

Poster Session 1

10:30 – 12:30 pm

SURF Fellow, SURF Mentor

- 1 How Background Congruency Influences Object Recognition
Vasila Abdumuminova¹, Sofiya Eliachova¹, RT Raghavan²; ¹Hunter College, ²New York University
- 2 Active Sensing in *C. elegans*: The correlation between head and nose movement and sensory activity
Josefine Sophie Meyer¹, Lisa Sippl², Ulises Rey³, Manuel Zimmer³; ¹University of Graz, ²University of Veterinary Medicine Vienna, ³University of Vienna
- 3 Can Fruit Flies Predict the Trajectory of a Moving Object?
Niyathi Annamaneni¹, Minseung Choi², Tom Clandinin²; ¹San José State University, ²Stanford University
- 4 Saccades and Motor Learning: Examining the Relationship in a Perturbation Task
Jesus Cabrales Quintanilla¹, Pavithra Rajeswaran¹, Leo R. Scholl¹, Si Jia Li¹, Lydia I. Smith¹, Amy L. Orsborn²; ¹University of Washington, ²Washington National Primate Research Center
- 5 Classifying Undirected Human Behavior with Semi-Supervised Learning and Interpretation
Zhang Zhang, **Chi Chou**, Yichi Yang, Timothy Sheehan, Holden Rosberg, William Perry, Jared Young, Arpi Minassian, Gal Mishne, Mikio Aoi; University of California San Diego
- 6 Distance Between Neural Regions According to Scene Classification
Sofiya Eliachova¹, Manu Raghavan²; ¹Hunter College, ²New York University
- 7 Dendritic Computations in Spiking Neural Networks
Dilay Fidan Ercelik¹, COMOB Group², Michael Häusser¹, Brendan Bicknell¹; ¹University College London, ²Collaborative Modelling of the Brain Working Group
- 8 Role of Neurexin1 α in Visuomotor Decision-making
Kaela Evans, Felicia Davatolhagh, Max Melin, João Couto, International Brain Laboratory, Anne K. Churchland; University of California Los Angeles
- 9 Electrode Implantation in Mouse Muscle Does Not Impact Motor Behavior
Rhuna Gibbs¹, Kyle Thomas^{1,2}, Sam Sober¹; ¹Emory University, ²Georgia Institute of Technology
- 10 Recreating dexterous finger movements with recurrent neural networks and real-time visual feedback in a brain-computer interface
Nghi Ho¹, Samuel R. Nason-Tomaszewski², Mattia Rigotti-Thompson^{1,2}, Anna Pritchard^{1,2}, Parag G. Patil³, Cynthia A. Chestek³, Chethan Pandarinath^{1,2}; ¹Georgia Institute of Technology, ²Emory University, ³University of Michigan
- 11 Abstract Representations Emerge in Linear Networks Trained to Perform Multiple Tasks
Mehnoor Khan¹, Jeff Johnston², Stefano Fusi²; ¹City University of New York, ²Columbia University
- 12 Exploring the contribution of motor cortex and thalamus on striatal activity during movement
Hannah Kim, Enida Gjoni, Takaki Komiyama; University of California San Diego
- 13 Flexible decision-making: the activity of neuronal subtypes in the prefrontal cortex
Hein Kim, Jinglan Zhang, Jose Ernesto Canton-Josh, Lucas Pinto; Northwestern University
- 14 Neurobiological underpinnings of meta-learning
Maxwell Kouna, Sriram Jayabal, Jennifer Raymond; Stanford University
- 15 Sex-specific differences in cortical processing during decision-making
Madison Lansing¹, Joao Couto², Anup Khanal², Anne K Churchland²; ¹University of California Irvine, ²University of California Los Angeles

Poster Session 2

3:05 – 5:05 pm

SURF Fellow, SURF Mentor

- 1 Distinguishing Cell Types: Exploring Trial-to-Trial Variability in Neuronal Activity and Behavior
Jeffrey Liu, Ram Dyuthi Sristi, Enida Gjoni, Takaki Komiyama, Gal Mishne; University of California San Diego
- 2 Modeling Heart Rate Dynamics during the Development of Autonomic Control Feedback Circuits
Maanasa Mendu¹, Joana Avrami¹, Abigail Huebner¹, Florian Engert², Luis Hernandez-Nunez²; ¹Harvard College, Harvard University
- 3 Correlation between Acoustic Elements and Sequencing in Birdsong is maintained during Motor Learning
Tommy Mesamours¹, Leila May Pascual², Kofi Vordzorgbe²; ¹Morehouse College, ²Emory University
- 4 Generalization properties of EMG decoders using M1 responses
Nana Dufie Akowuah¹, Elom A. Amematsro², Liam Paninski²; ¹City University of New York, ²Columbia University
- 5 Systemic pharmacological suppression of neural activity reverses learning impairment in a mouse model of Fragile X Syndrome
Adam Nance, Jacqueline Foltz, Amin Shakhawat, Jennifer L. Raymond; Stanford University
- 6 Efficient Continual Learning of Tasks in Reservoir Networks
Paul Okeahalam, Liang Zhou, Jorge A. Menendez, Peter E. Latham; University College London
- 7 Neural Networks Learn Object and Environment Statistics to Guide Foraging Decisions
Amelia Orwant, Ramanujan Srinath, Marlene R. Cohen; University of Chicago
- 8 Self-Supervised Neuron Boundary Inpainting to fix Membrane Leaking in Electron Microscopy Images
Manuel Paez¹, Dmitri Chklovskii^{2,3}, Jingpeng Wu²; ¹Columbia University, ²Flatiron Institute, Simons Foundation, ³New York University Grossman School of Medicine
- 9 Effect of post-training sensory input on systems consolidation of a motor skill
TT Phi¹, EK Chan², S Kim², DC Jang², VW Xin², AM Somera², TL Stay², JL Raymond²; ¹Foothill-De Anza College, ²Stanford University
- 10 Examining laminar and cell-type specific innervation in monkey hippocampus
Gian Andre Rodrigues, S. Gibson, Autumn Mallory, E.A. Buffalo, J.W. Rueckemann; University of Washington
- 11 Active Sensing in C. elegans: The correlation between head and nose movement and sensory activity
Lisa Sippel¹, Josefine Meyer², Ulises Rey³, Manuel Zimmer³; ¹University of Veterinary Medicine, ²University of Graz, University of Vienna³
- 12 Evaluating developmental shape selectivity from simultaneous multi-unit recordings along the ventral visual pathway
A. Ezra Sutter¹, Gerick M. Lee², Timothy D. Oleskiw², Najib J. Majaj², Lynne Kiorpes², J. Anthony Movshon²; ¹Drew University, ²New York University
- 13 Task-related neural activity during perceptual decision making across the brain
Patrick Udeh¹, Ila Fiete², Leenoy Meshulam³; ¹Boston University, ²Massachusetts institute of Technology, ³University of Washington
- 14 Plasticity and tuning of the oculomotor integrator by visual feedback in mice
Kellen Vu, Sriram Jayabal, Jennifer Raymond; Stanford University
- 15 Functional role of thalamocortical projections in motor learning
Xinyi (Cindy) Wang, Assaf Ramot, Takaki Komiyama; University of California San Diego