# Cherish Ardinger

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2018 - present	PhD (in progress), Addiction Neuroscience
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Indianapolis, IN Indiana University-Purdue University Indianapolis (IUPUI)

2018 - 2020Master of Science, Psychology

Indianapolis, IN Indiana University-Purdue University Indianapolis (IUPUI)

2014 - 2016 Master of Arts, Experimental Psychology

Towson, MD **Towson University** 

2010 - 2014 Bachelor of Science, Psychology

Towson, MD Towson University

Cum Laude, Psychology Departmental Honors

Minor in LGBT (Lesbian, Gay, Bisexual, Transgender) Studies

### **Grants**

2022 - Present

NIH T32: Training Grant on Genetic Aspects of Alcoholism (AA007462), Dr. Cristine Czachowski (Principal Investigator), Drs. Nicholas Grahame and Christopher Lapish (supervisors / mentors).

### **Research Experience**

2018 - Present Indianapolis, IN

# Indiana University-Purdue University Indianapolis (IUPUI)

Addiction Neuroscience Doctoral Student

Mentors: Drs. Christopher Lapish and Nicholas Grahame

Master's Thesis Title: Determining the impact of repeated binge drinking on

corticostriatal theta synchrony

Current Research Interests: I have a strong interest in understanding the physiological phenomena that underlie behavior. Specifically, I am interested in studying the neurobiological causes of and identifying novel treatments for addiction. My current research lies at the intersection of behavioral genetics, awake-behaving electrophysiology, and pharmacology - where I use rodent models to study the impact of alcohol on brain and behavior.

2015 - 2018Edgewood, MD Aberdeen Proving Ground

### U.S. Army Medical Research Institute of Chemical Defense (USAMRICD)

Oak Ridge Institute for Science and Education (ORISE) Fellow

Mentor: John H. McDonough, PhD

Description: Dr. McDonough's research program primarily focuses on identifying novel treatments for nerve agent-induced seizures. Experiments considered how various factors such as age, sex, and genetic background impacted treatment success in rodent models. My ORISE fellowship provided training in surgical procedures, EEG data analyses, and significantly developed my laboratory management, mentorship, and scientific communication skills.

2012 - 2016Towson, MD

# **Behavioral Neuroscience Laboratory, Towson University**

Master's, and Undergraduate Honors Thesis Student

Mentor: Paul Pistell, PhD

Master's Thesis Title: The use of 3-nitropropionic acid to create a model of aging

in mice

Undergraduate Honors Thesis Title: Creation of a peripheral lesion model to

examine age-associated learning and memory deficits in mice

2009 – 2011
Frederick, MD
Fort Detrick

Student Intern
Mentors: Drs. Katie Stagliano and Arthur Hurwitz
Project: Validation of a prostate-specific STAT3C expression construct
 2012 – 2014
Towson, MD

Cender Identity and Sexuality Lab, Towson University
Research Team Member
Mentor: M. Paz Galupo, PhD

