

1. Date of Preparation of CV

Created: September 25, 2020

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2. Personal Data:

Name

Holly Christian Hunsberger, Ph.D.

Contact Information

Assistant Professor

Center for Neurodegenerative Diseases and Therapeutics

Michael Reese Center for Health Equity

Department of Foundational Sciences and Humanities

Rosalind Franklin University of Medicine and Science

The Chicago Medical School

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Faculty Website: <https://www.rosalindfranklin.edu/academics/faculty/holly-c-hunsberger/>

Birthplace

Bridgeton, NJ, USA

Citizenship

United States of America

3. Academic Appointments, Hospital Appointments, and Other Work Experience

Academic Appointments

11/2021-

Assistant Professor

Department of Foundational Sciences & Humanities

Center for Neurodegenerative Diseases and Therapeutics (CNDT)

The Chicago Medical School (CMS)

Rosalind Franklin University of Medicine and Science (RFUMS)

11/2018-11/2021

Adjunct Associate Research Scientist

Department of Psychiatry

Columbia University

11/2018-11/2021

Research Scientist III

Division of Systems Neuroscience

Research Foundation for Mental Hygiene, Inc. (RFMH)

New York State Psychiatric Institute (NYSPI)

09/2018-11/2021

Columbia Technology Ventures Fellow

CTV Patent Office

- 11/2016-11/2018 **Postdoctoral Fellow**
Department of Psychiatry
Columbia University Irving Medical Center (CUIMC)
- 11/2016-11/2018 **Research Scientist I**
Division of Integrative Neuroscience
Research Foundation for Mental Hygiene, Inc. (RFMH)

Other Work Experience

- 07/01/2024- **Co-Editor**
International Journal of Molecular Sciences (MDPI): *How Aging Results in Cognitive Decline: Molecular Mechanisms*
- 01/2022-04/01/2023 **Co-Editor**
Frontiers in Neuroscience special topics: *Sex and gender differences in neurodegeneration*
- 09/2016-09/2017 **Associate Editor**
Translational Issues Psychological Science
- 09/2012-09/2016 **Psychology 101 Teaching Assistant**
West Virginia University
- 09/2011-05/2012 **Undergraduate Researcher**
Hawley Montgomery-Down's Laboratory
Department of Psychology
West Virginia University
- Organic Chemistry Teaching Assistant**
West Virginia University

4. Education

- 09/2014-12/2016 **Ph.D. in Behavioral Neuroscience, West Virginia University, Morgantown, WV**
Dissertation Title: Effects of anti-viral acute phase response on hippocampal glutamate regulation
Mentor: Miranda Reed, Ph.D.
Areas of Specialization: Animal learning, behavioral neuroscience, western blot, microelectrode arrays, *in vivo* rodent surgery, neurochemical networks
- 09/2012-05/2014 **M.S. in Psychology, West Virginia University, Morgantown, WV**
Dissertation Title: Glutamate dysregulation in a TauP301L mouse model of Alzheimer's disease
Mentor: Miranda Reed, Ph.D.
Areas of Specialization: Animal learning, behavioral neuroscience, western blot, microelectrode arrays, *in vivo* rodent surgery, neurochemical networks, drug therapy
- 09/2008-05/2012 **B.S. in Chemistry, West Virginia University, Morgantown, WV**
Honors Program
Major: Chemistry, Minor: Political Science
- 09/2004-06/2008 **Cumberland Regional High School, Seabrook, NJ**

5. Training

10/2024-06/2025	Faculty Academy, Rosalind Franklin University Certificate of Distinction in Leadership, Inclusion, Collaboration, Values
02/2024	AAMC EWIMS Leadership Development Seminar (National)
09/2022-06/2023	Faculty Leadership Course, Rosalind Franklin University (1/20 chosen) Certificate of Distinction, <i>Resonate and Thrive</i> (1-year intensive leadership training)
11/2016-11/2018	Post-doctoral fellow, Columbia University, New York, NY Department of Psychiatry Discipline: Aging and Alzheimer's Disease

6. Explanation of Any Gaps in Work/Training/Education

I have no gaps in my education or career.

7. Honors and Awards: [34 personal awards](#), [1 recognizing mentee](#)

2026	Board of Trustees Research Award for excellence in research at RFUMS
2025	American Academy of Neurology, Medical Student Research Scholarship: To support medical students in a Summer Internship
2023	Chicago Medical School Junior Faculty Investigator Award
2022	Academic Grant Award from Taconic Biosciences
2021	Winter Conference on Brain Research (WCBR) Travel Award, Snowmass, CO American College of Neuropsychopharmacology (ACNP) Travel Award, Puerto Rico Neuropsychiatric Syndromes PIA: New Investigator Award, Alzheimer's Association Alzheimer's Association International Conference (AAIC), Travel Award, Denver, CO.
2020	American Society of Clinical Psychopharmacology New Investigator Award Program, Miami Beach, FL Society of Biological Psychology (SOBP) Travel Award, San Diego, CA Plexon Postdoctoral Travel Award, IBNS, Glasgow, Scotland, UK Butler-Williams Scholar (NIA)
2019	Trainee Professional Development Award, SfN, Chicago, IL Leadership Development Program, SfN NIA Research for Collaborative Center Network Workshop Travel Award, Los Angeles, CA Reserve and Resilience research definitions Workshop Travel Award, Bethesda, MD
2018	Postdoctoral Research Symposium First Place Presenter, Columbia University BrightFocus Foundation Travel Award (International Learning & Memory Conference), Huntington Beach, CA
2017	Children's Hospital of Philadelphia Translational Neuroscience Workshop Award Recipient ADDF Young Investigator Scholarship (Jersey City Conference)
2016	ADDF Young Investigator Scholarship (Miami Conference)

Eberly College of Arts and Sciences Travel Award, West Virginia University
Academic Affairs Travel Award, West Virginia University
Doctoral Student Travel Program, West Virginia University

- 2015 ADDF Young Investigator Scholarship (San Diego Conference)
STEM Mountains of Excellence Scholarship, West Virginia University
Behavioral and Biomedical Training Scholarship, West Virginia University
Academic Affairs Funding, West Virginia University
Eberly College of Arts and Sciences Dissertation Award, West Virginia University
- 2014 Behavioral and Biomedical Training Scholarship, West Virginia University
ADDF Young Investigator Scholarship (Jersey City Conference)
- 2013 Department of Psychology Student Research Fund, West Virginia University
Eberly College of Arts and Sciences Travel Award, West Virginia University
Academic Affairs Travel Award, West Virginia University

Student Awards

- 2026 Dean's Award for Outstanding Achievement in Research (Kameron Kaplan, Graduate Student)

8. Academic Service

- 2026 NIH Study section reviewer: ZRG1 F02-K (20)
Schweppe Grant Reviewer
Faculty Senate
Inaugural ASPET webinar planning committee
Flight Attendant Medical Research Grant Reviewer
NIH Study Section reviewer: CSR ZRG1 AN-G (55)
Study Section reviewer: CAMH Womenmind Postdoctoral Fellowship
SEPAC, Chicago Medical School
Scholarship committee RFUMS
Graduate admissions committee
Faculty Collaborative Partners
Baby SEPAC (EARS)
- 2025 NIH Study Section reviewer: NIA ZRG1 F03C-A (20) L
SEPAC, Chicago Medical School
Study Section reviewer: CAMH Womenmind Postdoctoral Fellowship
Scholarship committee RFUMS
Graduate admissions committee
Baby SEPAC (EARS)
Faculty Senate
- 2024 BSI Retreat Planning Committee, Rosalind Franklin University
Study Section reviewer: Florida Department of Health Ed and Ethel Moore Alzheimer's Disease
Research Program
NIH Study Section reviewer: NIA ZRG1 F03C-K (20) L
Alzheimer's Association reviewer (AARG)
Study Section reviewer: National Science Foundation (NSF) GRFP
Study Section reviewer: CAMH Womenmind Postdoctoral Fellowship
Scholarship committee RFUMS
SEPAC, Chicago Medical School
Graduate admissions committee

