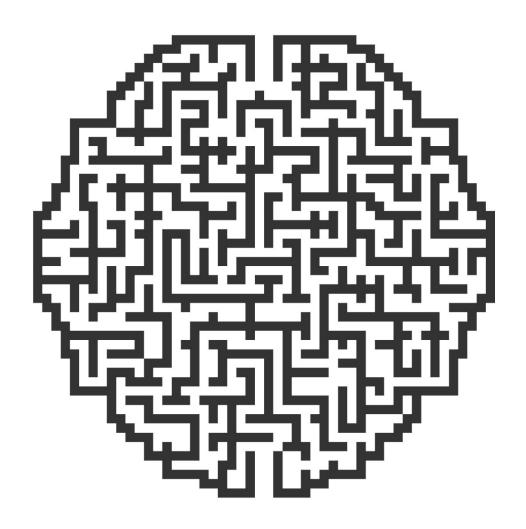
Duke Neurobiology



Graduate Program Annual Retreat

Sept 28 – 30, 2016

Wrightsville Beach, NC

Holiday Inn Resort

1706 N Lumina Ave, Wrightsville Beach, NC 28480

Wednesday, September 28

11:30am – 1:00pm	Hotel Arrival	
1:00 – 1:30 pm	Meet & Greet & Check-in	Hallway outside ballroom
1:30 – 3:20pm	Introduction – Steve Lisberger Talks (Session I)	Moderator: Jorg Grandl
1:40 – 2:00pm	Katie Tschida, Postdoc Mooney and Wang Labs	Neural circuits for the production of mouse love songs
2:10 – 2:30pm	Tim Darlington, Student Lisberger Lab	Fast-adapting Bayesian prior for visual motion speed in the smooth pursuit eye movement system
2:40 – 3:05pm	Rebecca Yang, Faculty Neurobiology	Neural system for reward-driven learning in Drosophila melanogaster
3:15 – 3:30pm	Break	
3:30 – 4:30 pm	Round table/activity	
4:40 – 5:40 pm	Keynote Speaker: Dr. Michael Greenberg, PhD Harvard Medical School	Introduction: Anne West Signaling networks that regulate synapse development and cognitive function
5:45 – 7:15 pm	Poster Session + Happy Hour	See attached list of presenters
Evening	Dinner on your own	

Thursday, September 29

8:45 – 9:30 am	Breakfast Buffet	
9:30 – Noon	Talks (Session II)	Moderator: Anne West
9:30 – 9:50 am	Khadar Abdi, Postdoc Kuo Lab	Uncovering pathways controlling ependymal stability: Implications for brain pathology
10:00 – 10:20 am	Erin Hisey, Student Mooney Lab	A midbrain-basal ganglia circuit is critical to externally and internally reinforced vocal learning
10:20 – 10:30	Break	

10:30 – 10:55 am	Scott Soderling, Faculty Cell Biology	Capturing the proteome of the elusive inhibitory synapse
11:05 – 11:25 am	Jeff Stogsdill, Student Eroglu Lab	A novel role for neuroligin-neurexin adhesions as mediators of astrocyte-synapse interactions
11:35 – 11:55 am	Ashley Wilson, Student Glickfeld Lab	Specific modulation of V1 neurons by goal-directed attention
12:00 – 2:30 pm	Lunch / Break	Volleyball/ free time
2:40 – 4:35 pm	Talks (Session III)	Moderator: Lindsey Glickfeld
2:40 – 3:00 pm	Jonathan Viventi, Faculty Biomedical Engineering	Multiplexed Micro-Electrocorticographic Electrode Arrays
3:10 – 3:30 pm	Min Fu, Postdoc Wang Lab	The learning stabilized Fos+ neuronal ensemble encodes the specific memory trace in motor cortex
3:40 – 4:00 pm	Dianna Amasino, Student Huettel Lab	Individual differences in eyetracking during intertemporal choice
4:10 – 4:35 pm	Nicole Calakos, Faculty Neurology	Detours and Unexpected Intersections: The path to discovering a common pathway mechanism for dystonia
4:45 – 5:00 pm	Break	
5:00 – 6:45 pm	Poster Session + Happy Hour	
7:00 – 9:00 pm	Banquet Dinner Awards Ceremony	Awards and Student & Faculty Skits
9pm – midnight	DJ Brian Hood	Main ballroom