### **Publications**

### https://www.ncbi.nlm.nih.gov/myncbi/cherish.ardinger.1/bibliography/public/

- 1) **C. Ardinger**, C. C. Lapish, C. L. Czachowski, N. J. Grahame (2022). A Critical Review of Front-loading: A Maladaptive Drinking Pattern Driven by Alcohol's Rewarding Effects. *Alcoholism: Clinical and Experimental Research (ACER)*. PMID: 36239713.
  - Awarded the 2023 ACER Journal Award for Early Career Investigator Outstanding Paper
  - Chosen by ACER as an Article of Public Interest! (link)
- 2) **C. Ardinger**, G. Winkler, C. C. Lapish, N. J. Grahame (2021). Effect of ketamine on binge drinking patterns in crossed high alcohol-preferring (cHAP) mice. *Alcohol*. PMID: 34547429
- 3) **C. Ardinger**, N. J. Grahame, C. C. Lapish, D. N. Linsenbardt (2020). High Alcohol Preferring Mice Show Reaction to Loss of Ethanol Reward Following Repeated Binge Drinking. *Alcoholism: Clinical and Experimental Research (ACER)*. PMID: 32865852.
  - Chosen by ACER as an Article of Public Interest! (link)
- 4) H. S. McCarren, M. Eisen, D. Nguyen, P. Dubee, **C. Ardinger**, E. Dunn, K. 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
- 5) E. Dunn, L. Matson, K. 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
- 6) C. Jackson\*, **C. Ardinger**\*, J. H. McDonough, H. S. McCarren (2019) Validating a model of nerve agent-induced status-epilepticus by evaluating the anticonvulsant and neuroprotective effects of scopolamine, memantine, and phenobarbital. *Journal of Pharmacological and Toxicological Methods*. PMID: 30790623 \*contributed equally
- 7) L. Matson, E. Dunn, K. 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
- 8) H. S. McCarren, J. Arbutus, **C. Ardinger**, E. Dunn, C. Jackson, J. H. McDonough (2018) Dexmedetomidine stops nerve agent-induced status epilepticus. *Epilepsy Research*. PMID: 29414381
- 9) K. 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
- 10) L. Matson, R. B. Lee-Stubbs, L. Cadieux, J. A. Koenig, **C. Ardinger**, J. Chandler, E. A. Johnson, H. M. Hoard-Fruchey, T.M. Shih, J. H. McDonough (2018) Assessment of mouse strain differences in baseline esterase activities and toxic response to sarin. *Toxicology*. PMID: 30172647

### **Publications in Progress**

- 1) **C. Ardinger**, C. C. Lapish, and D. N. Linsenbardt. Repeated Alcohol Drinking Leads to Reductions in Corticostriatal Theta Coherence in Female but not Male Mice. <u>Under revision for resubmission</u> to Alcohol: Clinical and Experimental Research.
- 2) N. M. Timme, **C. Ardinger**, S. D. C. Weir, R. Zelaya-Escobar, R. Kruger, C. C. Lapish (2023). Non-consummatory behavior signals predict aversion-resistance in head-fixed mice. *BioRxiv*. DOI: 10.1101/2023.06.20.545767.

# **Symposium Organized**

1) Front-loading your way to an AUD: The relationship between drinking rate, intoxication, and motivation to experience the subjective effects of alcohol (Jun 2022). *Research Society on Alcoholism* Conference round-table session. Orlando, FL. Organizer: **C. Ardinger**; Co-organizer: N. J. Grahame.

### **Talks**

- \* Indicates invited talk
- 1) Front-loading: Evidence that mice consume alcohol to experience its subjective rewarding effects (Jun 2022). Presented at the *Research Society on Alcoholism* Conference, Orlando, FL.
- 2) \*Alcohol binge drinking results in sex-specific effects on corticostriatal activity (May 2022). Oak Ridge Institute for Science and Education (ORISE) seminar series at the United States Army Medical Research Institute of Chemical Defense (USAMRICD), Edgewood, MD.
- 3) High alcohol preferring mice may represent a rodent model of high intensity drinking (Mar 2021). Virtual presentation at the *IUPUI*, *Wake Forest*, and *Medical University of South Carolina Alcohol Research Center (ARC) Trainee Showcase*.
- 4) High alcohol-preferring mice show reaction to loss of ethanol reward following repeated binge drinking (Feb 2021). Virtual presentation of my manuscript at the *University of Texas Health Science Center at San Antonio Addiction Journal Club*.

### **Conference Presentations (Recent Alcohol Research)**

- 1) **C. Ardinger,** Y. Chen, A. Kimbrough, N. J. Grahame, & C. C. Lapish (Jun 2023). Leveraging whole brain imaging to identify brain regions involved in alcohol front-loading. Poster presented at the *Research Society on Alcohol* Conference, Bellevue, WA.
- 2) **C. Ardinger**, C. C. Lapish, N. J. Grahame, & D. N. Linsenbardt (Apr, Jun & Oct 2022). Sex differences in corticostriatal activity following repeated binge drinking. Poster presented at the *Greater Indiana Society for Neuroscience* Conference, Indianapolis, IN, *Research Society on Alcoholism* Conference, Orlando, FL and at the *Alcohol and the Nervous System Gordon Research Seminar and Conference*, Oxnard, CA.
  - Awarded best graduate student poster, Greater Indiana Society for Neuroscience
- 3) C. Rangel-Barajas, **C. Ardinger**, N. J. Grahame, S. L. Boehm, M. L. Logrip (Jun 2022). Disrupted synaptic transmission in the dorsomedial striatum after chronic alcohol consumption in the selectively bred crossed high alcohol-preferring mice. Poster presented at the *Research Society on Alcoholism* Conference, Orlando, FL.
- 4) G. A. Winkler, **C. Ardinger**, C. C. Lapish, J. C. Crabbe, & N. J. Grahame (Jun 2022). Free choice drinking increases subsequent drinking in the dark in crossed high alcohol-preferring x high drinking in the dark (cHAPxHDID) mice. Poster presented at the *Research Society on Alcoholism* Conference, Orlando, FL.

