

Kari Haines

Email: karihaines03@gmail.com

Education

- Aug 2023 (expected)
Indianapolis, IN **Ph.D. in Psychology, Addiction Neuroscience**
Indiana University-Purdue University Indianapolis
Advisor: Dr. Cristine Czachowski
- December 2020
Indianapolis, IN **Master of Science in Addiction Neuroscience**
Indiana University-Purdue University Indianapolis
Advisor: Dr. Cristine Czachowski
Master's Thesis Title: Exploring the Effects of a Corticotropin Releasing Factor (CRF) Receptor Antagonist on Habit Expression
- May 2017
Towson, MD **Master of Arts in Experimental Psychology**
Towson University
Advisor: Dr. Paul Pistell
Master's Thesis Title: Evaluating Sex Differences in Procedural Learning and Memory Deficits Caused by 3-Nitropropionic Acid
- May 2015
Towson, MD **Bachelor of Science in Psychology**
Towson University
Minor in LGBT (Lesbian, Gay, Bisexual, Transgender) Studies
Cum Laude, Psychology Departmental Honors
Advisor: Dr. Paul Pistell
Undergraduate Honors Thesis Title: Using 3-Nitropropionic Acid to Create an Aging Model in Mice

Research Experience

Biopsychology:

- 2018 – Present *Research Assistant / Graduate Student*
Indiana University-Purdue University Indianapolis
Mentor: Dr. Cristine Czachowski
Research Focus: Habit learning and ethanol-seeking in selectively bred rats
- 2016 – 2018 *Oak Ridge Institute for Science and Education (ORISE) Fellow*
US Army Medical Research Institute of Chemical Defense (USAMRICD)
Aberdeen Proving Ground – Edgewood, MD
Mentor: Dr. John McDonough
Research Focus: Dr. McDonough's research program primarily focuses on identifying novel treatments for nerve agent-induced seizures. As a research fellow with a master's degree, I was trusted with coordinating several NIH-funded projects. This experience allowed me to further develop my rodent surgical, data analysis, project management, and laboratory management skills.
- 2013 – 2017 *Research Assistant / Undergraduate and Graduate Student*
Behavioral Neuroscience Lab, Towson University
Mentor: Dr. Paul Pistell
Research Focus: Sex differences in learning and memory in models of aging

Sexual and Gender Identity:

2014 – 2018

Research Team Member

Gender Identity and Sexuality Lab, Towson University

Mentor: Dr. M. Paz Galupo

Research Focus: LGBTQ family microaggressions and assessment of differences in conceptualization of sex, gender, and sexual orientation across sexual minority groups

Laboratory Skills / Techniques

Through the experiences listed above, I have gained proficiency with many laboratory techniques:

Animal Behavior: Operant training and testing, Stone T-Maze, and rotarod.

Stereotaxic Surgery: EEG lead implantation in adult rats, pediatric rats, and mice; including anesthesia monitoring, aseptic technique, suturing, post-operative care.

Other Laboratory Techniques: Injections, animal handling and observation, project coordination, EEG interpretation (use of Spike2 computer software), perfusions, brain extraction, drug preparation (dose calculations, syringe preparation), rat pup weaning and sexing, histopathology evaluation, mouse colony husbandry.

Software Skills

Data Analysis and Presentation:

- SPSS
- GraphPad Prism
- Excel
- Adobe Photoshop

Data Collection Software:

- Spike2 (EEG recording software)
- FIJI (histology)
- Biopac MP 150 Systems
- AcqKnowledge 4.4

Publications

1) **K.M. Haines**, C. L. Czachowski (Submitted: *Alcohol*) Evaluating habit formation across pairs of female and male selectively bred preferring and non-preferring rats.

2) H. S. McCarren, M. Eisen, D. Nguyen, P. Dubee, C. Ardinger, E. Dunn, **K.M. Haines**, A. Santoro, P. Bodner, C. Ondeck, C. Honnold, J. H. McDonough, P. Beske, P. McNutt. (2020). Characterization and treatment of spontaneous recurrent seizures following nerve agent-induced status epilepticus in mice. *Epilepsy Research*. PMID: 32182542

3) E. Dunn, L. Matson, **K.M. Haines**, K. Whitten, R. B. Lee-Stubbs, K. Berger, H. S. McCarren, C. Ardinger, C. Jackson-Piercy, S. M. Miller-Smith, J. H. McDonough. (2020). Evaluation of fosphenytoin, levetiracetam and propofol as treatments for nerve agent-induced seizures in pediatric and adult rats. *Neurotoxicology*, PMID: 32220603.

