

NEUROSCIENCE THESES

(Biology, Psychology, and Philosophy faculty advisors)

Rev. 5/31/19

Year	Student	Thesis Advisor	Thesis Title
2019	Bozorgi, Amanda M.	Crocker	Genetic underpinnings of behavioral response to repeated stress in <i>Drosophila melanogaster</i>
2019	Lessing, Lexie	Dash	Homeostatic Regulation of Sleep Intensity and Duration Across Local and Global Scales
2019	Taber, Kreager A.	Crocker	Octopaminergic Modulation of <i>Drosophila</i> Locomotor Patterns and Stress Response
2019	Tipps, John A.	Ernstrom	Expression pattern of a V-ATPase subunit required for chemical neurotransmission in <i>Caenorhabditis elegans</i>
2019	Vinton, Elizabeth A.	Crocker	Girls' Night out: Characterizing Sexually Dimorphic Learning Trends in <i>Drosophila melanogaster</i>
2018	Bingul, Deniz	Dash	Metabolic Consequences of Synaptic Plasticity
2018	Do, Jenny	Parker	Behavioral Characterization of Outbred Mice for d-Amphetamine Withdrawal: A GWAS Pilot Study
2018	Goldenberg, Joshua E.	Dash	Hippocampal-Striatal Theta Communication Predicts Strategy on an Ambiguous T-Maze Task
2018	Greenwald, Max	Ernstrom	Synaptic Vesicle Quantal Size Regulation by Reversible Dissociation of the V-ATPase
2018	Lentzou, Stergiani	Dash	Characterization of Gamma Oscillatory Activity during Acquisition of a dual-solution T-maze Task
2018	Masias, Erick	Parker	Genome-wide mapping of ethanol sensitivity in the Diversity Outbred mouse population

2018	McClusky, Kate	Ernstrom	Patch-clamp recording at nematode muscular junctions
2018	Vasitas, Marie	Crocker	The Effects of FoxP Expression on Pheromonal Communication in <i>Drosophila melanogaster</i>
2018	Wilson, Kathleen E.	Parker	Genome-wide mapping of conditioned fear in the Diversity Outbred mouse population
2017	Carroll, Caitlin M.	Dash (Psychology)	Reduced sleep propensity following pharmacological reductions in synaptic strength
2017	Glaser, Adam C.	Dash (Psychology)	The effects of LTP on cerebral glucose metabolism
2017	Goins, Emily C.	Spritzer (Biology)	Dose-dependent effects of testosterone replacement on spatial memory and BDNF level in male rats
2017	Jaeger, Eliza C.	Spritzer (Biology)	Effects of Testosterone Dose on Spatial Memory and Brain Protein Expression in Aged Male Rats.
2017	Kuzma, Alexandra E.	Collaer (Psychology)	Recreating the Rubber Hand Illusion in Virtual Reality: How Visuomotor Cues and Hand Resemblance Contribute to Feelings of Ownership and Agency
2017	Murata, Elle M.	Dash (Psychology)	Metabolic Consequences of Strengthening Synapses
2017	Pil, Bu-Guk G.	Crocker (Neuroscience)	Characterization of a novel mediator of nociception in adult <i>Drosophila melanogaster</i>
2016	Gogineni, Reshma	Besser (Philosophy)	The Morality of Neuroscientific Reductionism: Predicting Problem Populations?
2016	Miller, Erin E.	Spritzer (Biology)	Effect of Testosterone and Age on Spatial Memory and BDNF Levels in Male Rats
2016	Kreuzman, Andrew	Parker (Psychology)	Identifying genes associated with conditioned fear in the Diversity Outbred