- 5) N. M. Timme, **C. Ardinger**, R. Zelaya-Escobar, S. D. C. Weir, J. A. Stewart, and C. C. Lapish (Jun 2022). Assessing aversion-resistant alcohol consumption in head-fixed mice. Poster presented at the *Research Society on Alcoholism* Conference, Orlando, FL.
- 6) S. D. Weir, **C. Ardinger**, & C. C. Lapish (Mar 2021). A machine learning algorithm to identify bouts of drinking in rodent voluntary consumption studies. Poster presented virtually at the *Greater Indiana Society for Neuroscience* Conference.
- 7) G. A. Winkler, **C. Ardinger,** C. C. Lapish, N. J. Grahame (Jun 2021). Effect of ketamine on binge drinking patterns in crossed high alcohol preferring mice. Poster presented virtually at the *Research Society on Alcoholism* Conference.
- 8) **C. Ardinger**, C. C. Lapish, N. J. Grahame, & D. N. Linsenbardt (Jun 2020) Binge drinking ethanol is associated with changes in corticostriatal electrophysiology. Poster presented virtually at the *Research Society on Alcoholism* Conference.
- 9) **C. Ardinger**, C. C. Lapish & D. N. Linsenbardt (Oct 2019) Assessing the impact of excessive alcohol consumption on corticostriatal function in mice. Poster presented at the *Society for Neuroscience* Conference, Chicago, IL.
- 10) **C. Ardinger** & D. N. Linsenbardt (Jun 2019) Differences in the rate of binge drinking between replicate lines of high alcohol preferring (HAP) mice. Poster presented at the *Research Society on Alcoholism* Conference, Minneapolis, MN.
- 11) A. Ward, B.T. Freeman, **C. Ardinger**, and D.N. Linsenbardt (Mar 2019) cHAP mice are less sensitive to the motor depressing actions of alcohol compared to B6 mice. Poster presented at the *Greater Indiana Chapter Society for Neuroscience* Annual Meeting, Indianapolis, IN.

### **Laboratory Skills / Techniques**

<u>Stereotaxic surgery:</u> I am skilled in aseptic technique, subject surgical preparation, anesthesia regulation, suturing, and post-operative care. Surgical procedures that I can independently and successfully execute include implantation of EEG lead, cannula, optogenetic fibers, head-fix bar, awake-behaving electrophysiology probes (fixed-wire arrays, Cambridge shanks, and neuropixels 1.0), and targeted viral injections. I am most comfortable performing these surgeries on adult rats and mice, but I also have experience working with guinea pigs and pediatric rats.

<u>Animal Behavior:</u> MedPC (data collection and code), head-fixed mouse behavior, attentional set shifting, drinking-in-the-dark (including use of volumetric drinking monitor equipment to assess intake pattern and AnyMaze software to assess locomotor behavior), two-bottle choice, Stone T-Maze, and rotarod.

<u>Awake-behaving electrophysiology:</u> Rig / equipment set up, design and manufacture of custom fixed-wire electrodes, data collection from multiple brain regions during anesthetized and awake-behaving neural recordings, OpenEphys software (for data collection), stereotaxic surgery (see above), and data analysis with expertise in analyzing local field potentials using techniques such as spectral decomposition (e.g. Fourier transforms, frequency filtering, wavelets) and assessment of synchrony in periodic signals (measures of coherence, phase-locking, etc.).

<u>Other Laboratory Techniques:</u> General animal handling, collection of retro-orbital sinus bloods, use of Analox to calculate blood ethanol concentrations, perfusions, brain extraction, euthanasia, injections (including drug preparation and dose calculations), mouse colony husbandry, mouse and rat pup weaning and sexing, cryosectioning, immunohistochemistry and basic microscopy to identify electrode and virus placement, iDISCO whole brain clearing and immunohistochemistry, light sheet microscopy.

