# 2019 UC Berkeley Neuroscience Conference Sep. 20-22, 2019

# **Granlibakken Conference Center**

## FRIDAY, September 20th

## 2:00-3:30PM: Arrival and Registration

3:00-3:30PM: Poster Set-Up (Bay Room)

## 3:30-5:00PM: Posters (Bay Room)

Adesnik Lab Greg Telian Context Dependent Sensorimotor Processing During Active Sensation

#### Adesnik/Waller Labs Yi Xue Three-dimensional Partial Coherent Holography for Photostimulation In Vivo

**Bateup Lab** Daniel Kramer Deciphering Dopaminergic Heterogeneity Using a Novel Reporter Line

Erin Aisenberg Novel Cell Type-specific Peptidergic Signaling in the Nucleus Accumbens

#### Kamran Ahmed

mTORC1 and mTORC2 Differentially Control Midbrain Dopamine Neuron Somatodendritic Morphology and Functional Output

Vasiliki Karalis Raptor Downregulation Prevents TSC-related Phenotypes in Mice

**Cooper Lab** Zeynep Başgőze Effects of Context on the Visual Stability of Depth Edges in Natural Scenes

#### **DeWeese Lab**

Louis Kang Replay as Wavefronts and Theta Sequences as Bump Oscillations in a Grid Cell Attractor Network



## Dillin Lab

Holly Gildea Astrocyte-like Glial Cells of C. Elegans Non-cell Autonomously Regulate Induction of the Cytosolic Unfolded Protein Response Through the Thermosensory Circuit

#### Feldman Lab

Sanika Ganesh Transcriptional Changes During Experience-Dependent Plasticity in Somatosensory Cortex

#### **Feller Lab**

Mathew Summers Synaptic Basis of Velocity Tuning in Direction Selective Circuits

Malak El-Quessny Visual Experience Influences Dendritic Orientation While Maintaining Asymmetric Wiring of the Retinal Direction Selective Circuit

Franklin Caval-Holme Gap Junction Coupling Shapes the Encoding of Light Intensity in the Neonatal Retina

Joshua Tworig Impact of neuronal activity on Müller glial calcium transients and morphology during retinal development

#### Foster Lab

Bill Croughan Fast Triggering of Brain Stimulation Contingent on the Trajectory Content of Online-detected Hippocampal Replay

#### Ingolia Lab

Wren Kim

Engineered Biotin Ligases to Investigate Neuronal Gene Expression

#### Isacoff Lab

Irene Grossrubatscher Forebrain Modulation of Prey Capture in Zebrafish

Amy Winans Ciliary Localization of a Neuronal GPCR Regulates Behavior

Krisha Aghi Uncovering the Basis of Heterogeneity of Synaptic Probabilistic Release at the Drosophila Larval Neuromuscular Junction

#### Ji Lab

Qinrong Zhang Fast Widefield Imaging of Neuronal Structure and Function with Optical Sectioning In Vivo



### Kaufer Lab

Jessica Lin Inhibition of TGFb-signaling Ameliorates Age-related Blood-brain Barrier Decline

Lynn Yang Examining Blood-Brain Barrier Dysfunction in Neurological Disorders

Alex Ehrenberg The Locus Coeruleus as a Substrate for Alzheimer's Disease Pathogenesis

Siamak Sorooshyari Differentiating ECoG Signatures of Brain Aging via Machine Learning

#### Knight Lab

Anais Llorens Preservation of Working Memory Capacity after Orbitofrontal Damage

#### Kriegsfeld Lab

Emilio Emilio Soto Soto Teaching Transdisciplinary Neuroscience: Responsive Teaching To the Diversity of the Classroom

## Liu Lab

Sang Min Han High-throughput Estimation of Effective Connectivity Using Optogenetics

#### QB3 High-throughput Screening Facility Deepa Sridharan

QB3 High-throughput Screening Facility Highlights

#### Saijo Lab

Kurtresha Worden

A Neurodevelopmental Disorder Risk Gene Regulates Microglia Function

Laura Craciun Investigating the Role of TCF4 in Astrocyte Function and Brain Development

#### Scott Lab

Stefanie Engert Gustatory Sensory Neurons in Drosophila Melanogaster are Interconnected via Axo-axonic Synapses

Philip Shiu Identification of Neurons Comprising the Proboscis Extension Response (PER) Circuit

Amanda Gonzalez-Segarra Coordination of Sucrose and Water Ingestion in D. Melanogaster



Meghan Laturney Post Copulatory Changes in Feeding Behavior in Female Drosophila Melanogaster

Gabriella Sterne Circuit-level Representations of Gustatory Reward in Drosophila

#### Shekhar Lab

Karthik Shekhar Molecular Heterogeneity of the Vertebrate Retina: Form to Function

#### **Theunissen Lab**

Kevin Yu Focal Lesions in Auditory Cortex of the Zebra Finch Cause Deficits in Auditory Discrimination but not in Forming Associative Memories of Auditory Objects

#### Wallis Lab

Zuzanna Balewski OFC Representations Influence Choice Accumulation in ACC

## Weiner Lab

Willa Voorhies The Depth of Tertiary Sulci in Lateral Prefrontal Cortex Predicts the Development of Reasoning Performance

#### Wilbrecht Lab

George Smith Prounis Developing to disperse: Striatal Dopamine Signaling at the Age of Peak Exploration, Risk Taking, and Novel Object Interaction in Wild Mice

#### Wyrobek Lab

Andrew J. Wyrobek CSF Biomarkers for Neurological Risks



### 5:00-6:00PM: SESSION 1 (Mountain-Lake Room)

5:00-5:20: **Opening Remarks** 

5:20-5:40: John Widloski, Foster Lab

5:40-6:00: Will Liberti, Carmena Lab

6:00-7:00PM: Dinner (Granhall)

## 7:00-9:30 PM: SESSION 2 (Mountain-Lake Room)

7:00-7:50: Eric Betzig

7:50-8:40: Edvard Moser, Norwegian University of Science and Technology

8:40-9:30: Open conversation with Edvard Moser and students

10:00PM-1:30AM: Social (Ski Hut)

## SATURDAY, September 21st

# 7:30–9:00AM: Breakfast (Granhall) Corey Goodman available to speak with students

## 9:00AM-11:00AM: SESSION 3 (Mountain-Lake Room)

9:00-9:20: Storm Slivkoff, Gallant Lab

9:20-9:50: Helen Bateup

9:50-11:00: Third Year Data Slam

## 11:00-11:10AM: Coffee Break

## 11:10-12:00PM: SESSION 4 (Mountain-Lake Room)

- 11:10-11:40: Marla Feller
- 11:40-12:00: Prashant Donthamsetti, Isacoff Lab

## 12:00-1:00PM: Lunch (Granhall)

## 1:00-2:50PM: SESSION 5 (Mountain-Lake Room)

1:00-1:30: Steve Piantadosi

1:30-1:50: Katarina Slama, Knight Lab



- 1:50–2:20: Richard Kramer
- 2:20-2:40: Justin Theiss, Silver Lab
- 2:40-3:10: Chunlei Liu
- 3:10-6:00PM: Free Time
- 5:00-6:00PM: Faculty and Postdoc Social (Alumni Room)
- 6:00-7:00PM: Dinner (Granhall)
- 7:00-8:00PM: Posters (Award in Bay Room)
- 8:00PM-1:30AM: Talent Show and Social (Ski Hut)

## SUNDAY, September 22nd

7:30-10:00AM: Breakfast (Granhall)

**CHECKOUT BEFORE 11:00AM** 