			mouse population using a forward genetic, genome-wide approach
2016	Pil, Christina	Collaer (Psychology)	Emotion as a Moderating Factor in the Relationship between Stress and Moral Judgment
2016	Belser, Abigail	Dash (Psychology)	Metabolic responses to acute and chronic synaptic changes in the hippocampus
2016	Hunsaker, Todd	Kimble (Psychology)	Dissociation Preceding Negativity in Trauma Survivors: Evidence from Event-Related Potentials, A Preliminary Study
2015	Cullen, Brendan Haggerty	Cronise (Psychology)	Neurophysiological correlates of self-referential activity in meditators and non-meditators
2015	Gallagher, Evan	Collaer (Psychology)	What's Good, What's Bad, and What's Ugly? The Impact of Stress on our Perceptions of Morality
2015	Honican, Lauren	Spritzer (Biology)	Potential memory restorative effects of an ependymin mimetic in an aged, transgenic mouse model of Alzheimer's disease
2015	Larkin, Sydney	Root (Biology)	Polarization Contrast Vision and Predatory Behavior in <i>Octopus bimaculoides</i>
2015	Mansky, Benjamin Ethan	Parker (Psychology)	Variation in ethanol sensitivity in the Diversity Outbred mouse population: implications for genome-wide association mapping
2015	Pfeiffer, Rita Elizabeth	Kimble (Psychology)	Expressive Writing and Language Fluency: Implications for First-Year College Students
2015	Roy, Ethan	Spritzer (Biology)	The effects of dihydrotestosterone on stages of adult neurogenesis in male rats
2015	Schreger, Cade Gabriel	Kimble (Psychology)	The Long Road Home: Evaluating Perceptions of Combat Veterans – An IAT/EEG study

2015	Super, Chloe	Spritzer (Biology)	Effect of Testosterone and Age on Spatial Memory and BDNF in Male Rats
2015	Taylor, Walter Monroe	Parker (Psychology)	Measuring conditioned fear in the Diversity Outbred mouse population: Implications for identifying genes associated with PTSD in humans?
2014	Fowler, Rachel A.	Kimble (Psychology)	Post-Traumatic Stress Disorder (PTSD) and childhood trauma as predictors of a negative expectancy bias: An N400 study
2014	Rungratsameetaweemana, Nuttida	Arndt (Psychology)	The influence of internal and external arousal on memory
2014	Sobolewski, Sara M.	Kimble (Psychology)	Examining negative expectancy biases in PTSD using the N400 ERP response
2013	Batson, Chris	Spritzer (Biology)	Potential Roles of Testosterone and Luteinizing Hormone in Spatial Memory in Male Rats
2013	Harrold, George Kyle	Stefani (Psychology)	The effect of an $\alpha 2$ subunit selective GABAA receptor agonist on cognitive flexibility in a rat model of schizophrenia
2013	Reis, Amanda	Spritzer (Biology)	Effects of interactions with familiar v. unfamiliar juvenile cage mates on hippocampal neurogenesis in adult male rats.
2013	Sackett, Deirdre	Stefani (Psychology)	Effect of neurosteroid and operant response option on cognitive flexibility in a rat model of schizophrenia
2013	Wagner, Benjamin A.	Spritzer (Biology)	Effects of Testosterone Dose on Spatial Memory in Adult Male Rats
2012	Grafmiller, Kevin	Spritzer (Biology)	Effects of sexual interactions on neurogenesis in adult male rats: cell proliferation and survival
2012	Breton, Jocelyn	Arndt (Psychology)	The Influence of Retrieval Difficulty on the Testing Effect

2012	Johnson, Amy	Stefani (Psychology)	Effects of Pregnenolone Sulfate on Cognitive Flexibility in a Rat Model of Schizophrenia
2012	Hayes, Melissa	Cronise (Psychology)	The effect of HDAC inhibition on the extinction of conditioned tolerance to the hypothermic effects of alcohol and the resulting changes in BrdU cell labeling
2012	Harisiades, Jamie	Arndt (Psychology)	Psychophysiological Arousal Response at Encoding and Retrieval for Emotionally Arousing Items
2012	Wright, Nina	Stefani (Psychology)	The role of hypocretin in declarative memory
2011	Masseau, Evan	Stefani (Psychology)	Role of septohippocampal orexin transmission in memory acquisition and consolidation during a novel object recognition task
2011	Prince, William Tyler	Spritzer (Biology)	Effects of prolactin on neurogenesis in the dentate gyrus of adult male rats
2011	Shulman, Leanne Morin	Spritzer (Biology)	Effects of Sexual Experience on Spatial Memory and Behavioral Flexibility in Male Rats
2011	Silverstein, Noah	Collaer (Psychology)	Effects of stress on performance in a virtual reality task
2011	Sripad, Abhishek	Kimble (Psychology)	Examining negative expectancy bias in post-traumatic stress disorder (PTSD): An N400 study
2011	Ward, Ruby	Stefani (Psychology)	Effects of cannabinoid receptor blockade in the medial prefrontal cortex on cognitive flexibility in a rat model of schizophrenia
2010	Burns, Margot	Combelles (Biology)	'Relationships between Markers of Atresia and Antioxidants in Follicular Fluid from Individual Bovine Follicles'
2010	Curtis, Molly	Spritzer (Biology)	Effect of sexual interactions with novel or repeated partners on the survival of