4) L. Matson, E. Dunn, **K.M. Haines**, S. Miller-Smith, R. Lee-Stubbs, K. Whitten, C. Ardinger, H. McCarren, J. H. McDonough. (2019). Evaluation of first line anticonvulsants to treat nerve agent-induced seizures and prevent neuropathology in adult and pediatric rats. *Toxicology*. PMID: 31362008

5) **K.M. Haines**, L. Matson, E. Dunn, C. Ardinger, D. Bibi, J. H. McDonough, M. Bialer (2018) Comparative efficacy of valnoctamide and sec-butylpropylacetamide (SPD) in terminating nerve agent-induced seizures in pediatric rats. *Epilepsia*. PMID: 30615805

6) **K. M. Haines**, C. R. Boyer, C. Giovanazzi, M.P. Galupo (2018). "Not a real family": Microaggressions directed toward LGBTQ families. *Journal of Homosexuality*, PMID: 29144852

Leadership

2021-Present IUPUI	<i>Co-Chair</i> Psychology Graduate Student Diversity Committee
2018-Present IUPUI	<i>Addiction Neuroscience Representative and Founding Member</i> Psychology Graduate Student Diversity Committee, IUPUI
2014 - 2015 Towson University	<i>Vice President</i> Psi Chi, National Honors Society in Psychology

Conference Presentations / Published Abstracts

- 1) Evaluation habit learning across three alcohol preferring rat strains (Jun 2021). **K. M. Haines**, M. DeLory, C. L. Czachowski. Abstract shared virtually at the *Research Society on Alcoholism* Conference.
- 2) Examining habit across alcohol preferring rat strains (Mar 2021). **K. M. Haines**, M. DeLory, C. L. Czachowski. Poster presented virtually at the *Greater Indiana Society for Neuroscience* Conference.
- 3) Aversion resistant drinking: A comparison across alcohol preferring rodent lines and sex. (Jun 2020). **K. M. Haines**, M. DeLory, C. L. Czachowski. Poster presented virtually at the *Research Society on Alcoholism* Conference.
- 4) Evaluation of allopregnanolone as treatment for nerve agent-induced status epilepticus in pediatric and adult rats (Mar 2019). E. Dunn, K. Taylor, K. Whitten, L. M. Matson, **K. M. Haines**, K. Berger, H. M. McCarren, J. H. McDonough. Poster presented at *Society of Toxicology's Annual Meeting*, Baltimore, MD.
- 5) D. Nguyen, M. Eisen, C. Ardinger, E. Dunn, **K. M. Haines**, A. Santoro, P. Bodner, C. Ondeck, P. Dubee, H. McCarren, P. Beske, P. McNutt (Mar 2019) Evaluation of repurposed antiepileptic drugs to treat spontaneous recurrent seizures in instrumented male C57BL/6 mice following a sublethal soman exposure. Poster presented at *Society of Toxicology's Annual Meeting*, Baltimore, MD.
- 6) Assessment of three anticonvulsants to treat nerve agent-induced status epilepticus in pediatric and adult rats (May 2018). **K. M. Haines**, E. Dunn, L. M. Matson, A. N. Santoro, H. S. McCarren, S. M. Miller-Smith, J. H. McDonough. Poster presented at *Bioscience Review: Advances in Medical Chemical Defense*, Edgewood, MD.
- 7) Levetiracetam does not enhance the anticonvulsant efficacy of diazepam against nerve agent-induced status epilepticus (May 2018). K. M. Winter, **K. M. Haines**, H. S. McCarren, J. H. McDonough. Poster presented at *Bioscience Review: Advances in Medical Chemical Defense*, Edgewood, MD.
- 8) An evaluation of repurposed FDA-Approved antiepileptic drugs in order to treat spontaneous recurrent seizures following a sublethal soman exposure in instrumented male C57BL/6 mice (May 2018). D. L. Nguyen, C. Ardinger, E. Dunn, M. R. Eisen, **K. M. Haines**, A. N. Santoro, H. S. McCarren, P. M. McNutt. Poster presented at *Bioscience Review: Advances in Medical Chemical Defense*, Edgewood, MD.
- 9) Automated electroencephalogram analysis for identifying and measuring spontaneous recurrent seizures and epileptiform activity following soman exposure in mice (May 2018). P. B. Dubée, C. Ardinger, P. M. Bodner, M. R. Eisen, **K. M. Haines**, D. L. Nguyen, K. T. Pagarigan, A. N. Santoro, H. S. McCarren, P. M. McNutt. Poster presented at *Bioscience Review: Advances in Medical Chemical Defense*, Edgewood, MD.
- 10) The development of a long-term survivable mouse model to treat spontaneous recurrent seizures following nerve agent exposure (May 2018). E. Dunn, C. Ardinger, M. R. Eisen, **K. M. Haines**, D. L.

Nguyen, A. N. Santoro, H. S. McCarren, P. M. McNutt. Poster presented at *Bioscience Review: Advances in Medical Chemical Defense*, Edgewood, MD.

11) Assessment of midazolam and diazepam to treat nerve agent-induced seizures in pediatric and adult rats (Nov 2017). **K. M. Haines**, E. Dunn, L. M. Matson, A. N. Santoro, H. S. McCarren, S. M. Miller-Smith, J. H. McDonough. Poster presented at the *Society for Neuroscience Conference*, Washington, D. C.