Search committee: Genetics Center Director, Assistant Professor CNDT

- 2023 Study Section reviewer: PA Department of Health (progress reports)
Study Section reviewer: Florida Department of Health Ed and Ethel Moore Alzheimer's Disease Research Program
NIH Study Section reviewer: NIA CDNI
Study Section reviewer: Graduate Women in Science
Study Section reviewer: CAMH Womenmind Postdoctoral Fellowship
Study Section reviewer: National Science Foundation (NSF) GRFP
Scholarship committee RFUMS
Student judiciary committee RFUMS
WCBR mentor program
IBNS mentor program
- 2022 Scholarship committee: RFUMS
Student judiciary committee: RFUMS
Brain Science Institute Twitter account: RFUMS
Invited panelist: Women in Science and Healthcare symposium: RFUMS
M3 poster judging: CMS
Careers in Academia Panelist: Columbia University, NY
- 2021 Study Section: Florida Department of Health Ed and Ethel Moore Alzheimer's Disease Research Program
IBNS Peer Mentor Program
Project Encephalon Brain Awareness Week: Lecture on Learning and Memory
- 2018 Biobus Mentor: Variety Boys and Girls Club of Queens, NY
Columbia Neuroscience Outreach: High School Lab visit and Lecture
- 2017-2018 Columbia Postdoctoral Poster Session Judge: Columbia University
- 2016-2017 "Scientista" Symposium Poster Judge, Microsoft Technology Center, NY
"This is Research" Symposium Poster Judge, Auburn University
- 2012-2014 Psychology 101 Undergraduate Capstone Poster Session Judge, West Virginia University
Student Ambassador for Visiting Professors, West Virginia University
Behavioral Neuroscience Training Committee, West Virginia University Student Representative
Graduate Interview Weekend Coordinator, West Virginia University

9. Professional Organizations and Societies

Memberships and Positions

1. Councilor, Great Lakes Chapter American Society for Pharmacology and Experimental Therapeutics (GLC-ASPET)
2. **Secretary**, Chicago Chapter SfN
3. **President**, Women in Medicine and Science (WIMS)
4. Member, Society for Neuroscience (SfN)
5. Member, International Behavioral Neuroscience Society (IBNS)

6. **New Investigator Awardee** and Program Committee member, American Society of Clinical Psychopharmacology (ASCP)
7. Member, Society of Biological Psychiatry (SOBP)
8. **New Investigator Award**, ISTARRT Neuropsychiatric Syndromes PIA
9. Member, ISTARRT Sex and Gender Differences PIA
10. Columbia University Postdoctoral Society (Past member 2016-2021; Vice President, 2017)
11. Columbia University Neuroscience Outreach (Past member 2016-2021)

Journal Reviewer (Ad hoc Reviewer)

Acta Neuropathologica Communications, Aging and Health, American Journal of Respiratory and Critical Care Medicine, Behavioural Brain Research, Biochemistry and Behavior, Biological Psychiatry, Biology of Sex Differences, Communications Biology, Frontiers in Cell and Developmental Biology, Frontiers Psychiatry, Hippocampus, Journal of Affective Disorders, Journal of Alzheimer's Disease, Journal of Negative Results in Biomedicine, JOVE, Learning and Memory, Nature Aging, Nature Communications, Neural Regeneration Research, Neurobiology of Aging, Neurobiology of Disease, Neuroscience Letters, Neurotoxicology, Pharmacology, PLOS One, Qeios, Sleep Medicine, Toxicology letter

10. Fellowship and Grant Support: >\$4.5 million

Present Support

Understanding hippocampal excitatory and inhibitory circuits during perimenopause in Alzheimer's disease mice

Project Number	1R01AG096604-01A1
Source	NIA
Role	PI
Dates of Project	09/01/26-08/31/31
Direct Costs	\$2,201,477

Development of a non-invasive wearable biosensor for rodent research

Project Number	NA
Source	DePaul-RFUMS Technology Grant
Role	MPI
Dates of Project	07/01/26-06/30/27
Direct Costs	\$67,000

Understanding hippocampal circuits during perimenopause in AD mice

Project Number	26BFDN-1572151C
Source	Alzheimer's Association Bridge Funding for Disrupted Neurodegenerative Research Grant Program (BFDN)
Role	PI
Dates of Project	04/01/26-03/31/27
Direct Costs	\$63,812

Dissecting the sex-specific impact of mood disorders on aging and Alzheimer's progression

Project Number	2L60AG084117-02 (Renewal)
Source	NIA

Role	PI
Dates of Project	08/01/25-07/31/27
Direct Costs	Loan repayment grant

Ventral hippocampal circuitry underlying neuropsychiatric symptoms in AD

Project Number	24AARG-1188074
Source	Alzheimer's Association
Role	PI
Dates of Project	03/01/24-02/28/27
Direct Costs	\$200,000

Past Support

Translational Neuroscience Training Grant (Hen, PI)

Project Number	2T32MH015174-40
Source	NIMH
Role	Post-doctoral fellow
Major Goals	The primary goal of this proposal is to train postdoctoral fellows for careers as independent researchers at the interface between neuroscience and psychiatry as well as neurology.
Dates of Project	11/01/16-10/31/18

Identification and Manipulation of neural ensembles mediating sundowning in an Alzheimer's disease mouse model (Denny, PI)

Project Number	5R21AG064774-02
Source	NIA
Role	Postdoctoral Scientist
Dates of Project	09/01/19-05/31/21
Direct Costs	\$125,000

Cognitive training to enhance cognitive reserve in aging mice (Hunsberger, PI)

Project Number	R24AG061421
Source	Reserve and Resilience (NIA)
Role	PI
Dates of Project	09/01/20-03/31/22
Direct Costs	\$20,000

The impact of VCD-induced menopause on behavior and neural activity in Alzheimer's disease mice

Project Number	
Source	Schweppe Scholar Award (Internal)
Role	PI
Dates of Project	01/01/24-06/30/25
Direct Costs	\$60,000

Dissecting the sex-specific impact of mood disorders on aging and Alzheimer's progression

Project Number	1L60AG084117-01
Source	NIA
Role	PI
Dates of Project	08/01/23-07/31/25
Direct Costs	Loan repayment grant

The sex-specific impact of anxiety on Alzheimer's disease progression (NCE)

Project Number	K99AG059953 / R00AG059953
Source	NIA

Role	PI
Dates of Project	04/01/19-03/31/26
Direct Costs	\$999,500

The impact of POLY(IC) on neuronal excitability

Project Number	n/a
Source	Ataraxia LLC
Role	PI
Dates of Project	07/01/24-06/30/26
Direct Costs	\$25,000

