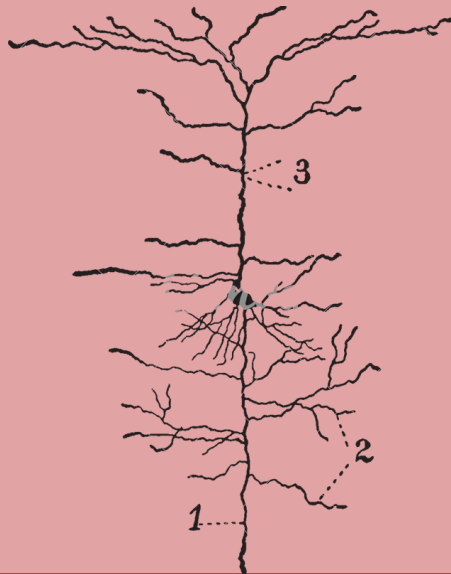UNIVERSITY of
ROCHESTER

NEUROSCIENCE
RETREAT
2025

PROGRAMME

PROGRAM

CONTINENTAL BREAKFAST

8:00am – Parlor

WELCOME & LAND ACKNOWLEDGEMENT

8:30am – Auditorium
Krishnan Padmanabhan, PhD

MATTHEW ADUSEI, PHD

8:40-9:10 – Auditorium
Graduate Student
Briggs Lab

POSTER SESSION I/COFFEE BREAK

9:20-10:35 – Ballroom

SFN CHAPTER MEETING

10:40am– Auditorium
Chris Holt, PhD

STATE OF THE NEUROSCIENCE GRADUATE PROGRAM

10:50am– Auditorium
Chris Holt, PhD

AWARD PRESENTATIONS

11:00am – Auditorium
Shrager Award and Doty Award

OVERVIEW OF THE NEUROSCIENCE DEPARTMENT

11:10pm – Auditorium
John Foxe, PhD

GROUP PHOTOGRAPH

11:20 – Pavilion

PROGRAM

LUNCH

11:30am – 12:40pm – Ballroom

DANA BOEBINGER, PHD

12:50 - 1:20pm – Auditorium
Post Doctoral Fellow
Norman-Haignere Lab

DORA BIRO, PHD

1:25-1:55 – Auditorium
Professor of Brain and Cognitive Sciences
Department of Brain and Cognitive
Sciences

POSTER SESSION II/COFFEE BREAK

2:00 - 3:10pm – Ballroom

KEYNOTE: UELI RUTISHAUSER, PHD

3:15 - 4:20pm – Auditorium
Professor of Neurology and Biomedical Sciences
Director of Human Neurophysiology Research
Cedars-Sinai

POSTER AWARD PRESENTATION

4:20pm – Auditorium

COCKTAIL RECEPTION

4:25 - 5:30pm – Parlor

SPEAKER BIOGRAPHIES

KEYNOTE: UELI RUTISHAUSER, PH.D.

Professor of Neurology and Biomedical Sciences
Director of Human Neurophysiology Research
Cedars-Sinai

Deciphering human memory and decision making at the single-neuron level

Dr. Ueli Rutishauser is a Professor and Board of Governors Chair in Neurosciences in the Department of Neurosurgery at Cedars-Sinai Medical Center where he directs the Center for Neural Science and Medicine and holds a joint appointment in the Division of Biology and Biological Engineering at the California Institute of Technology. He completed his PhD in Computational and Neural Systems at the California Institute of Technology and completed a post-doctoral fellowship at the Max Planck Institute for Brain Research in Frankfurt, Germany. Dr. Rutishauser's lab has pioneered the study of single neuron and population neural activity in humans, investigating the neural mechanisms underlying learning, memory, and decision-making via the development of advanced tools, computational methods, and surgical techniques. His work has provided new insights into the mechanisms of decision-making, revealed how sensory inputs and memories guide goal-directed choices, and uncovered how humans develop abstract representations in the hippocampus when performing inference behavior. In addition to leading studies which have appeared in Nature, Science, Nature Neuroscience, and a number of high impact journals, he continues to develop new methods and tools in support of Open Science Initiatives like the open-source spike sorting toolbox OSort and actively engaging in initiatives like the Neural Data without Borders. His work has been recognized with a number of awards and achievements including the NSF CAREER Award, The NIMH Director BRAINs Award, the Torland Award from the National Academy of Sciences.