### Software Skills

Data Analysis and Presentation:

MATLAB (link to my Github)

**Data Collection Software:** 

OpenEphys (awake-behaving ephys)

- GraphPad Prism
- Python
- Adobe Photoshop
- **SPSS**
- Inkscape

- AnyMaze
- Spike2 (EEG recording software)
- Nikon NIS Elements (fluorescent microscopy)
- Imspector Pro (light sheet microscopy)

### Service / Leadership

# IUPUI

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Co-Chair

The mission of the GSDC is to promote an academic environment that engages all students and faculty in discussions of diversity-related topics through education, dialogue, and advocacy. This is accomplished in part through an annual departmental climate survey, organizing a yearly diversity workshop for the department, sponsorship of a diversity award for psychology graduate students, and partnership with the faculty and staff diversity committee.

## Aug 2021 – Aug 2022 IUPUI

# Psychology Graduate Student Diversity Committee (GSDC)

Representative - Addiction Neuroscience

### Jun 2021 – May 2023 IUPUI

### Graduate Out in Science, Technology, Engineering and Math (GoSTEM) Secretary

GoSTEM seeks to encourage the success of LGBTQ+ students in STEM through both personal and professional development. We aim specifically at developing leadership skills through scientific outreach to the community, mentorship for at risk LGBTQ+ youth, and advocacy for creating policies and procedures in the IU School of Medicine and IUPUI that prevent discrimination against faculty, students and post-doctoral staff based on LGBTQ+ status.

# May 2021 - May 2022 Supporting Truth About Animal Research (STAR) Committee

Research Society on Alcoholism Representative

STAR is a coalition of scientific societies that aim to educate and promote the ethical use of animals in research.

### Dec 2020 - Present

### Animal Research and Ethics Committee: Research Society on Alcoholism Member

The mission of the Animal Research and Ethics Committee is to review and discuss topics related to the humane, ethical use of animals in biomedical research and to increase awareness among the RSA membership of the growing number of challenges that are being directed at investigators who study

alcoholism and other addictive disorders. The committee also serves as a liaison

between STAR (described above) and RSA members.

Feb 2020 - Present

### Ad Hoc Peer-Review

Journal of Neuroscience, Addiction Biology and Behavioural Processes.

# **Mentoring and Community Outreach**

### June 2022

# **National Research Mentoring Network (NRMN) Level 1 Training: Entering Mentoring Training**

As a trainee in this course, I learned effective ways to foster healthy mentor/mentee relationships, such as maintaining effective communication, aligning expectations, assessing understanding, addressing equity and inclusion, fostering independence, and promoting professional development.

### Feb 2022

### **Indiana Science Communication Day Participant**

<u>Poster title</u>: Hit me with another shot, mice further understanding of binge drinking-induced brain changes

I engaged lawmakers in conversations about my current research

2019 - Present Skype-a-Scientist Guest Lecturer

I typically engage with 2-3 K-12 classrooms per year.

During my time at IUPUI, I have mentored (and continue to mentor) several undergraduate and IUPUI Post Baccalaureate Research Education Program (IPREP) fellows, all of whom have gained enough laboratory experience to present first-author posters showcasing their research at local conferences (mentees in bold):

- 1) **K. Echeumuna,** S. Derisse, C. Ardinger, and N. M. Timme (Oct 2021). Alcohol and Water Drinking Patterns in Mice. Talk presented virtually at the *Louis Stokes Midwest Regional Center of Excellence Conference* 
  - Mentee Kelechi Echeumuna's abstract was selected within the top 25
- 2) **S. D. Weir**, C. Ardinger, & C. C. Lapish (Apr 2021). A machine learning algorithm to identify bouts of drinking in rodent voluntary consumption studies. Poster presented virtually at the *Greater Indiana Society for Neuroscience* conference
  - Mentee Seth Weir was awarded Best Undergraduate Poster
- 3) **R. Pittman**, C. Ardinger, & N. J. Grahame (Apr 2021). Differences in behavioral flexibility in HAP3 versus LAP3 mice. Poster presented virtually at the *IUPUI Engaged Learning Showcase*.
- 4) **A. Ward,** B. T. Freeman, C. Ardinger, & D. N. Linsenbardt (Apr 2019). cHAP mice are less sensitive to the motor depressing actions of alcohol compared to B6 mice. Poster presented at the *Greater Indiana Society for Neuroscience* conference, Indianapolis, IN.

