

POSTER PROGRAM
2015 Neuroscience Retreat

| Poster # | Authors (Presenter in bold italics) | Poster Title |
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| 1 | <i>Beau Ances</i> | About the Ances Neuroimaging Lab |
| 2 | <i>David L. Brody</i> , Hao Jiang, and Thomas J. Esparza | Progress toward purification of amyloid-beta oligomers from human Alzheimer's disease brain lysates |
| 3 | <i>Brent S. Bruck</i> , Ananth K. Vellimana, James W. Nelson, Haixia Zhang, Henry Han, Colin G. Nichols, and Gregory J. Zipfel | Vascular Kir6.1 GOF mutations attenuate vasospasm and neurological deficits following subarachnoid hemorrhage |
| 4 | <i>Cody A. Bursleson</i> , Hong-Jin Shu, and Steven Mennerick | Inhibitory co-transmission in glutamatergic primary hippocampal neurons |
| 5 | <i>Caitlin E. Carey</i> , Arpana Agrawal, Bo Zhang, Emily D. Conley, Louisa Degenhardt, Andrew C. Heath, Daofeng Li, Michael T. Lynskey, Nicholas G. Martin, Grant W. Montgomery, Ting Wang, Laura J. Bierut, Ahmad R. Hariri, Elliot C. Nelson, and Ryan Bogdan | Monoacylglycerol lipase polymorphism rs604300 interacts with childhood adversity to predict cannabis dependence symptoms and amygdala habituation: Evidence from an endocannabinoid system analysis |
| 6 | <i>Vania P. Carmona-Alcocer</i> , Anne T.C. Sun, John H. Abel, Carrie L. Simms, and Erik D. Herzog | Ontogeny of circadian rhythms in the suprachiasmatic nucleus |
| 7 | <i>Kendra M. Cherry-Allen</i> , Jeff M. Gidday, Jin-Moo Lee, Tamara Hershey, and Catherine E. Lang | Two doses of remote limb ischemic conditioning augment learning in healthy adults |
| 8 | <i>Katherine Conen</i> and Camillo Padoa-Schioppa | Economic choice and neuronal variability in orbitofrontal cortex |
| 9 | <i>Leah Czerniewski</i> , Scott Crick, and Jin-Moo Lee | Tracking <i>de novo</i> A β generation in live cells using fluorogenic click chemistry |
| 10 | <i>Dhruva Dhavale</i> , Christina Tsai, Devika Bagchi, Laura Engel, Jon Sarezyk, and Paul Kotzbauer | Structural requirements of alpha-synuclein fibril formation |
| 11 | <i>Andrew Fishell</i> , Adam Eggebrecht, Karla Bergonzi, Steven Petersen, and Joseph Culver | Developmental neuroimaging using high-density diffuse optical tomography |
| 12 | <i>Alexis Hill</i> , Poorva Jain, and Yehuda Ben-Shahar | A <i>Drosophila</i> model for the role of neuronal KCNH2 in spike-frequency adaptation and seizure susceptibility |
| 13 | <i>Vynn V. Huh</i> and Kurt A. Thoroughman | The role of action observation in motor memory formation and retention across multiple days |
| 14 | <i>Christina Ising</i> , G. Gallardo, Cheryl Leyns, H. Jiang, and David Holtzman | Anti-tau scFvs – a new tool to treat Alzheimer's disease? |
| 15 | <i>Nalin Katta</i> , <i>Mathew O'Neill</i> , Drew Sinha, and Baranidharan Raman | Spontaneous firing of sensory neurons modulates the gain in the downstream circuit of a simple olfactory system |
| 16 | <i>Sungsu Kim</i> , Amy Strickland, Jason Maynard, A.L. Burlingame, and Jeffrey Milbrandt | Schwann cell O-GlcNAcylation is required for myelin maintenance and axon survival |

