2014 UC BERKELEY NEUROSCIENCE ANNUAL CONFERENCE
PAJARO DUNES RESORT
SEPTEMBER 12 – 14, 2014

FRIDAY, SEPTEMBER 12

10:30 AM: Bus from UCB to Pajaro Dunes (for those who signed up)

1:00 – 1:30 PM: Arrival

2:00 - 6:00 PM: 1st Session in Cypress House

2:00 – 2:35 – **Diana Bautista**
"Molecular mechanisms underlying chronic itch"

2:35 – 3:00 – **Ian Greenhouse** (Ivry lab)
"Cortical GABA concentrations and motor dynamics during response preparation"

3:00 – 3:25 – **Guy Isley** (Sommer lab)
"Training spontaneous activity in recurrent neural nets"

3:25 – 3:50 – **Andrew Halley** (Deacon lab)
"Evolutionary changes in temporal schedules of embryonic neural development across mammalian species"

3:50 – 4:20 Coffee Break and registration

4:20 – 4:45 – **Claire Oldfield** (Isacoff lab)
"Practice makes perfect - a novel learning assay in larval zebrafish"

4:45 – 5:10 – **Elise Piazza** (Silver lab)
"Rapid multisensory learning influences perceptual selection during binocular rivalry"

5:10 – 5:35 – **Mike Schachter** (Theunissen lab)
"Fishing in a sea of LFPs and spikes"

5:35 – 6:10 – **Stephan Lammel**
"Multiple types and functions of midbrain dopamine neurons"

6:30 - 7:30 PM: Dinner in Lagoon House

7:45 - 10:00 PM: 2nd session in Cypress House

7:45 – 8:15 **Ehud Isacoff**, Director welcome

8:15 – 10:00 **3rd year students data slam** (19 students)

10:00 PM – 12:00 AM: Social at Lagoon House

SATURDAY, SEPTEMBER 13

7:30-8:45 AM: Breakfast in Lagoon House

9:00 AM to 1:00 PM: 3rd Session in Cypress House

9:00 – 9:25 – **Ignacio Saez** (Hsu lab)

"Pharmacological enhancement of dopamine tone promotes human egalitarian behavior"

9:25 – 9:50 – **Ryan Morrie** (Feller lab)

"Wiring Up a Direction Selective Circuit"

9:50 – 10:25 – **John Flannery**

"Engineering viral vectors for gene-based therapy"

10:25 – 10:40 AM Coffee Break

10:40 – 11:05 – **Franz Weber** (Yang Dan lab)

"A brain stem circuit regulating rapid eye movement (REM) sleep"

11:05 – 11:30 – **Doby Rahnev** (D'Esposito lab)

"The role of PFC in perception"

11:30 – 12:20 – Key Note - **Jack Gallant**

"Functional MRI doesn't have to suck"

12:30 – 1:30 PM: Lunch in Lagoon House

1:45 – 3:45 PM: Volleyball on the beach, poster set up in Lagoon House, and/or free time

4:00 – 6:00 PM: Poster Session in Terrace Room (next to Lagoon House) and Lawn

Adesnik Lab

Alan Mardinly

"Optically probing the neural basis of perception"

Elena Ryapolova-Webb

"Sensory signal transformation between barrel cortex and VPM nucleus of the thalamus"

Bateup Lab

Katie Benthall

"Investigating striatal E/I balance in Tsc1 KO mice"

Andrew Ward

"Investigating loss of inhibition in a mouse model of tuberous sclerosis"

Bautista Lab

Carolyn Walsh

"Molecular mechanisms underlying chronic itch"

Brooks Lab

George Brooks

"Direct and Indirect Brain Fueling via the Lactate Shuffle Following Severe Trauma"

Bunge Lab

Maria Eckstein

"Pupillometry reveals cognitive processes underlying a higher-order reasoning task"

Carmena Lab

Ryan Neely

"Brain-machine interface control in primary visual cortex"

Dan Lab

Siyu Zhang

"Long-range and local circuits for top-down modulation of visual cortical processing"

D'Esposito Lab

Courtney Gallen

"Task-based reorganization of brain networks in healthy aging"

DeWeese Lab

Melissa Newton

"Exploring the role of A1 in auditory behavior"

Feldman Lab

Brian Isett

"Whisker-mediated grating detection in a virtual foraging task"

Feller Lab

Juliana Rosa

"Developmental changes in the s-cone pathway underlying direction-selectivity in the retina"

Anna Vlasits

"Inputs and outputs are segregated in the starburst amacrine cell dendrite in the retina"

Hsu Lab

Joshua Moller-Mara

"Computation in social learning with information cascades"

Isacoff Lab

Alden Conner

"Neural-glial interaction in the zebrafish spinal cord"

Ben Gaub

"Using rhodopsin as intrinsic optogenetic actuator for vision restoration in blind mice"

Kaufer Lab

Kimberly Long

"Investigating the effects of maternal care on the response to acute stress and neurogenesis in adulthood"

Knight Lab

Chris Hodgraf

"Evidence for predictive coding in human auditory cortex"

Sara Slama

"Signal-to-noise ratio affects go response rates in complex auditory go/no-go Task for Rodents"

Kriegsfeld Lab

Benjamin Smarr

"Lasting Effects of Early Life Circadian Disruption"

Miller Lab

Alisha Contractor

"Brought to you by Water: Increasing Solubility of Functionalized Probes"

Parker Deal

"Development of "Light-Writable" Calcium Dosimeters for in Neuronal Activity Mapping"

Vincent Grenier

"Progress Towards a Photoactivatable Small Molecule Voltage Indicator"

Rishikesh Kulkarni

"Next Generation Voltage Sensors for Neural Imaging"

Neuroscience First Year Students

Ignas Cerniaukas

"Optogenetic Dissection of Entorhinal-Hippocampal Space Circuit"

Charles Frye

"Spontaneous Activity Converges On Sparse, Global Patterns During The Development of Sensory Cortex"

Ben Shababo

"Bayesian Inference and Online Experimental Design For Mapping Neural Microcircuits"

Olshausen Lab

Urs Koster

"Laminar Structure of Oscillatory Activity in Cat Visual Cortex"

Dylan Paiton

"Visual Sensitivity Modulation During Fixational Eye Movements"

Karl Zipser

"Figure-ground and Early Visual Cortical Areas"

Olshausen/Theunissen Labs

Tyler Lee

"Noise Reduction Using Artificial Auditory Neurons"

Scott Lab

Nick Jourjine

"Internal Osmosensors in Drosophila"

Sommer Lab

Chris Warner

"Modeling Retinal Network Computations via Coupled Oscillator Systems""

Wallis Lab

Feng-Kuei Chiang

"Prefrontal Mechanisms of Hierarchical Reinforcement Learning"

Whitney Lab

Alina Liberman

"Serial Dependence of Position Perception"

Wilbrecht Lab

Wan Chen Lin

"Early Life Food Insecurity Decreases Flexibility in Multiple Choice Reversal Learning in Adulthood"

6:00 – 7:15 PM: Dinner in Lagoon House

7:30 PM – 12:00 AM Social and talent show at Lagoon House

SUNDAY, SEPTEMBER 14

8:00-10:00 AM: Breakfast in Lagoon House

10:00 AM: Bus back to UC Berkeley campus (for those who signed up)

Before 11 AM – Check out