

NEUROSCIENCE, BEHAVIOR AND HEALTH RESEARCH FORUM

POSTER SESSION

- Poster #1 **Sensorimotor Behavioral Testing in a Mouse Model of Subarachnoid Hemorrhage**
Evelyn A. Bulkeley, Masayo Koide, George C. Wellman
- Poster #2 **The effects of voluntary exercise or methylphenidate on learning a set-shift task during development**
Meghan C. Eddy, Katherine J. Stansfield, & John T. Green
- Poster #3 **Cerebellar Secretin Modulates Acquisition and Extinction of Eyeblink Conditioning**
Jason R. Fuchs, Gain M. Robinson¹, Anthony D. Morielli, John T. Green
- Poster #4 **Infusion of pituitary adenylate cyclase-activating polypeptide (PACAP) into the bed nucleus of the stria terminalis (BNST) produces a stress response in female rats**
Gick, N., Edwards, S., Choi, I., Roelke, E., Lezak, K.R., Toufexis, D., Braas, K.M., May, V., Hammack, S.E.
- Poster #5 **Effects of Chronic vs Cycling estrogen treatment on acquisition, retention and expression of spatial memory**
Olga Lipatova & Donna Toufexis
- Poster #6 **Effects of Acute Nicotine Administration on Emotional Impulsivity**
Geoffrey J. Schaubhut, Janina K. Bowen, Emily C. Mazzulla, Sarahjane L. Dube, Alexandra S. Potter
- Poster #7 **Differential Effects of Nicotine and Ritalin on Working Memory in ADHD**
Eli Sepkowitz, Geoffrey Schaubhut, Sarahjane Dube and Alexandra Potter
- Poster #8 **Contextual control of instrumental actions vs. habits**
Eric A. Thrailkill & Mark E. Bouton
- Poster #9 **Data-driven dynamic mapping of the brain**
Nicholas A. Allgaier, Hugh Garavan, Josh C. Bongard, and Christopher M. Danforth
- Poster #10 **Applying Artificial Neural Networks to fMRI Data**
Aaron Morton, Hugh Garavan, Robert Snapp
- Poster #11 **MRI T2 Measurements Post Febrile Status Epilepticus Predict Performance On An Active Avoidance Task**
J.M. Barry, M. Choy, C. Dube, P.P. Lenk-Santini, R.C. Scott, T.Z. Baram, G.L. Holmes

- Poster #12 **Can establishing a regular meditation practice reduce college students' physiological responses to stressful testing situations and impact their social cognition**
Kahn, H., Raghunath, R., Calhoun, C., Lesenskyj, A., Weinert-Stein, M., Cronise, K., & Sellers, J.
- Poster #13 **AZD3480, a Novel Nicotinic Receptor Agonist, for the Treatment of Attention-Deficit/Hyperactivity Disorder in Adults**
Alexandra S. Potter, Geoffrey Dunbar, Emily Mazzulla, David Hosford, Paul A. Newhouse
- Poster #14 **Getting rid of resurgence: Implications for contingency management treatments**
Sydney Trask, Scott T. Schepers, & Mark E. Bouton
- Poster #15 **The Role of Human Histidyl-tRNA Synthetase Mutations in Human Diseases, Type IIIB Usher Syndrome and Peripheral Neuropathy**
Jamie Abbott, Bin Deng, Ying Wai Lam, Christopher Francklyn, and Susan Robey-Bond
- Poster #16 **Identification of protein networks disrupted by a mutation in HARS**
Susan Robey-Bond, Julia Fields, Ying-Wai Lam and Christopher Francklyn
- Poster #17 **Molecular Characterization of Plexins: Signaling Mechanisms and Developmental Expression**
Rachael Bassett and Bryan Ballif
- Poster #18 **Endothelial and Smooth Muscle Derived Neuropilin Like Protein is Required for Proper Development of the Retina in *Danio rerio***
Ryan M. Joy, Bryan A. Ballif Ph.D., Alicia M. Ebert Ph.D.
- Poster #19 **A role for FGF8a in neurovasculature signaling in developing zebrafish**
Erin Wysolmerski, Kathyana Santiago-Mangual, Alicia Ebert
- Poster #20 **Functional role for transforming growth factor-beta (TGF- β) signaling following cyclophosphamide (CYP)-induced cystitis in female rats**
Eric J Gonzalez, Margaret A Vizzard
- Poster #21 **TRPV4 blockade reduces urinary bladder dysfunction by increasing bladder capacity and decreasing micturition frequency following RVS in male rats**
Liana Merrill & Margaret Vizzard
- Poster #22 **Increased voiding frequency is associated with oxidative stress and ATP production in cyclophosphamide (CYP)-induced cystitis in rats**
A. Peterson, S. Malley, B. Girard, M. Kosofsky, D. Lambert, M.A. Vizzard
- Poster #23 **Measuring Kv1.2 potassium ion channel trafficking in real time**
Amy Duncan-Smith and Anthony Morielli

