

NEUROSCIENCE THESES

(Biology, Psychology, and Philosophy faculty advisors)

last revised 6/15/2018

| Year | Student | Thesis Advisor | Thesis Title |
|------|-----------------------|--------------------|--|
| 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 |
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| 2017 | Goins, Emily C. | Spritzer (Biology) | Dose-dependent effects of testosterone replacement on spatial memory and BDNF level in male rats |

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|------|---------------------|------------------------|---|
| 2017 | Jaeger, Eliza C. | Spritzer (Biology) | Effects of Testosterone Dose on Spatial Memory and Brain Protein Expression in Aged Male Rats. |
| 2017 | Pil, Bu-Guk G. | Crocker (Neuroscience) | Characterization of a novel mediator of nociception in adult <i>Drosophila melanogaster</i> |
| 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 | 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 |
| 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 |

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|------|--------------------------------|----------------------|--|
| 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 |

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|------|----------------------|----------------------|--|
| 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 |

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|------|-----------------------|----------------------|---|
| 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 |

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|------|---------------------------|----------------------|--|
| 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 Cannibinoid 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" |

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|------|---------------------|-----------------------|---|
| 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 Extract 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" |

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|------|----------------------|----------------------|---|
| 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 |

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|------|----------------------|--------------------------------|--|
| 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) |

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| 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? |