Friday, October 2

No events planned Hotel checkout by 11am

Poster Presentations – Wednesday, September 28, 2016

Name	Lab	Poster Title
Carina Block, Graduate Student	Eroglu Lab	Maternal Immune Activation, Impacts on Microglia-Synapse Interactions and Autism-like Behavior in Mice
Zachary Caffall, Lab Research Analyst II	Calakos Lab	HIV Protease Inhibitors Rescue DYT1 Pathology Through the Integrated Stress Response
Valeria Caruso, Postdoc	Groh Lab	Evolution of a reference frame along a brain pathway: persistently hybrid coordinates of auditory signals in Frontal Eye Fields implicate the Superior Colliculus in computing eye-centered sound location
Hsueh-Ling Chen, Graduate Student	Rebecca Yang Lab	Drosophila use sweet-sensing Gr5a neurons to discriminate and to promote opposing behavioral responses toward acetic acid and sucrose
Liang-Fu Chen, Graduate Student	West Lab	Single cell analysis of neuronal activity-dependent gene transcription reveals role for chromatin regulation at distal enhancers in transcriptional inducibility
Tim Darlington, Graduate Student	Lisberger Lab	Representation of Bayesian priors for target speed in the preparatory activity of neurons in the smooth eye movement region of the frontal eye fields
Taylor Fore, Graduate Student	Hull Lab	Cholinergic Regulation of Sensory Integration in the Cerebellar Cortex
David Gallegos, Graduate Student	West Lab	Activity-Dependent Transcriptional Enhancers of Npas4
Bin Gou, Senior Research Associate	Rebecca Yang Lab	Dopamine neurons control egg-laying behavior by modulating two mushroom body output neurons
Charles Hall, Graduate Student	McNamara Lab	Sustained TrkB activation is required for maintenance of sLTP
Jake Heffley, Graduate Student	Hull Lab	Cerebellar complex spikes differentially encode trial outcome in a voluntary forelimb task
Erin Hisey, Graduate Student	Mooney Lab	A midbrain-basal ganglia circuit is critical to externally and internally reinforced vocal learning
Li-Feng Jiang-Xie, Graduate Student	Wang Lab	Reactivation of the Neuronal Ensemble Orchestrating Anesthetic-Induced Unconsciousness
Miaomiao Jin, Graduate Student	Glickfeld Lab	Characterizing Adaptation along the Visual Hierarchy in the Mouse
Kamesh Krishnamurthy, Graduate Student	McNamara Lab	Selective Behavioral Effects of TrkB-PLCγ1 Uncoupling in Epileptogenesis versus Fear Conditioning
Amanda Lewis, Postdoc	Grandl Lab	Transduction of repetitive mechanical stimuli by Piezo ion channels
Jeff Mohl, Graduate Student	Groh Lab	A novel behavioral paradigm for studying multi-sensory cue integration and segregation in non-human primates.
Justin O'Hare, Graduate Student	Calakos Lab	Striatal Microcircuit Mechanisms for Habit
Vincent Prevosto, Associate in Research	Wang lab	Tactile information processing in the principal trigeminal nucleus during behavior.
Cameron Prigge, Postdoc	Kay Lab	Molecular mechanisms for spatial segregation of a developing retinal circuit