12) Evaluation of anticonvulsants to treat nerve agent-induced seizures and prevent brain damage in pediatric rats (Jun 2017). L. M. Matson, **K. M. Haines**, E. Dunn, C. Ardinger, H. S. McCarren, S. M. Miller-Smith, J. H. McDonough. Talk presented at the *71F Short Course (PPSC) at WRAIR*.

13) Evaluation of anticonvulsants to treat nerve agent- and pesticide-induced seizures and prevent brain damage in pediatric rats (Jun 2017). L. M. Matson, E. Scholl, **K. M. Haines**, E. Dunn, P. Roper, N. Simon, E. Mattias, J. H. McDonough, E. Dudek. Poster presented at *NIH Countermeasures against Chemical Threats (CounterACT) Meeting*, Boston, MA.

14) Evaluation of midazolam and diazepam to treat nerve agent-induced seizures in pediatric and adult rats (Mar 2017). **K. M. Haines**, L. M. Matson, C. Ardinger, E. Dunn, H. S. McCarren, S. M. Miller-Smith, J. H. McDonough. Poster presented at *Society of Toxicology's Annual Meeting*, Baltimore, MD.

15) Evaluation of anticonvulsant treatments for nerve agent-induced seizures in pediatric and adult rats (Mar 2017). L. M. Matson, **K. M. Haines**, C. Ardinger, E. Dunn, H. S. McCarren, S. M. Miller-Smith, J. H. McDonough. Poster presented virtually at the *Shores Meeting*.

16) C. Ardinger, **K.M. Haines**, P. Pistell (May 2016) A comparison of 3NP dosing schedules to create an accelerated aging model in mice. Poster presented at *Association for Psychological Science's (APS) Conference*, Chicago, IL.

17) Watch Out! Physiological Responses Induced by a New Set of Standardized Contemporary Emotion Eliciting Films (Apr 2016). **K. M. Haines**, N. Jamil, J. Rothweiler, J. McGinley. Poster presented at *The Student Research Expo, Towson University*, Towson, MD.

18) **K. M. Haines**, C. Ardinger, P. Pistell (Apr 2015) The use of 3-Nitropropionic acid to create an aging model in mice. Poster presented at *The Student Research Expo, Towson University*, Towson, MD.

19) C. Ardinger, **K. M. Haines**, J. Barry, L. Hyang, S. Peters, P. Pistell (Mar 2014) Evaluation of 3NP as a model of memory impairment in the mouse Stone T-maze. Poster presented at *Hunter College Psychology Convention*, New York City, NY.

Teaching Experience

2021-Present	<i>Instructor of Record</i> Introduction to Psychology , IUPUI <i>Duties:</i> I taught twice weekly lectures, graded exams and assignments, maintained the course Canvas site, and responded to student emails.
2018-Present	<i>Graduate Teaching Assistant</i> Research Methods Lab , IUPUI <i>Advisor:</i> Dr. Robert Stewart <i>Duties:</i> Taught weekly lab sections, facilitated students in writing research projects, graded in-class assignments and research papers Statistics Lab , IUPUI <i>Advisor:</i> Dr. Katherine Adams <i>Duties:</i> Taught weekly lab sections, facilitated students in applying statistical knowledge, graded in-class assignments

2015-2016 *Graduate Teaching Assistant*
Sensation and Perception, Towson University
Advisor: Dr. M. Paz Galupo
Duties: Lead exam review sessions, graded exams, answered student questions, held weekly office hours

Behavioral Statistics, Towson University
Advisor: Dr. Michal Balass
Duties: Planned and taught several lessons, lead review sessions, graded exams and weekly assignments, answered student questions, held weekly office hours

Sex Differences, Towson University
Advisor: Dr. M. Paz Galupo
Duties: Graded weekly journal assignments, facilitated small group discussions, developed and graded exams, held weekly office hours

Selected Workshops

Jul – Aug 2020 **Psychology 595: Seminar in Teaching**
IUPUI *Student*
This optional, one-credit summer course serves as a workshop for students interested in developing teaching skills. As a student in this course, I learned about and discussed concepts such as Bloom's Taxonomy, backwards course design, and the 'Transparency in Learning and Teaching Format.' I implemented these and other pedagogical ideas through creating a rubric, an assignment, a syllabus, and teaching a sample lesson to the class.

Grants

2016 *Graduate Student Travel Grant (\$500)*, Awarded by Towson University

Honors / Awards

2015 LGBT Department Award- Highest GPA for Graduating Senior, Towson University

2014 - Present Psi Chi, National Honors Society in Psychology member, Towson University

2014- 2017 Omicron Delta Kappa, National Leadership Honors Society, Towson University

2011 - 2015 Dean's List (maintain 3.5 GPA or higher)

References

Cristine Czachowski, PhD, PhD Mentor
Indiana University-Purdue University Indianapolis, Psychology Department
(317) 278-4820, cczechow@iupui.edu

John H. McDonough, PhD, ORISE Fellowship Mentor
US Army Medical Research Institute of Chemical Defense, Neuroscience Group
(410) 436-1942, john.h.mcdonough2.civ@mail.mil

Additional reference contact information available upon request.