SPEAKER BIOGRAPHIES

DORA BIRO, PH.D.

Professor of Brain and Cognitive Sciences
Department of Brain and Cognitive Sciences

Coordination, conventions and collective intelligence

Dora Biro is the Beverly Petterson Bishop and Charles W. Bishop Professor of Brain and Cognitive Sciences at the University of Rochester. She received her undergraduate and PhD degrees from the University of Oxford and subsequently held a JSPS postdoctoral research fellowship and a visiting professorship at the Primate Research Institute of Kyoto University, Japan, before returning to Oxford as a Royal Society University Research Fellow and later Professor of Animal Behaviour. She is the recipient of a L'Oreal-UNESCO "For Women in Science" fellowship, with research interests centered on animal cognition and collective animal behavior, including navigation, tool use, culture, and collective decision-making.

SPEAKER BIOGRAPHIES

DANA BOEBINGER, PH.D.

Postdoctoral Fellow
Norman-Haignere Lab

Rapid and dynamic construction of acoustically invariant speech representations in the human auditory cortex

Dana Boebinger, PhD, is a postdoctoral fellow working in the lab of Samuel Norman-Haignere, PhD, at the University of Rochester Medical Center. She received her doctoral degree from Harvard University's Speech and Hearing Bioscience and Technology program, her master's degree in Cognitive Neuroscience from University College London as a Fulbright Scholar, and her undergraduate degrees in Psychology and Music at Florida State University. Her research focuses on how the human brain perceives and understands sounds like speech and music.

SPEAKER BIOGRAPHIES

MATTHEW ADUSEI, PH.D.
Briggs Lab

Wired for Reciprocity: Corticogeniculate Networks Across the Visual System

Matthew Adusei is a recent PhD graduate of the Neuroscience Graduate Program at the University of Rochester Medical Center. He earned a Bachelor of Science in Biology from Lafayette College in 2019, and his PhD in Neuroscience in 2024. During his PhD, he worked in Dr. Farran Briggs' lab, focusing on structure-function characterizations of corticogeniculate neurons throughout the carnivore (ferret) and primate (macaque) visual systems. To support the final year of his thesis work, he was awarded a Joan Wright Goodman Dissertation Fellowship.

Matt is currently a postdoctoral fellow in Dr. David Leopold's Laboratory at the National Institutes of Health, developing a safe and robust method for genetically modifying primate brain cells through ultrasound-guided fetal intracerebroventricular adeno-associated virus injections in marmosets and rats.

MORNING POSTERS

1. Connecting cortical and subcortical oscillatory activity in patients with Parkinson's disease and Dystonia

Abigail Alpers
Graduate Student
Neuroscience Graduate Program
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2. Neural representations of sensory qualities in value-based decision making

Sarah Chiaradonna
Laboratory Technician
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3. Exploring Microglial Transcriptomic Sex Differences in the 5xFAD Mouse Model of Amyloidosis

Lia Calcines Rodriguez
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4. Hidden Under the Surface: A Deeper Look at the Buried Food Task Utilizing Machine Learning

Bryan Crum
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5. Depletion of Astrocytic TG2 Enhances the Ability of Astrocytes to Metabolically Support Neurons through Lipid and Antioxidant Metabolism

Thomas Delgado
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6. The Role of Trauma in Shaping Attention and Threat Expectancy: A Virtual Reality Threat Conditioning Experiment

Tanya Garg
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MORNING POSTERS

7. Quantification of artery to vein cerebrospinal fluid transport via the glymphatic system

Michael Giannetto
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8. Tracking the population of transfused immune cells in retinal blood

Jin won Huh
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9. Training-induced recovery of motion perception after occipital stroke despite V1-V4 damage

Niki Lam
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10. Hunger Modulation of a Sensorimotor Circuit

Gladys Leitch
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11. Phospho-regulation of liprin-a1 via the PPP2R5D-PP2A holoenzyme

Abigail Mayer
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12. Sex-specific signatures on macroscopic structural brain connectome following chronic alcohol exposure in mice using high-resolution diffusion MRI