11. Educational Contributions

Direct Teaching/Preception/Supervising

2026-	Director, Writing Skills Class, RFU Graduate Program Neurodegeneration lecture, Molecular Basis of Disease, RFU Graduate Program
2025	Co-director, Writing Skills Class, RFU Graduate Program
2024	Brain anatomy Lab: Chicago Medical School
2023-	Brain metabolism lecture for Neurobehavioral Health course: Chicago Medical School Neural signaling course (2 lectures), RFU Graduate Program Rosalind Franklin University INSPIRE Lecture: Science Communication
2022-	Research Mentor for Lake Forest College Summer Research Scholars Program, Rosalind Franklin University Research Mentor for INSPIRE Scholars Program, Rosalind Franklin University
2021	Research Mentor for Summer Undergraduate Research Fellowship (SURF), Columbia University
2019	Research Mentor for an Undergraduate Honors Thesis Project, Columbia University
2018	Research Mentor for the Summer Undergraduate Research Internship (SURI), Columbia University Research Mentor the Amgen Research Internship, Columbia University
2015-2017	Research Mentor, Biology 4980, Auburn University
2012-2016	Psychology 101 Teaching Assistant, West Virginia University
2012-2015	Project Supervisor for the Summer Undergraduate Research Internship (SURI), West Virginia University Project Supervisor for the Summer Undergraduate Research Experience (SURE), West Virginia University Organic Chemistry Teaching Assistant, Chemistry Department, West Virginia University

Advising and Mentorship

Graduate Students

2024-present Aleksandra Feshchenko

Rosalind Franklin University of Medicine and Science

2022-present Kameron Kaplan
Rosalind Franklin University of Medicine and Science
Dissertation Defense: Nov 2, 2026

Medical Students

2026 Ammarah Hussaini
Weiland Wang
Shalini Udawatte
***MDDR (Research Distinction)**
Lizzy Lovelette
***MDDR (Research Distinction)**
Chicago Medical School M1 Student

Tatheer Razvi
Tan Nguyen
Chicago Medical School M2 Student

2025 Aidan Butler
Summer Research Intern, University of Toledo
Medical AAN Scholarship

2024-2025 Cristina Gonzalez
Jonathan Schneider
Chicago Medical School M1 student

2023 Juhi Mody
Chicago Medical School M1 student

Undergraduate Students

2025 Anna Lee
Summer Research Volunteer, Carleton College
***Current Position: SURF program Mayo Clinic**

Kaia Mismash
Summer Research Intern, Lake Forest College

Sam Kelly
Depaul Summer Research Intern, Depaul University

Leslie Monroy
INSPIRE Research Intern

2024 Sofia Schumann
Summer Research Assistant, Purdue University
Current Position: Internship at Novartis

Trisyia Rahimi, Jasmine Mendez
Summer Research Intern, Lake Forest College

2023 Megha Verma
Summer Research Intern, Lake Forest College

Naina Beishembieva
 Summer Research Intern, Lake Forest College
Current Position: NIH Human BioMolecular Atlas Program (Intern)

2022-2025 Perla Arias
 Honors Thesis Student
***Awarded the highest honors in Neuroscience at LFC**
 INSPIRE Research Intern, Lake Forest College (LFC)

2022-2023 Olivia Godek
 Summer Research Intern, Lake Forest College
Current Position: M1 Chicago Medical School

High School Students

2026 Sarah Murphey
 Work Study Program

2025 Yoselyn Diaz
 Work Study Program

Mentored undergraduate students during Postdoctoral Fellowship

2021-2022 Robert Chen
 Summer Volunteer, Columbia University

2019-2022 Alicia Whye
 Research Assistant, Columbia University
 Summer Undergraduate Research Fellowship (SURF), Columbia University

2017-2019 Keerthana Jayaseelan
 Columbia University Honors Thesis Project

2018 Miranda Scarlata
 Summer Undergraduate Research Fellowship (SURF), Columbia University

2017-2018: Yasmine Raya Ayman
 Research Assistant, Columbia University

Mentored high school students during Postdoctoral Fellowship

2018-2019 Elsie Wang
 Summer Internship Program Princeton Day School

2017-2018 Nicole Moiseyev
 Summer Volunteer, Bergen County School

Mentored undergraduate students during Graduate training

2016 Ryan Heslin, Brandon Honeywell
 Research Assistant, Auburn University

2012-2015 Eric Libell, James Hickman
 Research Assistant, West Virginia University

2014 Rebecca Speer, Lindsey Mosmiller

Summer Undergraduate Research Experience (SURE), West Virginia University

Sylvia Terlecki
Capstone, West Virginia University

2013 Kirsten Schoonover
Summer Undergraduate Research Internship, West Virginia University

Qualifying Exam Committees

1. Wacey Gallegos (Neuroscience Program, Rosalind Franklin University, North Chicago, IL) ***Chair**
2. Rachel Parker (Physiology Program, Rosalind Franklin University, North Chicago, IL)
3. Dmitry Kovalev (Neuroscience Program, Rosalind Franklin University, North Chicago, IL)
4. Jordan Villa (Neuroscience Program, Rosalind Franklin University, North Chicago, IL) ***Chair**

12. Patents & Inventions

1. METHOD AND WEARABLE TRACKER SYSTEM FOR HEALTH CONDITIONS AND DIAGNOSIS. Filed 07/06/23; Published 01/11/24; Electronically published 02/27/2025 (US 2025-0064397 A1). Pending
2. AI-POWERED NEUROPLASTICITY VIA WEARABLE AND EMBEDDED BRAIN INTERFACES
Patent Application No. 63/784,758. Filed: April 7, 2025
3. COMPOSITIONS AND METHODS FOR THE TREATMENT OF ALZHEIMER'S DISEASE AND OTHER NEURODEGENERATIVE DISEASE
Patent Application No. US20250213564A1. Filed: February 12, 2025; Electronically published 09/16/2025
Pending

13. Publications: n=29 (15 first-author, 6 senior-author, 2 editorial highlights)

Peer-Reviewed Research Publications in Print or Other Media

1. Jin MJ, Fu Y, Chen X, **Hunsberger HC**, Sorid S, Mouris G, Huang C, Whye AR, Ogundare SO, Yao Y, Shipley SC, Pavlova I, Silver R, Lee S, Peng Y, Denny CA. (2026) Behavioral and brain-wide neural signatures of sundowning in Alzheimer's disease. *Res Sq Preprint*.
2. Patil SA, **Hunsberger HC**. (2026) Psilocybin: Chemical Foundations and Emerging Therapeutic Potential. In Press. *Bentham Science Mini-Reviews in Medicinal Chemistry*.
Impact Factor: 4.1
3. Butler AR, Kim N, **Hunsberger HC**. (2025) Unresolved Controversies: The effect of benzodiazepines on cognition and Alzheimer's disease. *Journal of Dementia and Alzheimer's Disease*. 3(1).
New journal established 2024
4. Potashkin J, Vidyadhara DJ, **Hunsberger HC**. (2025) The impact of lifestyle on brain health. *American Journal of Lifestyle Medicine*. PMID: 41480488.
Impact Factor: 2.7
5. Whalley JP, **Hunsberger HC**, Bennett DA, Lamar M, Peterson DA, Stutzmann GE. (2025) Aged brain multi-omic integration captures immunometabolic and sex variation. *BioRxiv preprint*.
6. Chen BK[†], **Hunsberger HC**[†], Whye A, Matthews LC, Yook A, Willner MJ, Logan RW, Weisblum E, Denny CA. (2025) Combinatorial targeting of NMDARs and 5-HT 4 Rs exerts beneficial effects in a mouse model of Alzheimer's disease. *Alzheimer's Research & Therapy*. 17(1):160. PMID: 40665449.