### **Honors and Awards**

Apr 2023	Research Society on Alcohol (RSA) Student Merit Award Used to present data at the RSA Conference, Bellevue, WA
Mar 2023	ACER Journal Award for Early Career Investigator Outstanding Paper Awarded for publication: A Critical Review of Front-loading: A Maladaptive Drinking Pattern Driven by Alcohol's Rewarding Effects. PMID: 36239713.
Dec 2022	Paul J. McKinley Graduate Student Award for Outreach, Public Engagement, and Diversity Awarded to IUPUI Addiction Neuroscience graduate students who display a dedication to service in these areas.
Apr 2022	Research Society on Alcoholism (RSA) Student Merit Award Used to present data at the RSA Conference, Orlando, FL
Apr 2022	Best Graduate Student Poster, Greater Indiana Society for Neuroscience Awarded for presentation of poster: Sex differences in corticostriatal activity following repeated binge drinking", Indianapolis, IN
Oct 2019	School of Science Graduate Student Council Travel Grant (IUPUI) Used to present data at the Society for Neuroscience Conference, Chicago, IL
May 2019	Research Society on Alcoholism (RSA) Student Merit Award Used to present data at the RSA Conference, Minneapolis, MN

Dec 2012-Present Psi Chi, International Honors Society in Psychology, member

May 2013 Undergraduate Student Travel Award (Towson University)

Used to present data at the Association for Psychological Science's meeting,

Washington, D.C.

Jan 2013 Undergraduate Research Grant (Towson University)

Used for Honors Thesis Project: "Creation of a peripheral lesion model to

examine age-associated learning and memory deficits in mice"

# **Selected Workshops**

July 2020 Online

# **Neuromatch Academy**

Interactive Track Student

I worked closely with a small group of other students from different institutions, guided by a teaching assistant, using open-source data to complete a computational modeling project over the three-week course. In addition to this collaborative project, the group and I worked closely together to work through tutorials to learn about various data analysis techniques, neural modelling, and deep learning (syllabus: <a href="https://github.com/NeuromatchAcademy/course-">https://github.com/NeuromatchAcademy/course-</a>

content). Certificate of completion available upon request.

Jul – Aug 2020 IUPUI

# **Psychology 595: Seminar in Teaching**

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.

# **Teaching Experience**

Fall 2020

### IUPUI

Graduate Teaching Assistant: Systems Neuroscience (Psychology 301)

Mentor: Charles Goodlett, PhD

<u>Skill set:</u> I assisted the instructor in successfully shifting the course from an inperson to hybrid format due to COVID-19. I graded written essay exams, prepared interactive activities for, and led twice-weekly lecture sessions.

Spring 2019

### IUPUI

Graduate Teaching Assistant: Service-Learning Capstone in Psychology

(Psychology 456)

Mentor: Katherine Adams, PhD

<u>Skill set:</u> I engaged students in small group discussions relating lessons from their service work to course readings. I assisted student groups in gathering relevant literature and applying their findings to their specific client population to share a research project about their service-learning experience in the form of a poster presentation at the University's *Capstone Poster Day* at the end of the

semester (held virtually due to COVID-19).

Fall 2018 Spring 2018 Fall 2019

### IUPUI

Graduate Instructor: Research Methods Laboratory (Psychology 312)

Mentor: Robert Stewart, PhD

<u>Skill set:</u> I taught a laboratory designed to help students write their own APA-style research papers. I taught students the processes of literature review, creating survey measures, collecting and analyzing their own data (using SPSS), and drawing conclusions based upon their results. I was responsible for grading and

providing feedback on weekly in-class exercises, drafts, presentations, and final papers. I taught students effective ways to present their findings in a seminar format. I also maintained the Canvas site, and responded to student emails.