			newly proliferated cells in the dentate gyrus of adult male rats
2010	Fujii , Tats	Stefani (Psychology)	Effects of pre- versus post-testing systemic glucose administration on selective attention
2010	Giammattei, Jeannette	Arndt (Psychology)	Hemispheric asymmetries in the activation and monitoring of memory errors
2010	Hastings, Stephanie	Combelles (Biology)	Relationship between oxidative stress and atresia in antral follicles in the bovine ovary
2010	Mehravari, Alison	Stefani (Psychology)	Cognitive effects of glucose administration into the rat anterior insular cortex
2009	Drucker, William Stolley	Stefani (psychology)	Assessing Cognitive Effects of AMP-induced Hypothermia
2009	Lehmann, Ashton Elizabeth	Stefani (psychology)	The Effects of Prefrontal Cannabinoid Receptor Blockade on Cognitive Flexibility in a Rat Model of Schizophrenia
2009	McCaslin, Addason	Stefani (psychology)	Dopaminergic D2 activity modulates glucose-mediated memory enhancement
2009	Taren, Adrienne	Root (Biology)	The Neural Correlates of Strategic Choice in Economic Decision Making
2008	Bababekov, Yan ('09)	Kimble (psychology)	"The P300 Event-Related Potential and Post-traumatic Stress Disorder"
2008	Devan, Priyanjali	Stefani (psychology)	"Sweet Memories: An enhancing effect of glucose on learning and cognition?"
2008	Hawkins, Robert	Spritzer (biology)	"Effects of Luteinizing Hormone and Testosterone on Adult Hippocampal Neurogenesis"
2008	Ibler, Erin	Spritzer (biology)	"The effects of testosterone and social isolation on hippocampal cell survival in adult male rats"

2008	Tarbi, Elise	Collaer (psychology)	"Does the way you PAY ATTENTION influence your spatial abilities?"
2007	Batterink, Laura	Kimble (psychology)	N400 ERP Response as a Measurement of Semantic Expectancy in Trauma Survivors
2007	Cook, Amanda	Cronise (psychology)	The Effects of Forced Binge Drinking on Subsequent Voluntary Consumption: Evaluation of Drinking Patterns and Behavior in C57BL/G Mice with Prior Ethanol Exposure
2007	Daviau, Emily	Spritzer (biology)	"The Effects of Testosterone on Hippocampal Neurogenesis and Spatial Memory in Adult Male Rats"
2007	Fong, Rachel	Stefani (psychology)	Sweet to the mouth, sweet to the mind – the role of dopamine in glucose-induced cognitive enhancement
2007	Zaval, Lisa	Kimble (psychology)	Investigating the Effects of Fear Responses on Advantageous Decision-Making
2006	Devine, Katie	Arndt (psychology)	"Are Two Heads Better Than One? Collaborative Inhibition of Recall"
2006	Frett, Brigitte	Spackman (philosophy)	"Sex Hormone Mediation of Cognitive Sex Differences: A Feminist Critique"
2006	Kaufman, Rebecca	Root (biology)	"The Role of Anxiety and Physiological Arousal in Advantageous Decision-Making"
2006	Morgan Prust	Kimble (psychology)	"The Purely Emotional Iowa Gambling Task: The Effects of Fear on Unconscious Decision-Making"
2006	Ross, Jessica (Feb)	Arndt (psychology)	"How the Association Between an Ambient Odor and Failure Influences Performance of Rats on a Discrimination Task"
2005	Basso, Julia	Collaer (psychology)	"The Effects of Yoga on Respiratory Function and Mood"