[†]These authors have contributed equally to this work and share first authorship

Impact Factor: 8.0

7. Kaplan K, Toennies LB, **Hunsberger HC**. (2025) Alprazolam induces anterograde amnesia for contextual fear memory and alters dorsoventral hippocampal neuronal ensembles in female mice. *Scientific Reports*. 15(1):23504. PMID: 40604112.
Impact Factor: 4.3
8. Chen B, Luna VM, Jin M, Shah A, Shannon ME, Pauers MM, Williams BL, Pham V, **Hunsberger HC**, Gardier AM, Mendez-David I, David DJ, Denny CA. (2025) A tale of two receptors: simultaneous targeting of NMDARs and 5-HT4Rs exerts additive effects against stress. *Biological Psychiatry*. Online ahead of print. PMID: 41043535.
Impact Factor: 10.4
9. **Hunsberger HC**, Lee S, Jin M, Lanio M, Whye A, Cha J, Scarlata M, Jayaseelan K, Denny CA. (2025) Sex-Specific Effects of Anxiety on Cognition and Activity-Dependent Neural Networks: Insights from (Female) Mice and (Wo)Men. *Biological Psychiatry*. 97(9):900-914. PMID: 39349155.
Impact Factor: 10.4
 - a. Editorial Highlight: O'Connell K. (2025). The missing half: Why sex differences matter in Alzheimer's disease. *Biological Psychiatry*. 97(9):849-850. PMID: 40216521
10. McGowan JC, Ladner LR, Shubeck CX, Tapia J, LaGamma CT, Anqueira-Gonzalez A, DeFrancesco A, Chen BK, **Hunsberger HC**, Sydnor EJ, Logan RW, Yu TS, Kernie SG, Denny CA. (2024) Traumatic brain injury-induced fear generalization in mice involves hippocampal memory trace dysfunction and is alleviated by (R,S)-ketamine. *Biological Psychiatry*. 95(1):15-26. PMID: 37423591.
Impact Factor: 12.81
11. Kaplan K, **Hunsberger HC**. (2023) Benzodiazepine-induced anterograde amnesia: Detrimental side effect to novel study tool. *Frontiers Neuropharmacology*. 14:1257030. PMID: 37781704.
Impact Factor: 5.6
12. Young JE, Wu M, **Hunsberger H**. (2023) Editorial: Sex and gender differences in neurodegenerative diseases. *Frontiers in Neuroscience*. 17:1175674. PMID: 37008208.
Impact Factor: 4.3
13. Brinkley T, Sites S, **Hunsberger H**, Karvonen-Gutierrez C, Li M, Shaaban C, Thorpe R, Kritchevsky S. (2022) Research centers collaborative network workshop on sex and gender differences in aging. *Innovation in aging*. 6(7). PMID: 36267320.
Impact Factor: 6.208
14. **Hunsberger HC**, Sharay SE, Rudy CC, Weitzner DS, Pfitzer JC, McDonald KL, Hong H, Bhattacharya S, Suppiramaniam V, Reed MN. (2021) Differential effects of human P301L tau expression in young versus aged mice. *Int J Mol Sci*. 22(21). PMID: 34769068.
Impact Factor: 5.923
15. Chen BK, Luna VM, Shannon ME, **Hunsberger HC**, Mastrodonato A, Stackmann M, McGowan JC, Rubinstenn G, Denny CA. (2021) Fluoroethylnormemantine, a novel NMDA receptor antagonist, for the prevention and treatment of stress-induced maladaptive behavior. *Biological Psychiatry*. 90(7). PMID: 34274107.
Impact Factor: 12.81
16. Anacker C, Sydnor E, Chen BK, LaGamma CT, McGowan JC, Mastrodonato A, **Hunsberger HC**, Shores R, Dixon R, McEwen B, Byne W, Meyer-Bahlburg HFL, Bockting W, Ehrhardt AA, and Denny CA. (2020)

Behavioral and neurobiological effects of GnRH agonist treatment in mice - potential implications for puberty suppression in transgender individuals. *Neuropsychopharmacology*. 46(5). PMID: 32919399.
Impact Factor: 8.304

17. **Hunsberger HC**, Greenwood BP, Tolstikov V, Narain NR, Kiebish MA, and Denny CA. (2020) Divergence in the metabolome between natural aging and Alzheimer's disease. *Sci Reports* 10:12171. PMID: 32699218.
Impact Factor: 4.997
18. Mastrodonato A, Cohensedgh O, LaGamma CT, McGowan JC, **Hunsberger HC**, and Denny CA. (2019) Prophylactic (R,S)-ketamine selectively protects against inflammatory stressors. *Behav Brain Res*. 378:112238. PMID: 31563463.
Impact Factor: 3.002
19. **Hunsberger HC**, Pinky P, Smith W, Suppiramaniam V, Reed MN (2019). The role of APOE4 in Alzheimer's disease: strategies for future therapeutic interventions. *Neuronal Signal*. 3(2): PMID: 32269835.
Impact Factor: 3.5
20. Setti S, **Hunsberger HC**, Reed MN (2017). Alterations in hippocampal activity and Alzheimer's disease. *Transl Issues in Pscychol Sci*. 3(4): 348-356. PMID: 29862310.
21. **Hunsberger HC**, Konat GW, Reed MN (2017). Peripheral viral challenge elevates extracellular glutamate in the hippocampus leading to seizure hypersusceptibility. *J Neurochem*. 141(3): 341-346. PMID: 28244106.
Impact Factor: 5.546
22. **Hunsberger HC**, Setti SE, Heslin RT, Quintero JE, Gerhardt GA, Reed MN (2017). Using enzyme-based biosensors to measure tonic and phasic glutamate in Alzheimer's mouse models. *J Vis Exp*. 123: 55418. PMID: 28518111. (<https://www.jove.com/video/55418/using-enzyme-based-biosensors-to-measure-tonic-phasic-glutamate5>).
Impact Factor: 1.424
23. **Hunsberger HC**, Wang D, Petrisko TJ, Alhowail A, Setti SE, Suppiramaniam V, Konat GW, Reed MN (2016). Peripherally restricted viral challenge elevates extracellular glutamate and enhances synaptic transmission in the hippocampus. *J Neurochem*. 138(2): 307-316. PMID: 27168075.
Impact Factor: 5.546
24. **Hunsberger HC**, Hickman JE, Reed MN (2016). Riluzole rescues alterations in rapid glutamate transients in the hippocampus of rTg4510 mice. *Metab Brain Dis*. 31(3): 711-715. PMID: 26744018.
Impact Factor: 3.655
25. **Hunsberger HC**, Weitzner DS, Rudy CC, Hickman JE, Libell EM, Speer RR, Gerhardt GA, Reed MN (2015). Riluzole rescues glutamate alterations, cognitive deficits, and tau pathology associated with P301L tau expression. *J Neurochem*. 135(2): 381-389. PMID: 26146790.
 - a. Editorial Highlight: Whitcomb DJ & Molnar E (2015). Is riluzole a new drug for Alzheimer's disease? *J Neurochem*. 135: 207-209. PMID: 26451974.
Impact Factor: 5.546
26. **Hunsberger HC**, Rudy CC, Batten SR, Gerhardt GA, Reed MN (2015). P301L tau expression affects glutamate release and clearance in the hippocampal trisynaptic pathway. *J Neurochem*. 132(2): 169-182. PMID: 25319522.
Impact Factor: 5.546