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| 17 | Andrew W. Kraft , Adam Q. Bauer, Karen P. Smith, Joseph P. Culver, and Jin-Moo Lee | Sensory deprivation following cortical focal ischemia facilitates remapping and accelerates behavioral recovery |
| 18 | Terrance Kummer | MRI analysis of axonal injury after subarachnoid hemorrhage in animal models and patients |
| 19 | Brian V. Lananna , David D. Xiong, Mariko Izumo, Alexander Cammack, Joseph S. Takahashi, Erik H. Herzog, and Erik S. Musiek | The astrocyte circadian clock regulates neuroinflammation and neuronal injury |
| 20 | Mariah Lawler , Erica Koval, Ted Hyman, David O'Brien, Chengran Yang, Amy Wegener, Tao Shen, Greg Wu, Joseph Dougherty, and Tim Miller | Defining motor neuron-enriched miRNAs: Implications for motor neuron disease |
| 21 | Cheryl Leyns , Gilbert Gallardo, Christina Ising, Hong Jiang, and David Holtzman | Investigating the role of Fc receptors for Anti-Tau Antibodies |
| 22 | Xitong Liang , Timothy E. Holy, and Paul H. Taghert | Neuropeptide signaling helps synchronous <i>Drosophila</i> circadian pacemakers produce staggered patterns of Ca ²⁺ activity rhythms in vivo. |
| 23 | Tsen-Hsuan Lin , Chia-Wen Chiang, Carlos J Perez-Torres, Yong Wang, Peng Sun, Kathryn Trinkaus, Robert E. Schmidt, Anne H Cross, and Sheng-Kwei Song | The feasibility to quantify and monitor axonal disability and pathology at the onset of optic neuritis using diffusion basis spectrum imaging |
| 24 | Dario Maschi and Vitaly A. Klyachko | Spatial control of synaptic vesicle fusion at nanometer resolution |
| 25 | Ross McKinney and Yehuda Ben-Shahar | Bilateral chemosensory inputs are required for determining the axial orientation of mating partners in <i>D. melanogaster</i> |
| 26 | Marie E. McNeely , Kristen P. Pickett, Ryan P. Duncan, Tamara Hershey, and Gammon M. Earhart | Longitudinal changes in gait in people with Wolfram syndrome |
| 27 | Peter Millar and David Balota | Wakeful rest benefits memory for materials that are incidentally encoded |
| 28 | Liang Sun, Anuj Sharma, Jason Schultz, Nilantha Bandara, Buck Rogers, and Liviu M. Mirica | Development of new theranostic tools for Alzheimer's disease |
| 29 | D.P. Mohapatra , Andrew J. Shepherd, Lipin Loo, and Aaron Mickle | Neurobiological mechanisms underlying pain associated with bone-metastasized prostate cancer |
| 30 | Eric Mooshagian and Lawrence H. Snyder | Neuronal activity in the lateral intraparietal area codes which arm moves, not saccade direction, in a bimanual coordination task |
| 31 | Peter Myers , Gammon Earhart, Marie McNeely, and Meghan Campbell | Beyond the basal ganglia: cerebellar volumetrics in Parkinson disease |
| 32 | Sam Nemanich and Gammon Earhart | Effects of freezing of gait and task switching on saccadic eye movements in Parkinson's disease |
| 33 | Ruiye Ni , David Bender, Jeffery Gamble, and Dennis Barbour | Single and population neural discrimination of vocalizations in noise |

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| 34 | <i>Tirth Patel</i> , Zander Galluppi, and David Holtzman | Development of high-sensitivity assays to detect tau and amyloid beta on the Simoa HD-1 platform |
| 35 | <i>Benjamin A. Philip</i> , Ken F. Valyear, and Scott H. Frey | Interhemispheric reorganization in sensory cortex following unilateral upper extremity amputation in humans |
| 36 | <i>Melanie Y. Pullen</i> , Sung Il Park, Daniel S. Brenner, Bryan Copits, Vijay Samineni, Steve Davidson, Clinton D. Morgan, Judith P. Golden, Jose G. Grajales-Reyes, John Rogers, and Robert W. Gereau IV | Bidirectional optogenetic control of peripheral pain transmission with fully wireless implantable microLEDs |
| 37 | <i>Debajit Saha</i> and Baranidharan Raman | Switching between orthogonal neural activities mediates sensing and unsensing of a sensory stimulus |
| 38 | <i>Kristina Sakers</i> and Joseph Dougherty | Local translation in astrocyte processes |
| 39 | <i>Taylor D. Sheahan</i> , John M. Webb, Robert W. Gereau IV, and Judith P. Golden | Non-reflexive measures of persistent pain in mice |
| 40 | <i>Andrew Shepherd</i> and D.P. Mohapatra | Peripheral Angiotensin II causes mechanical, but not thermal cutaneous hypersensitivity |
| 41 | <i>Molly Stanley</i> , Shannon L. Macauley, Emily E. Ceasar, Grace Robinson, David M. Holtzman. | Hyperinsulinemia modulates extracellular amyloid-beta in vivo |
| 42 | <i>Min-Yu Sun</i> , Yukitoshi Izumi, Ann Benz, Charles F. Zorumski, and Steven J. Mennerick | Endogenous 24S-hydroxycholesterol modulates NMDAR-mediated function in hippocampal slices |
| 43 | <i>Matt Tso</i> and Erik Herzog | The astrocyte clock within the SCN |
| 44 | <i>Manouela V. Valtcheva</i> , Bryan A. Copits, Steve Davidson, Taylor D. Sheahan, Melanie Y. Pullen, and Robert W. Gereau IV | Human sensory neurons: a novel strategy for translational approaches to itch and pain |
| 45 | <i>Matheus B. Victor</i> , Michelle Richner, and Andrew S. Yoo | Modeling Huntington's disease with striatal neurons directly converted from patient fibroblasts |
| 46 | <i>Frans Vinberg</i> , Tian Wang, Alicia DeMaria, Jeannie Chen, and Vladimir Kefalov | The Na/Ca, K exchanger 4 and 2 govern the high temporal resolution of mammalian cone phototransduction and vision |
| 47 | <i>Dana Watt</i> and Valeria Cavalli | The role of Ran in axon growth |