

Deborah Ho, M.S.

Ph.D. Student
Department of Psychology, Emory University
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RESEARCH INTERESTS

animal behavior, evolution, behavioral neuroscience, social behavior, animal personality, neuroethology

EDUCATION

Ph.D. in Psychology | Advisor: Dr. Aubrey Kelly
Behavior and Systems Neuroscience (BSN) concentration
Emory University, Atlanta, GA
Aug 2022 - present

M.S. in Psychology | Advisor: Dr. Ben Dantzer
Biopsychology area
University of Michigan, Ann Arbor, MI
Apr 2022

B.S. in Psychology (High Honors) and Neuroscience
University of Michigan, Ann Arbor, MI
May 2021

AWARDS AND HONORS

Broadening Participation Award, \$500
Society for Integrative & Comparative Biology
2022

James B. Angell Scholar
University of Michigan
Winter 2021, Fall 2020

University Honors
University of Michigan
Winter 2021, Fall 2020

Thesis Research Funding Award, \$200
Department of Psychology, University of Michigan
2020

RESEARCH EXPERIENCE

Comparative Social Neuroscience Lab | PI: Dr. Aubrey Kelly
Ph.D. Student
Emory University, Atlanta, GA
Aug 2022 - present

- Conducting experiments to examine the neural mechanisms underlying social behavior in the highly colonial spiny mouse (*Acomys cahirinus*)

Dantzer Lab | PI: Dr. Ben Dantzer

May 2021 – Apr 2022

Accelerated Master's Degree Program (AMDP) Student

University of Michigan, Ann Arbor, MI

- Completed a Master's thesis in Psychology: *Does maternal care induce adaptive plasticity effects on offspring behavioral traits in wild North American red squirrels (Tamiasciurus hudsonicus)?*
- Transcribed maternal attentiveness data from field notes to the database
- Scored video recordings of squirrels undergoing behavioral assays
- Mentored new lab members on behavioral scoring
- Contributed to refining and improving behavioral observation protocol

Undergraduate Research Assistant

Jan 2020 – May 2021

Mentor: Dr. Matt Gaidica

- Completed an Honors thesis in Psychology (awarded High Honors): *Developing a Data Analysis Pipeline for Novel Bio-logging Tools*
- Assisted in testing and developing a data analysis pipeline for custom bio-logger devices (for neural recordings from free-living animals)
- Spearheaded the development of a custom-made, 3D-printed peanut dispenser

PUBLICATIONS

Ho, D., Martinig, A., McAdam, A., Boutin, S., Lane, J., and Dantzer, B. Are the fitness benefits of animal personality traits affected by conspecific density? In prep for *Biology Letters*.

Fricker, B., **Ho, D.,** Seifert, A., and Kelly, A. Biased brain and behavioral responses in a communally breeding species. Under review at *Nature's Scientific Reports*

Ho, D., Gaidica, M. and Dantzer, B., 2021. Developing a data analysis pipeline for novel bio-logging tools. [online] Available at:

<<http://deepblue.lib.umich.edu/bitstream/2027.42/169389/1/debho.pdf>>. *University of Michigan Deep Blue*.

PRESENTATIONS

Ho, D., Curley, J., and Kelly, A., 2023. Neural correlates of behavior during novel large group interactions in the highly social spiny mouse (*Acomys cahirinus*). Presenter at Neuroscience 2023. Washington, DC. (*Poster, expected Nov 2023*)

Gaidica, M., **Ho, D.**, and Dantzer, B., 2021. Evolutionary Trade-offs of the Squirrel's 'Super Sleeper' Phenotype. Co-presenter at Society for Integrative and Comparative Biology 2022. Virtual.

Ho, D., Gaidica, M., and Dantzer, B., 2021. Developing a data analysis pipeline for novel bio-logging tools. Presenter at the University of Michigan Virtual Psychology Undergraduate Research Forum 2021. Ann Arbor, MI. (*Poster*)

TEACHING EXPERIENCE

PSYC 200W - Lab in Experimental Methods Fall 2023
Lab Instructor
 Emory University, Atlanta, GA

PSYC 110 - Intro Psych I: Psychobiology & Cognition Spring 2023
Guest Lecturer | Topic: Personality in Animals
 Emory University, Atlanta, GA

PSYCH 111 - Intro to Psychology Winter 2022
Graduate Student Instructor (GSI)
 University of Michigan, Ann Arbor, MI

PROFESSIONAL MEMBERSHIPS

Society for Neuroscience Jun 2023 - present
Graduate Student Member

Society for Behavioral Neuroendocrinology Sep 2022 - present
Student Member

Society for Integrative & Comparative Neuroscience Nov 2021 - present
Student Member

SKILLS

Laboratory techniques: animal handling and husbandry, perfusion, cryosectioning, behavioral scoring, immunohistochemistry, tissue mounting, fluorescence microscopy

Software and programming: R/RStudio, SPSS, Python, MATLAB, C++, Behavioral Observation Research Interactive Software (BORIS), TRex, ImageJ, Adobe Photoshop, Adobe Illustrator, Adobe Premiere

Statistics: t-tests, ANOVA, linear modeling, principal component analysis, social network analysis

Languages: English (native), Mandarin (proficient)