- Poster #24 **PAC1 receptor internalization is required for activation of the MEK/ERK intracellular signaling cascade in HEK 293 cells stably expressing the PAC1 receptor**
Victor May, Thomas Buttolph, Beatrice A. Girard, Todd Clason, Laura A. Merriam and Rodney L. Parsons
- Poster #25 **Targeting the $\alpha 5$ nicotinic acetylcholine receptor (nAChR) subunit as a treatment for neuroblastoma**
Vanessa Ochoa, Loen Hansford, David Kaplan, and Rae Nishi
- Poster #26 **L-amino acid taste: Are multiple receptors involved?**
Shreoshi Pal Choudhuri, Rona J. Delay, and Eugene R. Delay
- Poster #27 **Increased asynchronous neurotransmitter release at parasympathetic major pelvic ganglion neurons in diabetic mice: Implication for altered Ca^{2+} homeostasis**
John D. Tompkins, Rodney L. Parsons
- Poster #28 **Fingolimod Promotes Primary Sensory Afferent Growth in Developing Chicken Embryo**
Michelle McNamara and Cynthia Forehand
- Poster #29 **A PLC γ 1-dependent, Force-sensitive Signaling Network in the Myogenic Constriction of Cerebral Arteries**
Albert L. Gonzales, Ying Yang, Michelle N. Sullivan, Lindsey Sanders, David C. Hill-Eubanks, Mark T. Nelson, and Scott Earley
- Poster #30 **Inhibition of nitric oxide synthase restores cerebral artery tone in a rodent model of traumatic brain injury**
Nuria Villalba, Tram L. Tran, Mark T. Nelson, George C. Wellman and Kalev Freeman
- Poster #31 **Subarachnoid hemorrhage suppresses KV1 and KV2 currents via different mechanisms in rat parenchymal arteriolar myocytes**
Koide M, O'Connor KP, Pappas AP, Syed AU and Wellman GC
- Poster #32 **ROS-dependent and -independent MMP activation leads to KV current suppression in cerebral artery myocytes after SAH**
Masayo Koide and George C. Wellman
- Poster #33 **Contribution of Rho Kinase to TRPM4-Mediated Myogenic Tone in Cerebral Parenchymal Arterioles**
Yao Li, Rachael L. Baylie, Matthew J. Tavares, Joseph E. Brayden
- Poster #34 **Impairment of Neurovascular Coupling by Chronic Stress**
Thomas Longden, Fabrice Dabertrand, Sayamwong E Hammack, Mark T Nelson
- Poster #35 **The increased amplitude of spontaneous Ca^{2+} events in astrocytic endfeet parallels the inversion of neurovascular coupling after subarachnoid hemorrhage**

Anthony C. Pappas, Masayo Koide, George C. Wellman

- Poster #36 **TRPV4 Ca²⁺ sparklets in myoendothelial projections (MEPs) regulate vascular function**
Swapnil K. Sonkusare, Adrian D. Bonev, Thomas Dalsgaard, Luis F. Santana, Michael I. Kotlikoff, Mark T. Nelson
- Poster #37 **Activation of ATP-Sensitive Potassium (KATP) Channels underlies vasodilation to PACAP, but not CGRP, in Pressurized Rat Middle Meningeal Artery**
Arsalan U. Syed, Masayo Koide, Victor May, George C. Wellman
- Poster #38 **A Decade of the Journal IMPULSE: Growth and Impact**
Mansky, B., Georgakas, J., Casler, A., Kreuzman, D., Spollen, K., Cronise, K., Jones LS
- Poster #39 **COBRE NEUROSCIENCE CELL AND MOLECULAR BIOLOGY CORE FACILITY**
Sheryl White, Cindy Forehand and Rodney Parsons
- Poster #40 **Pituitary Adenylate Cyclase Activating Polypeptide (PACAP) in the Amygdala: Origin and Coexpression**
May V, Missig G, Braas KM, Vizzard MA, Hammack SE
- Poster #41 **The Ubiquitin Ligase Trim32 as a Regulator of Potassium Channels in the Brain**
Gene Cilento and Anthony Morielli