27. **Hunsberger HC**, Rudy CC, Weitzner DW, Zhang C, Tosto DE, Xu Y, Reed MN (2014). Effect size of memory deficits in mice with adult-onset P301L tau expression. *Behav Brain Res*. 272: 181-195. PMID: 25004446.
Impact Factor: 3.352
28. Rudy CC, **Hunsberger HC**, Weitzner DS, Reed MN (2014). The role of the tripartite glutamatergic synapse in the pathophysiology of Alzheimer's disease. *Aging Dis*. 6(2): 131-148. PMID: 25821641.
Impact Factor: 9.968
29. Povroznik JM, Rudy CC, **Hunsberger HC**, Tosto DE, Reed MN (2014). Effects of an alpha-5GABAA inverse agonist on MK-801-induced learning deficits in an incremental repeated acquisition task. *Behav Pharmacol*. 25(4): 331-335. PMID: 25006978.
Impact Factor: 2.277

Book Chapters

1. Siguenza, I., Pomarico, Y., Castañeda, Y., Gorospe, C., Gomez, M., Maciel, D., Ramos de la Cruz, S., Fresquez, A., Ayala, R., **Hunsberger, H.**, Arias, P., Ayala, R., Colunga, M., Monroy, N., Manriquez, E., Pena-Rasgado, C., Chen, M., Rasgado-Flores, H. "Latinx Women in STEM & Medicine RISE: Resilience, Identity, Strength and Equity." *The Role of Women in Research and Innovation*, edited by Diana Da Silva Dias, IntechOpen, 2025, ISBN 978-1-83635-085-9.

Other Media

- | | |
|------|---|
| 2026 | Echo Microscope Spotlight |
| 2023 | Helix Interview: Wearable Tech Hypothesis |
| 2022 | Helix Interview: Sex differences in Alzheimer's progression
Inscopix Podcast Interview |
| 2021 | Project Encephalon Brain Awareness Week Seminar
International Science Interview |
| 2020 | SfN's TPDA Insight
Alz Afternoon Talk |
| 2017 | JOVE
ADDF Young Investigator Scholarship
Cell Advice Article – What would you tell your younger self? |
| 2015 | 3-Minute thesis competition |

Thesis

- | | |
|------|---|
| 2016 | Hunsberger, HC. Ph.D. Dissertation. Effects of anti-viral acute phase response on hippocampal glutamate regulation. |
| 2014 | Hunsberger, HC. M.S. Thesis. Glutamate dysregulation in a TauP301L mouse model of Alzheimer's disease. |

Poster Presentations Peer-Selected

1. Kaplan K, Webber EK, Steinbrenner D, Gupta S, Toennies LT, Kim N, Stutzmann G, **Hunsberger HC** (2026, January). Targeting neuropsychiatric symptoms in aging and Alzheimer's: From

benzodiazepines to psychedelic therapies. Poster presented at ACNP, Bahamas.

2. Feshchenko A, Kaplan K, Toennies LT, **Hunsberger HC** (2025, July). Understanding and targeting neuropsychiatric symptoms in aging, Alzheimer's disease, and throughout menopause. Poster presentation AAIC, Toronto, CA.
3. Webber EK, Steinbrenner D, Toennies LB, Stutzmann GE, **Hunsberger HC** (2024, December). Using psilocybin to treat Alzheimer's Disease Neuropsychiatric symptoms and cognitive decline. Poster presentation ACNP, Phoenix, AZ.
4. **Hunsberger HC**, Kaplan K (2023, December). Alprazolam Impairs Fear Memory and Alters Dorsoventral CA1 Neuronal Ensembles in Female Mice. Poster presentation at the American College of Neuropsychopharmacology (ACNP) conference, Tampa, FL.
5. **Hunsberger HC** (2022, December). In vivo calcium imaging reveals sex differences in ventral hippocampal activity in Alzheimer's disease mice. Poster presentation at American College of Neuropsychopharmacology (ACNP) conference, Phoenix, AZ.
6. **Hunsberger HC**, Lee S, Whye A, Lanio, M, Cha J, Denny CA (2022, August). Uncovering sex differences in neural circuitry and brain-wide networks in Alzheimer's disease. Poster presentation at the Neurobiology of Disease GRC, Barcelona, Spain.
7. **Hunsberger HC**, Lee S, Whye A, Jayaseelan K, Scarlata M, Cha J, Denny CA (2021, December). Anxiety impacts cognitive decline in female Alzheimer's disease mice and predicts dementia transition in the ADNI human dataset. Poster presentation at the American College of Neuropsychopharmacology (ACNP) conference, San Juan, Puerto Rico. ***Travel Award**
8. **Hunsberger HC**, Lee S, Whye A, Jayaseelan K, Scarlata M, Cha J, Denny CA (2021, July). Anxiety throughout Alzheimer's disease progression: Of mice and (Wo)men. Poster presentation at the American Alzheimer's International Conference (AAIC), Denver, CO (virtual). ***Travel Award**
9. **Hunsberger HC**, Lee S, Whye A, Jayaseelan K, Scarlata M, Cha J, Logan R, Denny CA (2021, April). Sex differences in cognition, neuropsychiatric symptoms, and sleep in an Alzheimer's disease mouse model. Poster presentation at Society of Biological Society, virtual. ***Travel Award**
10. **Hunsberger HC**, Lee S, Whye A, Jayaseelan K, Scarlata M, Cha J, Logan R, Denny CA (2021, May). Of mice and wo(men): The sex-specific impact of anxiety on Alzheimer's disease. Poster presentation at the American Society of Clinical Psychopharmacology (ASCP), virtual. ***New Investigator Award**
11. **Hunsberger HC**, Lee S, Cha J, Denny CA (2020, August). Using anxiety as a sex-specific neuropsychiatric biomarker of Alzheimer's disease. Poster presentation at the International Behavioral Neuroscience Society, virtual.
12. **Hunsberger HC**, Lee S, Cha J, Denny CA (2020, July). Using anxiety as a sex-specific neuropsychiatric biomarker of Alzheimer's disease. Poster presentation at Alzheimer's Association International Conference, virtual.
13. **Hunsberger HC**, Lee S, Cha J, Denny CA (2019, October). Of mice and (wo)men: the sex-specific impact of anxiety on Alzheimer's disease progression. Poster presented at Society for Neuroscience, Chicago, IL. ***Trainee Professional Development Award winner (TPDA)**.
14. **Hunsberger HC**, Lee S, Cha J, Denny CA (2019, October). Of mice and (wo)men: the sex-specific impact of anxiety on Alzheimer's disease progression. Poster presented at Columbia Postdoctoral

Research Symposium, New York, NY.