Joseph Rittiner, Postdoc	Calakos Lab	A Common Role for Deficient eIF2a Signaling in Inherited and Sporadic Dystonia
Kiersten Ruda, Graduate Student	Field Lab	Sensory encoding in the retina during light adaptation
David Schneider, Postdoc	Mooney Lab	Neural circuit mechanisms for recognizing and predicting self-generated sounds
Melina Smith, Associate in Research	Sommer Lab	The dose response relationship between single pulse TMS intensity and neuronal activity in cerebral cortex of alert macaques
Martine Tremblay, Graduate Student	Jiang Lab	Tet1 mediated transcriptional regulation of the oxytocin receptor in the mouse brain
Akiyoshi Uezu, Senior Research Associate	Soderling Lab	Unraveling the Molecular Mechanisms of Inhibitory Synaptic Function in vivo
Shawn Willett, Graduate Student	Groh Lab	Interactions of simultaneous sound representations in the primate inferior colliculus
Yang Zhang, Postdoc	Huanghe Yang Lab	A calcium-activated chloride channel in the inferior olivary nucleus controls motor learning

Poster Presentations – Thursday, September 29, 2016

Name	Lab	Poster Title
Katie Baldwin, Postdoc	Eroglu Lab	A Candidate Screen to Identify Novel Regulators of Astrocyte Development and Astrocyte-Synapse Interaction
Mor Ben-Tov, Postdoc	Mooney Lab	Representation of self-vocalization and auditory memories in the song sparrow's HVC
Matt Biegler, Graduate Student	Jarvis Lab	Clarification of an HDAC complex protein in the zebra finch song system
Caley Burrus, Graduate Student	Eroglu Lab	Wildtype huntington protein is necessary for proper synapse formation and neuronal survival in the striatum
David Carlson, Postdoc	Dzirasa Lab	Reliability and Scalability of Spike Sorting for Dense Multi-Electrode Arrays
Chia-Hui Chen, Graduate Student	Yan Lab	A Slit-independent Robo mechanism of neural and epithelial development in <i>Caenorhabditis elegans</i>
Shataakshi Dube, Graduate Student	Soderling Lab	Proteomic and functional analysis of presynaptic actin remodeling during synaptic transmission and plasticity
Min Fu, Postdoc	Wang lab	The learning stabilized Fos+ neuronal ensemble encodes the specific memory trace in motor cortex
Yudong Gao, Postdoc	Soderling Lab	Investigating the Dynamic Regulation and Plasticity of Inhibitory Synapses using Proteomics and Imaging Approaches
Gregory Gedman, Graduate Student	Jarvis Lab	A comprehensive profiling of differential gene expression specializations in the song system of a vocal learning songbird, Taeniopygia guttata.
Ricardo Hernández-Martínez, Postdoc	Calakos Lab	Novel role for the eIF2alpha translational control pathway in corticostriatal synaptic plasticity: expected and unexpected mechanisms
Breanna Kalmeta, Graduate Student	Grandl Lab	Title Unavailable
Namita Kansal, Undergraduate Student	Calakos Lab	Proteomic Analysis of TorsinA-associated Proteins and Modulation by ER Stress and Dystonia-causing mutation