Mariah Marrero
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13. Pre-operative right hemisphere language network connectivity predicts post-operative language impairment

Emma Stawderman
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Neuroscience Graduate Program
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AFTERNOON POSTERS

14. Exploring the Collective role of Sleep Disturbances and Trauma Exposure on Contextual Threat Learning

Shreya Bavdekar
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15. Reaching Toward an Understanding of Directed Reaching

Attilio Ceretti, Ph.D
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16. Exploring the Neurophysiologic and Neuropathologic Basis for Photophobia in Cystinosis

Hayley Chang
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17. The role of Sez6L2 in complement-mediated synaptic pruning during neurodevelopment

Julia Granato
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18. Potential role of viral latency protein U94A in Alzheimer's Disease

Amelia Hines
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19. The role of temporal anticipation in event perception and memory for naturalistic narratives

Aishwarya Jayan
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AFTERNOON POSTERS

20. Novel psychosocial resource deprivation stress alters the neurotoxicity of low dose PFOA exposure during gestation in maternal postpartum brain and behavior

Erin Murray
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21. Characterizing Microglia Density and Morphology Throughout Pregnancy and Postpartum in Mice

Elizabeth Plunk
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22. AAV-huTau Induces Acute Tau Hyperphosphorylation and Neuroinflammation in the Dorsal Hippocampus

Tiwaladeoluwa Oni
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23. Apoptotic markers in immature and mature neurons in primate paralaminar amygdala: effects of early life stress

Phoebe Shin
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24. Inhibitory Reciprocal Circuit Motifs in Taste Processing

Jonathan Williams
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COMMITTEE MEMBERS

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Event Coordinator

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Neural Circuits and Computation Laboratory
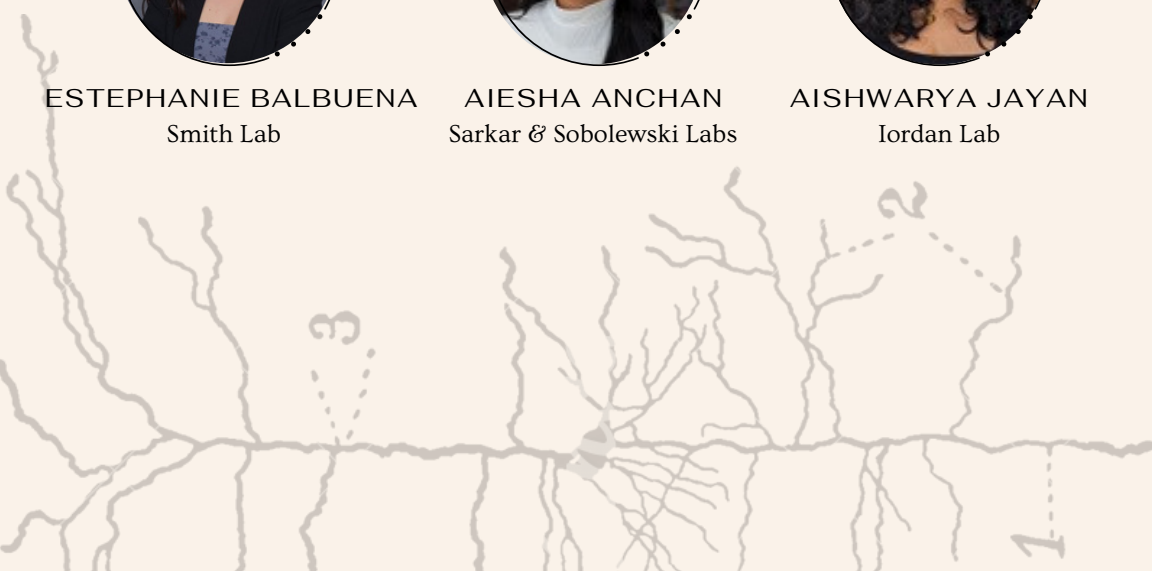
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Smith Lab

AIESHA ANCHAN
Sarkar & Sobolewski Labs

AISHWARYA JAYAN
Iordan Lab

NOTES

UNIVERSITY *of*
ROCHESTER

NEUROSCIENCE
RETREAT
2025

THANK YOU FOR COMING!

Programme Design by
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Website by Mark Diltz