15. **Hunsberger HC**, Kitayev A, Hill C, Narain NR, Kiebish MA, & Denny CA (2018, December). A longitudinal analysis of hippocampal metabolomic alterations following cognitive decline in aged mice and APP/PS1 Alzheimer's disease mice. Poster presented at Columbia Postdoctoral Research Symposium, New York, NY. ***1st place presenter**
16. **Hunsberger HC**, Kitayev A, Hill C, Narain NR, Kiebish MA, & Denny CA (2018, November). A longitudinal analysis of hippocampal metabolomic alterations following cognitive decline in aged mice and APP/PS1 Alzheimer's disease mice. Poster presented at Society for Neuroscience (SfN), San Diego, CA.
17. **Hunsberger HC** (2017, September). Sex differences in Alzheimer's disease: Using optogenetics and neurochemical assays to rescue cognitive decline. Poster presented at the Alzheimer's drug discovery foundation conference, Jersey City, NJ. ***ADDF Young Investigator Scholarship winner**
18. **Hunsberger HC**, Wang D, Konat G, & Reed MN (2016, April). Peripherally restricted viral challenge elevates extracellular glutamate and enhances synaptic transmission in the hippocampus. Poster presented at Harrison School of Pharmacy Research Day: Auburn University, Auburn, AL. ***1st place presenter - Neuroscience Category**
19. **Hunsberger HC**, Wang D, Konat G, & Reed MN (2016 March). Elevated extracellular glutamate and enhanced synaptic transmission resulting from peripheral viral challenge. Poster presented at the Alzheimer's drug discovery foundation conference, Miami, FL. ***ADDF Young Investigator Scholarship winner**
20. **Hunsberger HC**, Weitner D, Rudy CC, & Reed MN (2015, June). Riluzole rescues glutamate alterations associated with Alzheimer's disease. Poster presented at the Regional Pharmacy Research Forum: West Virginia University, Morgantown, WV. ***1st place presenter - Neurodegeneration Category**
21. **Hunsberger HC**, Weitner DS, Rudy CC, & Reed MN (2015, March). Riluzole attenuates glutamate dysregulation and cognitive impairment associated with P301L Tau expression. Poster presented at the Alzheimer's drug discovery foundation conference, San Diego, CA. ***ADDF Young Investigator Scholarship winner**
22. **Hunsberger HC**, Weitner DS, Rudy CC, & Reed MN (2014, September). Riluzole reduces cognitive deficits and glutamate dysregulation in a mouse model of frontotemporal dementia and Alzheimer's disease. Poster presented at the Alzheimer's drug discovery foundation conference, Jersey City, NJ. ***ADDF Young Investigator Scholarship winner**
23. **Hunsberger HC**, Rudy CC, Weitner DS, & Reed MN (2014, July). Glutamate dysregulation correlates with memory deficits in a mouse model of Alzheimer's disease. Poster presented at the West Virginia University Neuroscience Retreat, Wheeling, WV. ***1st place in poster competition.**

Oral Presentations Peer-Selected

1. **Hunsberger HC**, Toennies L, Ferrara N (2024, January). Sex differences in cognitive decline, affective behaviors, and vCA1→BLA circuitry in AD mice after isolation. Panel talk for the Winter Conference on Brain Research, Breckenridge, CO. ***Panel Chair**
2. **Hunsberger HC**, Kaplan K (2023, January). The impact of benzodiazepines on contextual fear memory. Panel Chair and Presenter at the Winter Conference on Brain Research, Snowbird, UT. ***Panel Chair**

3. **Hunsberger HC**, Jin M, Logan R, Denny CA (2022, April). Sex-specific onset of sundowning behavior in an Alzheimer's mouse model. Panel talk Society of Biological Psychiatry, New Orleans, LA. ***Travel Award *Panel Chair**
4. **Hunsberger HC**, Jin M, Logan R, Denny CA (2022, January). Sex-specific onset of sundowning behavior in an Alzheimer's mouse model. Panel talk Winter Conference on Brain Research (WCBR), Snowmass, CO. ***Travel Award *Panel Chair**
5. **Hunsberger HC**, Lee S, Whye A, Jayaseelan K, Scarlata M, Cha J, Logan R, Denny CA (2021, June). The impact of anxiety, sleep, and sex on Alzheimer's disease progression. Oral and Poster presentation at the International Behavioral Neuroscience Society (IBNS), virtual.
6. **Hunsberger HC**, & Denny CA (2019, October). Prior life stress impacts late adulthood anxiety-like behavior in a sex-specific manner. Oral presentation at Society for Neuroscience, Chicago, IL. ***Invited to panel**
7. **Hunsberger HC** & Denny CA (2019, June). The impact of anxiety on female Alzheimer's disease progression. Data blitz presented at the RCCN's Sex Differences in Aging Workshop. ***Travel Award winner**
8. **Hunsberger HC** & Denny CA (2019, June). Sex, anxiety, and the hippocampus: Intersections in Alzheimer's disease. Data blitz presented at the Spring Hippocampal Research Conference, Taormina, Italy.
9. **Hunsberger HC** & Denny CA (2018, April). The sex specific impact of anxiety on Alzheimer's disease progression. Lightning talk presented at The International Learning and Memory Conference, Huntington Beach, CA. ***Travel Award**
10. **Hunsberger HC** (2015, November). Targeting glutamate to treat Alzheimer's disease. Auburn University 3-Minute Thesis Competition. ***Top visiting scholar finalist**
11. **Hunsberger HC** (2015, April). Glutamate's role in Alzheimer's disease. West Virginia University 3-Minute Thesis competition. ***Finalist and people's choice winner.**

Student Presentations

1. Kaplan K, Toennies L, **Hunsberger HC** (2026, April). Alprazolam impairs fear memory and dampens somatostatin interneuron activation in learning and memory circuits. Oral presentation at GLC-ASPET Webinar, Zoom.
2. Nguyen T, Toennies L, **Hunsberger HC** (2026, March). Optimizing fluorescent channel differentiation for neuronal analysis in QuPath. Poster presentation at the All School Research Consortium at RFU, North Chicago, IL.
3. Feshchenko A, **Hunsberger HC** (2026, March). Neuropsychiatric symptoms in AD: mapping anxiety-related circuitry in aging and AD mice. Poster presentation at the All School Research Consortium at RFU, North Chicago, IL.
4. Kaplan K, Toennies L, **Hunsberger HC** (2026, March). Alprazolam impairs fear memory and dampens somatostatin interneuron activation in learning and memory circuits. Poster presentation at the All School Research Consortium at RFU, North Chicago, IL.
5. Toennies L, Verma M, Kaplan K, Ferrara N, **Hunsberger HC** (2026, March). Hippocampal amygdalar

circuitry mediating AD cognitive and behavioral deficits after isolation. Poster presentation at the All School Research Consortium at RFU, North Chicago, IL.