Raveena Kothare, Graduate Student	Sommer Lab	The dose response relationship between single pulse TMS intensity and neuronal activity in cerebral cortex of alert macaques
Chris Kozlowski, Graduate Student	Kay Lab	Elucidating the Downstream Signaling Molecules involved in Megf10- Mediated Homotypic Repulsion
Son C. Le, Graduate Student	Huanghe Yang Lab	Modulation of the Ca2+-activated chloride channel TMEM16A by phosphatidylinositol 4,5-bisphosphate (PIP2)
Steven Marinero, Graduate Student	Lo Lab	3D brain tissue-based model for probing contributions of microglia and peripheral macrophages in driving neurodegenerative disease mechanisms
Aaron Mitchell-Dick, Graduate Student	Silver Lab	Effects of mitosis length on cell fate decisions during cortical development
Shiva Nagappan, Graduate Student	Franks Lab	Probing odor ensembles in piriform cortex
Vanessa Punal, Graduate Student	Kay Lab	Mechanisms of Astrocyte Spatial Patterning
Thomas Ray, Postdoc	Kay Lab	An experimental and bioinformatics pipeline for characterizing isoform diversity and spatial expression in the r etina
Erica Rodriguez, Graduate Student	Wang lab	Dissecting the lateral Parabrachial affective pain circuits reveals recurrent loops and monosynaptic trigeminal ganglion inputs
Jonnathan Singh-Alvarado	Mooney Lab	Imaging neural representations of song in the basal ganglia
Jeff Stogsdill, Graduate Student	Eroglu Lab	Astrocytic neuroligins control astrocyte development and synapse association
Divya Subramanian, Graduate Student	Lisberger Lab	Graded learning in cerebellar-dependent smooth pursuit adaptation
Janani Sundararajan, Graduate Student	Mooney lab	Mechanisms of movement-related changes in auditory thresholds
Mai-Anh Vu, Graduate Student	Dzirasa Lab & Adcock Lab	A corticolimbicmesoscale network adapts in response to challenging experiences
Jingjing Wang, Graduate Student	Kay Lab	Anatomy and spatial organization of Müller glia in mouse retina
Xiaoyang Yao, Graduate Student	Field Lab	Light adaptation changes the functional properties of direction selective retinal ganglion cells

List of Attendees

Khadar Abdi Mariah Hazlett Dianna Amasino Jake Heffley Katie Baldwin Ricardo Hernandez-Martinez Jeff Beck Erin Hisev Stuart Behling Thuy Hua Mor Ben-Tov Mary Hughes Matt Biegler Court Hull Carina Block Yong-hui Jiang Tyler Bradshaw Li-Feng Jiang-Xie Mary Rose Branch Miaomia Jin Federica Brecha Joshua Jones Macopson Sam Brudner Breanna Kalmeta Caley Burrus Namita Kansal Zachary Caffall Raveena Kothare Nicole Calakos Chris Kozlowski Lindsey Cantin Kamesh Krishnamurthy David Carlson Chay Kuo Valeria Caruso Oluwadamilola Lawal Urann Chan Son Le Chia-Hui Chen Amanda Lewis Hsueh-Ling Chen Steve Lisberger Liang-Fu Chen Ying Liu Joseph Corless Donald Lo Rui Dai Dongye Lu Tim Darlington Steven Marinero Bryson Deanhardt Hiro Matsunami Andrew Mattson Shataakshi Dube Kafui Dzirasa James McNamara Cagla Eroglu Valerie Michael Greg Field Aaron Mitchell-Dick Elizabeth Fleming Jeff Mohl Taylor Fore Shiva Nagappan Justin O'Hare Megan Fowler Kevin Franks Caitlin Paisley Min Fu Zhe Pei Neil Gallagher Vincent Prevosto David Gallegos Cameron Prigge Yudong Gao Vanessa Punal Gregory Gedman Thomas Ray Caitlin Gilbert Joseph Rittiner Lindsey Glickfeld Erica Rodriguez Bin Gou Suva Roy Jorg Grandl Kiersten Ruda Henry Greenside David Schneider Charles Hall Miranda Shipman Nathan Hall Debby Silver

Jonnathan Singh Alvarado Melina Smith Scott Soderling Marc Sommer Jeff Stogsdill Divya Subramanian Janani Sundararajan Christabel Tan Masashi Tanaka Jane Tandler Nathan Taylor Gwenaelle Thomas Martine Tremblay Katherin Tschida Akiyoshi Uezu Aashutosh Vihani Jonathan Viventi Mai-Anh Vu Fan Wang Jingjing Wang Anne West Teleza Westbrook William Wetsel Shawn Willett Ashley Wilson Dong Yan Haidun Yan Huanghe Yang Rebecca Yang Xiaoyang Yao Michael Young Yang Zhang