2005	Gandhi, Meeli	Cronise (psychology)	"Does Prior Tolerance to Intoxicating Effects of Alcohol Increase Consumption..?"
2005	Meyer, Matthew J.	Cronise (psychology)	"Conflicting Fear Responses and their Effects on Decision Making"
2005	Riesel, Johanna	Collaer (psychology)	"Effects of Green Tea Extrac and Acute Alcohol Exposure in Juvenile Rats"
2005	Stamper, Kate	Parfitt (biology)	"What Time is it and Where is My Mother: Effects of Maternal Separation and Corticosterone Circadian Rhythm on Corticotropin-Releasing Hormone (CRH) mRNA Expression in C57BL/6 Mice"
2004	Corriveau, Erin	Parfitt (biology)	Sunsets and Raging Hormones: Physiological Effects of Maternal Separation are Influenced by Corticosterone Circadian Rhythm and Maternal Behavior in C57BL/6 Mice
2004	Davies, Gareth	Root (biology)	Vocal Communication in the Black Capped Chickadee
2004	Dorr, Nate	Helmreich (biology)	Stress-induced transcription of the CRH and AVP genes in the rat hypothalamus
2004	Eggebroten, Jen	Osborne (psychology)	Who Put a Soda Can in the Trash? Predicting Environmental Behavior in Addison County
2004	Dougherty, Kevin	Osborne (psychology)	Fetal Alcohol Syndrome: The Effects of Fetal Alcohol Exposure on Anxiety and the Stress Response in Adolescent Rats
2004	Gould, Christine	Arndt (psychology)	The Effects of Repetition, Associations, and Retrieval Speed on False Memory
2004	Hoagland, Sadie	Collaer (psychology)	The Relationship Between Spatial Ability and Emotional Perception in Children (Psychology)
2004	Reid, Laura	Arndt (psychology)	Using a Bilingual Stroop Task to Investigate Intra- and Interlingual Interference in Novice Children and Novice Adult Bilinguals

2004	Selgrade, Becca	Helmreich (biology)	Behavioral Effects of Hypothyroidism in Adult Rats
2004	Studwell, Clare	Collaer (psychology)	Maze Madness: Sex Differences in Spatial Ability and Navigation (Psychology)
2003	Hess, Jamie	Ennen (philosophy)	Unpacking "Theory of Mind": The Interface of Philosophy, Psychology, Psychiatry and Neuroscience
2003	Saltstein, Katherine	Parfitt (biology)	Does differential rearing environment produce changes in adult behavior in the C57BL/6 mouse?
2003	Tory, Heather	Helmreich (biology)	Dexamethasone Suppression of Corticosterone Secretion in Stressed Rats
2002	Cassidy, Lynette	Helmreich (biology)	Animal Models of Human Depression: The Effects of Imipramine on the Porsolt Swim Test and the Effects of Dexamethasone on Corticosterone Secretion
2002	Cordner, Amy (BI/PY)	Parfitt (biology)	Antidepressant Administration Prevents the Adverse Effect of Stress on Male Reproductive Behavior in the Syrian Hamster (<i>Mesocricetus auratus</i>)
2002	Crouch, Megan	Helmreich (biology)	Stressor Controllability: influences on the behavior of the adult male rat in the Open Field test, the Neophobia test and the Forced Swim test
2002	Goralnick, Jenny	Collaer (psychology)	Does hemispheric lateralization explain sex differences in visuospatial abilities?
2002	Levin, Jennifer	Parfitt (biology)	The Effects of the Early Rearing Environment on the Behavioral and Physiological Response to Stress in C57BL/6 Mouse
2001	Gauthier, Celeste	Collaer (psychology)	Assessing Rapport Building Techniques as a Way to Enhance Preschoolers' Recall Memory
2001	Mahal, Yasmin	Osborne (psychology)	Alterations in Nesting Behaviors of Rats After Fornix Transection and Administration of ACTH(4-9)

2000	Dunleavy, Dana	Collaer (psychology)	The Effects of Music Exposure on Spatial-Temporal Reasoning: A Comparison of Musicians and Nonmusicians
2000	McLean, Jme	Collaer (psychology)	Hemispheric Lateralization of Chinese Character Perception: A Cross-Fluency Study
1999	Huffman, Elizabeth	Collaer (psychology)	Category Specific fMRI Response During the Visual Processing of Sad and Neutral Facial Expressions (Psychology)
1999	McDermott, Lawrence	Collaer & Osborne (psychology)	Interacting Effects of Pubescent and Post-Pubescent Ethanol Exposure in Male and Female Rats on Spatial Ability and Exploratory Measures in the Morris Water Maze (Psychology)
1998	Reis, Anne	Collaer, & Osborne (psychology)	Effects of Sex and Alcohol on Spatial Ability in Rats
1985	Jordan Sterrer (no copy)	Osborne/Root (BI/PY)	Does human methionyl growth hormone work synergistically with adrenocorticotropin, 1-24 to potentiate aldosterone release from the adrenal cortex?