6. Butler A, Kaplan K, Webber EK, Steinbrenner D, Gupta S, Toennies L, Stutzmann GE, **Hunsberger HC** (2026, March). CNS drugs targeting the neuropsychiatric and cognitive symptoms of Alzheimer's disease. Poster presentation Neurology Research Day, University of Toledo, OH. ***1st place poster winner**
7. Kaplan K, Toennies L, **Hunsberger HC** (2026, February). Alprazolam impairs fear memory and dampens somatostatin interneuron activation in learning and memory circuits. Oral presentation at Chicago Society for Neuroscience, University of Illinois Chicago, IL. ***Selected to represent Rosalind Franklin University in the Graduate Student Competition.**
8. Toennies L, Verma M, Kaplan K, Ferrara N, **Hunsberger HC** (2026, February). Hippocampal amygdalar circuitry mediating AD cognitive and behavioral deficits after isolation. Poster presentation at Chicago Society for Neuroscience, University of Illinois Chicago, IL.
9. Feshchenko A, **Hunsberger HC** (2026, February). Neuropsychiatric symptoms in AD: mapping anxiety-related circuitry in aging and AD mice. Poster presentation at Chicago Society for Neuroscience, University of Illinois Chicago, IL.
10. Feshchenko A, **Hunsberger HC** (2025, October). Neuropsychiatric symptoms in AD: mapping anxiety-related circuitry in aging and AD mice. Poster presentation at BSI Retreat, Rosalind Franklin University, North Chicago, IL.
11. Toennies L, Verma M, Kaplan K, Ferrara N, **Hunsberger HC** (2025, October). Sex differences in memory retention and social behaviors after social isolation in AD mice. Poster presentation BSI retreat, RFU.
12. Feshchenko A, **Hunsberger HC** (2025, August). Neuropsychiatric symptoms in AD: mapping anxiety-related circuitry in aging and AD mice. Poster presentation at UC Irvine The Changing Brain, Irvine CA.
13. Kaplan K, Toennies L, **Hunsberger HC** (2025, June). Alprazolam impairs fear memory and alters engram activation in the dCA3 of female mice. Poster presentation at the American Society for Pharmacology and Experimental Therapeutics (ASPET), Northwestern University.
14. Kaplan K, Toennies L, **Hunsberger HC** (2025, March). Alprazolam impairs fear memory and alters engram activation in the dCA3 of female mice. Poster presentation at the Chicago Society for Neuroscience, Northwestern University. ***1st place graduate student poster winner**
15. Arias P, **Hunsberger HC** (2025, March). The impact of pregnancy on mood, cognition, and microglia function in Alzheimer's disease mice. Poster presentation at the Chicago Society for Neuroscience, Northwestern University.
16. Kaplan K, Toennies L, **Hunsberger HC** (2025, March). Alprazolam impairs fear memory and alters engram activation in the dCA3 of female mice. Oral presentation at the All School Research Consortium at RFU, North Chicago, IL.
17. Arias P, **Hunsberger HC** (2024, November). The impact of pregnancy on mood, cognition, and microglia function in Alzheimer's disease mice. Poster presentation at Lake Forest College, North Chicago, IL.
18. Rahimi T, **Hunsberger HC** (2024, November). The impact of VCD-induced menopause on Alzheimer's

Disease mice. Poster presentation at Lake Forest College, North Chicago, IL.

19. Mendez J, Toennies LT, Ferrara N, **Hunsberger HC** (2024, November). Impact of social isolation on memory retention, social behaviors, and brain region changes: Sex differences in Alzheimer's disease mice. Poster presentation at Lake Forest College, North Chicago, IL.
20. Kaplan K, Toennies L, **Hunsberger HC** (2024, November). Alprazolam impairs fear memory and alters dorsoventral CA1 neuronal ensembles in female mice. Poster presentation BSI retreat, RFU. ***1st place basic science poster winner**
21. Toennies L, Verma M, Kaplan K, Ferrara N, **Hunsberger HC** (2024, November). Sex differences in memory retention and social behaviors after social isolation in AD mice. Poster presentation BSI retreat, RFU.
22. Toennies L, Verma M, Kaplan K, Ferrara N, **Hunsberger HC** (2024, October). Sex differences in memory retention and social behaviors after social isolation in AD mice. Poster presentation Society for Neuroscience, Chicago, IL
23. Kaplan K, Toennies L, **Hunsberger HC** (2024, October). Alprazolam impairs fear memory and alters dorsoventral CA1 neuronal ensembles in female mice. Poster presentation Society for Neuroscience, Chicago, IL
24. Arias P, **Hunsberger HC** (2024, October). The impact of pregnancy on mood, cognition, and microglia function in Alzheimer's disease mice. Poster presentation Society for Neuroscience, Chicago, IL
25. Toennies L, Kaplan K, Ferrara N, **Hunsberger HC** (2024, September). Sex differences in memory retention and social behaviors after social isolation in AD mice. Poster presentation Society for Behavioral Neuroendocrinology, Virtual.
26. Webber EK, Steinbrenner D, Toennies LB, Stutzmann GE, **Hunsberger HC** (June 2024). Using psilocybin to treat Alzheimer's Disease Neuropsychiatric symptoms and cognitive decline. Poster presentation ASPET, North Chicago, IL. ***1st place poster winner**
27. Toennies L, Verma M, Kaplan K, Ferrara N, **Hunsberger HC** (2024, June). Sex differences in memory retention and social behaviors after social isolation in AD mice. Poster presentation at ASPET, North Chicago, IL.
28. Kaplan K, Toennies L, **Hunsberger HC** (2024, June). Alprazolam impairs fear memory and alters dorsoventral CA1 neuronal ensembles in female mice. Poster presentation ASPET, North Chicago, IL. ***3rd place poster winner**
29. Toennies L, Verma M, Kaplan K, Ferrara N, **Hunsberger HC** (2024, March). Sex differences in memory retention and social behaviors after social isolation in AD mice. Poster presentation at the All School Research Consortium at RFU, North Chicago, IL.
30. Kaplan K, Toennies L, **Hunsberger HC** (2024, March). Alprazolam impairs fear memory and alters dorsoventral CA1 neuronal ensembles in female mice. Poster presentation at the All School Research Consortium at RFU, North Chicago, IL.
31. Mody J, **Hunsberger HC** (2023, December). Cognitive training to enhance cognitive reserve in a Tau mouse model of Alzheimer's disease. Poster presentation at the Summer Research Poster Session (Chicago Medical School), North Chicago, IL.

32. Arias P, **Hunsberger HC** (2023, September). The impact of pregnancy on mood, cognition, and microglia function in Alzheimer's disease mice. Poster presentation at Lake Forest College, Lake Forest, IL.
33. Beishembieva N, Kaplan K, Toennies L, **Hunsberger HC** (2023, September). Alprazolam impairs fear memory and alters dorsoventral CA1 neuronal ensembles in female mice. Poster presentation at Lake Forest College, Lake Forest, IL.
34. Verma M, Toennies L, Ferrara N, Kaplan K, **Hunsberger HC** (2023, September). Sex differences in cognitive decline and affective behaviors in AD mice after isolation. Poster presentation at Lake Forest College, Lake Forest, IL.
35. Verma M, Toennies L, Ferrara N, Kaplan K, **Hunsberger HC** (2023, September). Sex differences in cognitive decline and affective behaviors in AD mice after isolation. Poster presentation at Pavlovian Society, Austin, TX.
36. Kaplan K, Toennies L, **Hunsberger HC** (2023 September). The impact of benzodiazepines on contextual fear memory. Poster presentation at Pavlovian Society, Austin, TX.
37. Kaplan K, Toennies L, **Hunsberger HC** (2023 May). The impact of benzodiazepines on contextual fear memory. Data blitz at the Spring Hippocampal conference, Verona, Italy.
38. Kaplan K, Toennies L, **Hunsberger HC** (2023 May). The impact of benzodiazepines on contextual fear memory. Poster presentation at the VA Research Week, Lovell Federal Healthcare Center, North Chicago, IL.
39. Kaplan K, Toennies L, **Hunsberger HC** (April 2023). The impact of benzodiazepines on contextual fear memory. Oral presentation at Memory Messabout, Loyola University, Chicago, IL.
40. Kaplan K, Toennies L, **Hunsberger HC** (2023, April). The impact of benzodiazepines on contextual fear memory. Poster presentation at the Chicago SfN Chapter, Loyola University, Chicago, IL.
41. Kaplan K, Toennies L, **Hunsberger HC** (2023, April). The impact of benzodiazepines on contextual fear memory. Poster presentation at the All School Research Consortium at RFU, North Chicago, IL.
42. Kaplan K, Toennies L, **Hunsberger HC** (2022, September). Benzodiazepines impact contextual fear memory. Poster presentation at Pavlovian Society, Milwaukee, WI.

