation Social	6:30–8:30 p.m.
Simons Foundation Autism and Neuroscience Social	6:30–8:30 p.m.
Sleep and Circadian Biology Datablitz	6:30–8:30 p.m.
Workshop: Simulating Embodied Neural Control Using NeuroMechFly	6:30–8:30 p.m.
Therapeutic Development at NINDS: Innovation From Academic and Small Business Investigators	6:30–9 p.m.
Washington University in St. Louis Neuroscience Reception	6:30–9:30 p.m.

Neuroscience Meet-Ups

Connect and engage with registered attendees virtually or in person outside of the SfN program hours. No fee or meeting room is required. Meet up at a preferred off-site location. SfN will list the event date, time, location, and contact information in the mobile app and the Neuroscience Meeting Planner. Submission opens this summer.

Registration

Bonus Day

Opens Tuesday, July 9, noon EDT, for members who renewed their membership by March 15.

Advance Registration

Opens Wednesday, July 10, noon EDT for members and Tuesday, July 16, noon EDT for nonmembers.

Regular Registration

From Tuesday, September 10, midnight EDT through the duration of the annual meeting.

	In-Person and Virtual		Virtual Only	
Registration Category	Advance	Regular	Advance	Regular
Member	\$605	\$760	\$215	\$270
Member, Category II	\$185	\$230	\$65	\$80
Member, Category III	\$305	\$380	\$110	\$135
Postdoctoral Member	\$455	\$570	\$160	\$200
Postdoctoral Member, Category II	\$140	\$180	\$50	\$60
Postdoctoral Member, Category III	\$230	\$285	\$80	\$100
Student Member, Graduate	\$305	\$385	\$110	\$135
Student Member, Graduate Category II	\$95	\$120	\$30	\$40
Student Member, Graduate Category III	\$155	\$195	\$55	\$65
Student Member, Undergraduate	\$155	\$195	\$55	\$65
Student Member, Undergraduate Category II	\$50	\$65	\$15	\$20
Student Member, Undergraduate Category III	\$80	\$100	\$25	\$35
Nonmember	\$1,090	\$1,365	\$385	\$480
Student Nonmember	\$550	\$690	\$195	\$240
Guest	\$85	\$105		

Note: Single-day registration is not available.

Registration

Accepted Forms of Payment

Visa, MasterCard, American Express, Discover, and checks or money orders in U.S. dollars drawn on a U.S. bank made payable to the Society for Neuroscience.

Place Registration On Hold for Organization or Company Payment

The "Registration on Hold" option is available for online credit card payments only. If the attendee's organization or company is paying for their registration, the attendee should start the registration process and select this option to place the registration on hold until SfN receives payment. An email will be sent to the attendee and the payer with a link allowing the payer to pay for the registration.

For the advance registration fee to apply, payment must be received by the advance registration deadline: Monday, September 9, 11:59 p.m. EDT. After this date, higher registration fees will apply.

Note: Registration is not complete until SfN receives payment, and housing reservation access will not be permitted until payment has been made.

Contact Information

sfnregistration@xpressreg.net

+1 (508) 743-8563 (International)

9 a.m.–5 p.m. EDT

Code of Conduct at SfN Events

If attendees experience unwelcome or unsafe situations anywhere in the city, attendees should contact local authorities (dial 9-1-1). Additional social service resources are listed at changingourcampus.org under 'Get Help.' Information about SfN's policy is at sfn.org/codeofconduct. Any official report of a violation of the code of conduct should be emailed to hrofficer@sfn.org.

Photography & Recording Policy

SfN is committed to honoring the rights of copyright owners and to respectful sharing of scientific research and data. For more information on the policy, visit: sfn.org/photopolicy.



Travel Resources

Airports

Chicago O'Hare International Airport (ORD)

flychicago.com/ohare

(773) 686-2200

Approximate 40-minute drive (17 miles) to downtown Chicago and McCormick Place

Midway International Airport (MDW)

flychicago.com/midway

(773) 838-0600

Approximate 20-minute drive (11 miles) to downtown Chicago and McCormick Place

International Attendees

Visa Information

If you are from a nation participating in the Visa Waiver Program, review U.S. travel regulations early to ensure compliance. For more information and to request an official invitation letter, visit sfn.org/visainfo.

Hotel Information

Housing for advance registered members who renewed by March 15, opens July 9, noon EDT; for all other members on July 10, noon EDT; and for advance nonmembers on July 16, noon EDT. Housing is open through September 24.

- Reservations can be made online or by phone, fax, or mail. Online hotel reservations are encouraged and will be given priority. Reservations are not accepted directly by participating hotels or SfN headquarters.
- The Hyatt Regency McCormick Place and the Marriott Marquis Chicago are the official co-headquarters hotels.

Reservation Policies and Procedures

- To make a hotel reservation through SfN Housing, you must be registered for Neuroscience 2024. Only one hotel room may be reserved per paid registrant until August 13.