Fall 2019 IUPUI

Graduate Teaching Assistant: Research Methods Lecture (Psychology 311)

Mentor: Robert Stewart, PhD

<u>Skill set:</u> I was responsible for grading and providing feedback on weekly homework assignments for approximately 100 students. In addition, I responded to student emails and assisted the professor in the creation of assignments and

maintenance of the Canvas site.

Fall 2017 **Towson University** Spring 2018 *Adjunct Professor: B* 

Adjunct Professor: Behavioral Statistics (Psychology 212)

<u>Skill set</u>: I created a syllabus, coursework, and exams to teach students the foundational theory of statistics as well as common data analytic concepts such as measures of central tendency, *t*-tests, correlations, ANOVA, and ways to analyze categorical data. I also taught students the basic functions of SPSS and how to share their findings using APA format. Emphasis was placed on when it is appropriate to use each statistical test based upon the type of data that is being

worked with.

Feb 2017 - Jul 2018 **USAMRICD,** within Dr. McDonough's laboratory

Surgery Trainer

<u>Skill set</u>: I became an expert in stereotaxic rat (adult and pup) and mouse EEG lead implantation surgery and was approved by the institute's veterinary team to train other laboratory members to perform these surgeries. I taught our team aseptic technique, subject surgical preparation, surgical techniques, ways to troubleshoot issues, anesthesia regulation, suturing, and post-operative care.

Spring 2016 Towson University

Graduate Teaching Assistant: Sex Differences (Psychology 447)

Mentor: M. Paz Galupo, PhD

<u>Skill set</u>: I graded weekly journals, facilitated classroom and small group

discussions, prepared and graded exams, lead exam review sessions, held office hours, maintained the class website (BlackBoard), and responded to student

emails.

Fall 2013 Towson University

Undergraduate Teaching Assistant: Introduction to Psychology (Psychology 101)

Mentors: Drs. David Earnest and Elizabeth Katz

Skill set. I kept attendance records, lead discussions, and graded weekly

assignments.

Fall 2012 Towson University

Undergraduate Teaching Assistant: Introduction to LGBT Studies (LGBT 101)

Mentor: Loraine Hutchins, PhD

Skill set: I lectured, lead exam review sessions, assisted in the preparation of

materials for class activities, and responded to student emails.

### **Conference Presentations (Other / Not Alcohol Related)**

12) D. Nguyen, M. Eisen, **C. Ardinger**, E. Dunn, K. 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.