14. Invited Oral Presentations at Regional, National or International Levels

Regional

1. **Hunsberger HC** (2026, February). Panelist and Speaker for BioInnovations Series Topic: Women in Biotech, Rosalind Franklin University, North Chicago, IL. ***Invited Talk**
2. **Hunsberger HC** (2025, December). Panelist and Presenter Health Equity Breakfast, Rosalind Franklin University, North Chicago, IL. ***Invited Talk**
3. **Hunsberger HC** (2024, November). Sex, drugs, and environment: understanding part of the Alzheimer's disease exposome, Northwestern University, Downers Grove, IL. ***Invited Talk**
4. **Hunsberger HC** (2024, November). Understanding the Alzheimer's disease exposome, Brain Science Institute Retreat Panel, North Chicago, IL. ***Invited Talk**

5. **Hunsberger HC** (2024, May). Alzheimer's Prevention Day. Rosalind Franklin University, North Chicago, IL. ***Invited Talk**
6. **Hunsberger HC** (2024, April). Panelist for RFU's BioInnovation Series, Topic: Protecting your IP.
7. **Hunsberger HC** (2023, October). Using anxiety as a neuropsychiatric predictor in men and women. Invited speaker for Grand Rounds Chicago Medical School, North Chicago, IL. ***Invited Talk**
8. **Hunsberger HC** (2023, February). Sex, drugs, and anxiety: Uncovering sex differences throughout aging and Alzheimer's disease. Neuroscience Seminar Purdue University, West Lafayette, IN. ***Invited Talk**
9. **Hunsberger HC** (2022, October). Sex differences in aging and Alzheimer's disease. Biomedical Innovation Research Day. Rosalind Franklin University, North Chicago, IL. ***Invited Talk**
10. **Hunsberger HC**, Jin M, Logan R, Denny CA (2022, October). Circadian disturbances in Alzheimer's disease: Imaging insights into the vCA1. Chicago UGM Inscopix data blitz, Chicago, IL. ***Invited Talk**
11. **Hunsberger HC**, Lee S, Whye A, Jayaseelan K, Scarlata M, Cha J, Jin M, Logan R, Denny CA (2022, March). Uncovering the roles of sex, anxiety, and sleep in Alzheimer's disease progression. Innovative Research Seminar Series, Rosalind Franklin University, North Chicago. ***Invited Talk**
12. **Hunsberger HC**, Jin M, Logan R, Denny CA (2022, February). Sex-specific onset of sundowning behavior in an Alzheimer's mouse model. AAIC Neuropsychiatric Symptoms PIA, Zoom. ***Invited Talk**
13. **Hunsberger HC**, Jin M, Logan R, Denny CA (2022, February). Sex-specific onset of sundowning behavior in an Alzheimer's mouse model. Dr. Alex Leow Laboratory Meeting, Zoom. ***Invited Talk**
14. **Hunsberger HC**, Lee S, Whye A, Jayaseelan K, Scarlata M, Cha J, Logan R, Denny CA (2021, January). The impact of anxiety on Alzheimer's disease progression: Of mice and (Wo)men. Oral presentation at Systems Neuroscience Seminar Series, Columbia University, Zoom. ***Invited Talk**
15. **Hunsberger HC**, Lee S, Cha J, Denny CA (2020, September). The sex-specific impact of anxiety on Alzheimer's disease progression. Zuckerman Institute Postdoctoral Seminar (ZIPS), Columbia University, Zoom. ***Invited Talk**
16. **Hunsberger HC**, Lee S, Cha J, Denny CA (2020, August). The sex-specific impact of anxiety on Alzheimer's disease progression. Boston College, Zoom. ***Invited Talk**
17. **Hunsberger HC**, Lee S, Cha J, Denny CA (2020, June). The sex-specific impact of anxiety on Alzheimer's disease progression. Oral presentation at Hippocampus Club, virtual. ***Invited Talk**
18. **Hunsberger HC**, Lee S, Cha J, Denny CA (2019, October). Of mice and (wo)men: the sex-specific impact of anxiety on Alzheimer's disease progression. Talk for the Columbia University Cognitive Neuroscience seminar series. ***Invited Talk**
19. **Hunsberger HC** (2017, July). Sex differences in Alzheimer's disease: Using optogenetics and neurochemical assays to rescue cognitive decline. Talk given at the Columbia University Postdoctoral Seminar Series, New York, NY. ***Invited Talk**

National

1. **Hunsberger HC** (2024, August). Neuropsychiatric symptoms in Alzheimer's disease: Insights from Female mice and Women. American Psychological Association, Seattle, Washington. ***Invited Talk**

2. **Hunsberger HC** (2024, February). Alzheimer's disease progression in men and women: In vivo calcium imaging reveals sex differences in ventral hippocampal activity in Alzheimer's disease mice. Invited speaker for the International Neuropsychological Society, New York City, New York. ***Invited Talk**
3. **Hunsberger HC** (2024, January). Sex-specific circuit changes in Alzheimer's disease progression. Invited speaker for Neurobiology on Learning and Memory conference, Park City, Utah. ***Invited Talk**
4. **Hunsberger HC, Lee S, Cha J, Denny CA** (2020, May). The sex-specific impact of anxiety on Alzheimer's disease progression. Oral presentation at Alzheimer Afternoons, virtual. ***Invited Talk**
5. **Hunsberger HC & Denny CA** (2019, May). Anxiety impacts cognitive decline in a sex-specific manner in Alzheimer's disease mice. Panel talk presented at the Organization for the Study of Sex Differences Conference, Washington, DC. ***Invited talk**
6. **Hunsberger HC & Denny CA** (2018, October). Anxiety predicts cognitive decline in a sex-specific manner in Alzheimer's disease mice. Panel speaker at The Pavlovian Society Conference, Iowa City, IA. ***Invited talk**
7. **Hunsberger HC** (2017, October). Sex differences in Alzheimer's disease: Using optogenetics and neurochemical assays to rescue cognitive decline. Poster presented at the Sex as a Biological Variable Workshop, Bethesda, MD. ***Invited presentation**

International

1. **Hunsberger HC** (2025, September). Sex, anxiolytics, and psychosocial stress: Vulnerabilities to aging and Alzheimer's disease. Women's Health Research Cluster, Virtual (based out of Canada). ***Invited Talk**
2. **Hunsberger HC, Lee S, Whye A, Jayaseelan K, Scarlata M, Cha J, Denny CA** (2021, October). The sex-specific effect of anxiety on Alzheimer's disease progression. Oral presentation at the Sex and Gender Differences Personal Interest Area (PIA) for AAIC, virtual. ***Invited Talk**
3. **Hunsberger HC, Lee S, Whye A, Jayaseelan K, Scarlata M, Cha J, Denny CA** (2021, September). The sex-specific effect of anxiety on Alzheimer's disease progression. Oral presentation at the Neuropsychiatric Syndromes Personal Interest Area (PIA) for AAIC, virtual. ***Invited Talk**