- Upon registering, each attendee will receive a unique registration confirmation number that is required to make a hotel reservation. Reservations must be guaranteed with a valid credit card or check deposit.
- SfN Housing will make your reservation based on your requests; however, special requests cannot be guaranteed. It is the attendee's responsibility to reconfirm requests directly with the assigned hotel prior to arrival.
- A limited number of lower-priced hotel rooms have been set aside through August 20 for students and member category I, II, and III registrants.
- Housing for exhibitors opens July 23. For exhibitor hotel reservation information, visit sfn.org/exhibits.
- You may change or cancel hotel reservations until September 24.

Contact Information

SfNHousing@cmrus.com

(866) 999-3093 (U.S. and Canada)

+1 (415) 268-2091 (International)

9 a.m.–9 p.m. EDT

On-Site Attendee Resources

Child care services, infant care facilities, scooter/wheelchair rentals, a prayer room, and real-time captioning of lectures will be offered during Neuroscience 2024. For additional information, visit sfn.org/attendeerresources. If you require American Sign Language, CART transcription services, or have a disability or special need that may affect your participation in the annual meeting, contact meetings@sfn.org. SfN cannot ensure the availability of appropriate accommodations without prior notification of need.



Navigating Chicago

Complimentary SfN Shuttle Service

With shuttle bus service operating every 10 minutes during peak time and 20 minutes during off-peak time, you can conveniently travel between your official SfN meeting hotel and the convention center. With the exception of hotels within walking distance of McCormick Place, shuttle service will be available to all SfN contracted hotels. In addition, because of Chicago's commitment to successful large meetings, shuttles operate on a dedicated travel-free "busway" from downtown to the convention center.

Public Transportation

Chicago offers two options for public transportation: Metra (the commuter train system) and CTA (the "L" light rail system). Metra, with stops within walking distance to a selection of the SfN-contracted hotel rooms, has a stop inside McCormick Place. If you opt to take the L, also convenient to many Neuroscience 2024 hotels, the Cermak-McCormick Place station (Green line) is the closest CTA stop to McCormick Place.

Taxis

More than 5,800 city taxis are in service in Chicago. A taxi dispatch center is located in McCormick Place to ensure cabs are readily available to meet demand.

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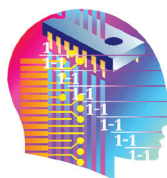
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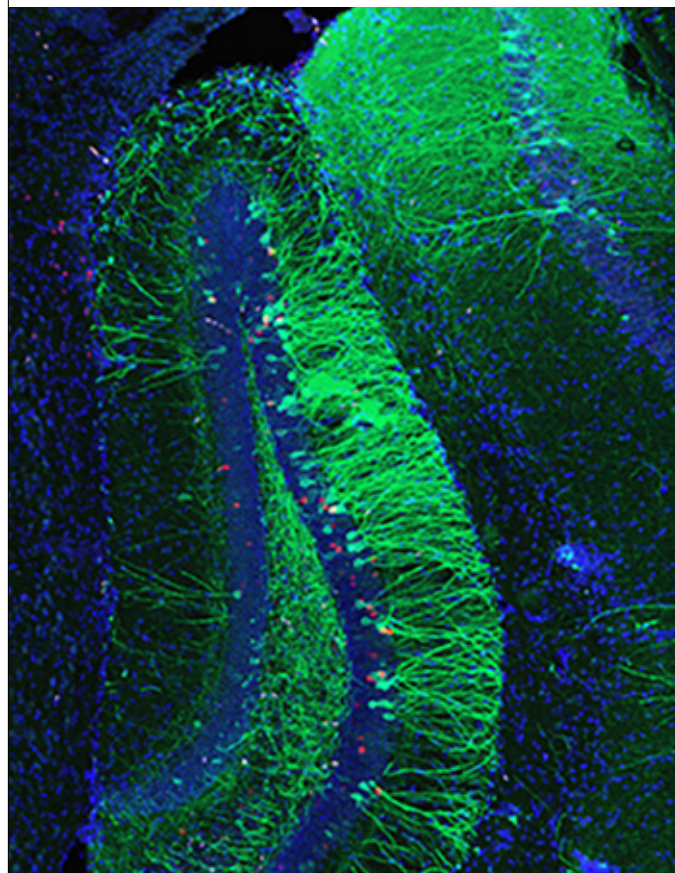
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Key Dates

Early July

Notifications of abstract acceptance status sent to presenting authors
Presenters of accepted abstracts will have an opportunity to edit their author blocks for a three-week period in July.

Learn more at sfn.org/coauthors.

August

Notifications of Trainee Professional Development Award acceptance status sent to applicants

Learn more at sfn.org/tpda.

Tuesday, July 9, noon EDT

Bonus Day registration opens

For SfN members who joined or renewed by March 15

Wednesday, July 10, noon EDT

Advance member registration opens

Tuesday, July 16, noon EDT

Advance nonmember registration opens

Monday, August 12, 9 a.m. EDT

Webinar: “How to Make and Present a Poster for Neuroscience 2024”

All webinars are free.

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Visit neuronline.sfn.org/sfnmeeting for details.



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