- 13) H. S. McCarren, **C. Ardinger**, P. Bodner, P. Dubee, E. Dunn, M. Eisen, K. Haines, D. Nguyen, A. Santoro, P. McNutt (Nov 2019) Optimizing a mouse model of severe nerve agent intoxication for long-term survivability incidence of neuropathology, and emergence of spontaneous recurrent seizures. Poster presented at *Society for Neuroscience's* Annual Meeting, San Diego, CA.
- 14) **C. Ardinger**, C. Jackson, J. H. McDonough, H. S. McCarren (May 2018) Validation of the CounterACT Neurotherapeutics Screening (CNS) program model. Poster presented at *Bioscience Review: Advances in Medical Chemical Defense*, Edgewood, MD.
- 15) H. S. McCarren, J. Arbutus, **C. Ardinger**, E. Dunn, C. Jackson, J. H. McDonough (May 2018) Dexmedetomidine as a countermeasure for nerve agent-induced status epilepticus. Talk given at *Bioscience Review: Advances in Medical Chemical Defense*, Edgewood, MD.
- 16) E. Dunn, **C. Ardinger**, M. Eisen, K. Haines, D. Nguyen, A. Santoro, H. S. McCarren, P. McNutt (May 2018) The development of a long-term survivable mouse model to treat spontaneous recurrent seizures following nerve agent exposure. Poster presented at *Bioscience Review: Advances in Medical Chemical Defense*, Edgewood, MD.
- 17) C. Jackson\*, **C. Ardinger**, D. Ballough, H. Craigh, J. H. McDonough. H. S. McCarren (Nov 2017) Validating a nerve-agent induced seizure model by evaluating the anticonvulsant and neuroprotective effects of scopolamine, memantine, phenobarbital and ganaxolone. Poster presented at the *Society for Neuroscience* Conference, Washington, D. C. \* Contributed equally
- 18) J. McCabe, B. Slusher, J. H. McDonough, **C. Ardinger,** A. Alqazzaz, J. Vaughan, C. Jackson, K. Winter, H. S. McCarren, H. Xi, J. Liu, R. Rais (Jun 2017) Amelioration of soman-induced neuropathology with NAAG-related compounds. Poster presented at *NIH Countermeasures against Chemical Threats* (CounterACT) Meeting, Boston, MA.
- 19) L. Matson, E. Scholl, K. Haines, **C. Ardinger**, E. Dunn, P. Roper, N. Simon, E. Mattias, J. H. McDonough, E. Dudek (Jun 2017) Evaluation of anticonvulsants to treat nerve agent and pesticide-induced seizures and prevent brain damage in pediatric rats. Poster presented at *NIH Countermeasures against Chemical Threats (CounterACT) Meeting*, Boston, MA.
- 20) H. S. McCarren, P. Beske, M. Eisen, D. Nguyen, **C. Ardinger**, E. Dunn, J. H. McDonough, P. McNutt (Jun 2017) Therapeutic evaluation of clinically approved antiepileptic drugs to treat spontaneous recurrent seizures following nerve agent exposure. Poster presented at *NIH Countermeasures against Chemical Threats (CounterACT) Meeting*, Boston, MA.
- 21) H. Craig, J. Chandler, L. C. Cadieux, **C. Ardinger, J. Koenig,** H. S. McCarren, Z. Canter, H. Hoard-Fruchey, T-M, Shih, E. Johnson, D. Cerasoli, J. H. McDonough, L. Matson (Jun 2017) Evaluation of mouse strain differences in esterase and nerve agent-induced toxicity. Poster presented at *Military Health System Research Symposium*. Kissimmee, FL.
- 22) H. S. McCarren, J. Arbutus, **C. Ardinger**, E. Dunn, C. Jackson, J. H. McDonough (Mar 2017) Combined stimulation of α2-adrenoceptors and GABAA receptors abruptly terminates soman-induced status epilepticus. Poster presented at *Gordon Research Conference: Chemical & Biological Terrorism Defense*, Ventura, CA.
- 23) **C. Ardinger**, H. S. McCarren, J. Liu, H. Xi, R. Rais, B. Slusher, J. McCabe, J. H. McDonough (Mar 2017). Assessing the neuroprotective potential of 2-PMPA in rats exposed to soman (GD). Poster presented at *Society of Toxicology's Annual Meeting*, Baltimore, MD.
- 24) K. Haines, L. Matson, **C. Ardinger**, E. Dunn, H. S. McCarren, S. M. Miller-Smith, J. H. McDonough (Mar 2017). Evaluation of midazolam and diazepam to treat nerve agent-induced seizures in pediatric and adult rats. Poster presented at *Society of Toxicology's Annual Meeting*, Baltimore, MD.

- 25) H. S. McCarren, **C. Ardinger**, E. Dunn, S. M. Miller-Smith, J. H. McDonough (Dec 2016) Evaluation of five anticonvulsants in a pediatric rat model of nerve agent-induced epilepticus. Poster presented at *American Epilepsy Society's Annual Meeting*, Houston, TX.
- 26) **C. Ardinger**, E. Dunn, K. Gyenai, H. S. McCarren, S. M. Miller-Smith, J. H. McDonough (Jun 2016) The ability of common anticonvulsants to treat nerve agent-induced seizures in pediatric rats. Poster presented at *Bioscience Review: Advances in Medical Chemical Defense*, Edgewood, MD.
- 27) **C. Ardinger**, K. 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.
- 28) K. 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.
- 29) **C. Ardinger**, K. 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.
- 30) **C. Ardinger**, C. R. Boyer, K. R. V. Sekely, A. M. Hackl, M. P. Galupo (May 2013) Attractive eggs and strong sperm: Online presentation of egg and sperm donors. Poster presented at *Association for Psychological Science's (APS) Conference*, Washington, D. C.
- 31) **C. Ardinger**, K. R. Valliere, A. M. Hackl, C. R. Boyer, M. P. Galupo (Apr 2012) Beauty and passivity, now let's talk viability: Femininity and gendered presentation of egg donors. Poster presented at *The Student Research Expo, Towson University*, Towson, MD