



# Neuroscience Retreat and Research Day

May 16, 2018

8:00 - 8:45 Coffee and Continental Breakfast

8:45 Opening remarks

## Session I: Circuits and Behavior

9:00 - 9:20 Catherine von Reyn  
Visual feature integration within *Drosophila* escape circuits

9:25 - 9:45 Jessica Barson  
Neuropeptides in the thalamic paraventricular nucleus: Role in ingestive behavior

9:50 - 10:10 Kim Dougherty  
Genetically-defined spinal excitatory interneurons involved in locomotor rhythm generation

10:15 - 10:25 Zachary Brodник (Graduate student, Espana Lab)  
Susceptibility to traumatic stress accelerates the development of cocaine-associated dopamine transients and drives cocaine use vulnerability

10:30 - 10:40 Kendall Schmidt (Graduate student, Giszter Lab)  
Optogenetically mediated neuromodulation of motor cortex enhances voluntary control of trunk below a complete midthoracic SCI in adult rats when paired with robot assisted rehabilitation

10:45 Break

## Session II: Development and Plasticity

11:00 - 11:20 Dong Wang  
Neural circuit dynamics underlying learning and memory consolidation

11:25 - 11:45 Kazu Toyooka  
Novel Spotlight of Plxdc1 in Neurite Formation

11:50 - 12:10 Denise Garcia  
Cortical astrocytes are derived from two molecularly distinct progenitor populations

12:15 - 12:35 Michael Akins  
Presynaptic Fragile X Proteins and Synapse Formation

12:40 Lunch

## Session III: Injury

- 2:00 - 2:20** Marie-Pascale Cote  
Rehabilitation improves sensorimotor function after SCI: a role for chloride co-transporters
- 2:25 - 2:45** Shaoping Hou  
Spinal endogenous dopamine regulates spontaneous micturition reflex after spinal cord injury
- 2:50 - 3:10** Megan Detloff
- 3:15 - 3:25** Lyandysha V. Zholudeva (Graduate student, Lane Lab)  
Cell Therapy for Repair following Cervical Spinal Cord Injury
- 3:30 - 3:40** Eugene Mironets (Graduate student, Tom Lab)  
Delaying pharmacological inhibition of spinal soluble tumor necrosis factor alpha (sTNFa) signaling diminishes the development of autonomic dysreflexia after complete high thoracic spinal cord injury
- 3:45** Break

## Session IV: Pathology of the Nervous System

- 4:00 - 4:20** Seena Ajit  
A protective role for exosomes derived from macrophages in attenuation of pain
- 4:25 - 4:45** Sandhya Kortagere  
Levodopa induced dyskinesia: A Tango of Dopamine D1 and D3 Receptors
- 4:50 - 5:10** Huijuan Hu  
Store-operated calcium channels and pain plasticity
- 5:15 - 5:25** Priya Panikker (Graduate Student, Elephant Lab)  
Epigenetic Tip60 HAT/HDAC2 balance promotes cognitive function in an Alzheimer's disease *Drosophila* model
- 5:30** Wine and Cheese Reception