

Elizabeth Gaillard

egaillard@uchicago.edu · (201) 249-1242
5848 S University Avenue · Chicago IL 60637

EDUCATION

Hamilton College, Bachelor of Arts — Clinton, NY **May 2023**

Major: Neuroscience, **Minor:** Literature, **GPA:** 3.9, *magna cum laude*

Honors Thesis: The Role of Parasympathetic Activation in Affective Perception: An Attentional Mechanism

Relevant Coursework: Stress and Psychophysiology · Systems Neuroscience · Cellular Neurobiology · Human Neuroscience · Health Psychology · Statistics and Research Methods

Objective: Prospective graduate student with strong foundation in neuroscience seeking to apply communication skills and knowledge of experimental methods to research on stress and evaluative processing.

RESEARCH EXPERIENCE

Environmental Neuroscience Laboratory, The University of Chicago Chicago, IL
Lab Manager and Research Assistant **August 2023 - Present**

- Conduct comparative analysis of image preference ratings collected through diverse methods, identifying limitations and proposing refinements in collaboration with team members to enhance future data collection for method comparison
- Construct and implement large-scale data collection and perform advanced statistical analysis in RStudio to investigate relationships among neighborhood factors, life expectancy, and delay discounting
- Contribute to collection and pre-processing of Functional Near-Infrared Spectroscopy (fNIRS) data from children aged 8-10 years old in order to examine the role of gesture in ability to learn math equivalency problems
- Facilitate daily lab functioning by procuring equipment, amending IRB protocols, reviewing grants, and organizing lab meetings aimed at optimizing data management and project documentation

Learning Laboratory, Hamilton College Clinton, NY
Research Assistant **May 2022 - May 2023**

- Recruited, tested, and debriefed over 50 participants in order to examine the effect of task complexity on implicit and explicit processes involved in human motor learning
- Standardized experimenter script and procedures, implementing pilot feedback to refine protocols
- Met regularly with Principal Investigator to discuss status of the project and outline goals

Systems Neuroscience Laboratory, Hamilton College Clinton, NY
Laboratory Student **August 2022 - December 2022**

- Performed stereotactic surgery on rats to unilaterally increase activation of the dopaminergic nigrostriatal pathway via infusion of a Cre-dependent chemogenetic system
- Perfused rats and used fluorescent microscopy to examine procedure effectiveness

Affective Neuroscience Laboratory, Hamilton College Clinton, NY
Research Assistant **August 2021 - August 2022**

- Cleaned electrocardiogram data to extract high-frequency heart rate variability using MindWare Technology software
- Developed and piloted experimental stimuli via EPrime Studio version 3, Qualtrics, and Inquisit to be used in faculty research pertaining to emotion perception

WRITING & COMMUNICATION EXPERIENCE

Nesbitt-Johnson Writing Center, Hamilton College
Peer Tutor

Clinton, NY
August 2020 - May 2023

- Read and edited 6 drafts of peer writing per week in preparation for individual consultation
- Collaborated with students on scientific and other written work to improve development of ideas/argument and generate clear, concise communication
- Planned and implemented workshops targeted at improving lab report writing skills and knowledge of APA format for Introductory Psychology students

Community Outreach Fellowship, The Parkway Center
Hamilton College COOP Intern

Utica, NY
August 2020 - May 2023

- Assisted with development of community programming and exercise initiatives for senior citizens to improve social relations and bring awareness to health and safety

POSTER PRESENTATIONS

Gaillard, E. P., Smith, K. E., Restrepo, A., Ye, Z., Norman, G. J., & Faig, K. E. (2023, September 27 - October 1). *Depression, resting parasympathetic activity, and evaluative responses* [Poster Presentation]. Annual Meeting of the Society for Psychophysiological Research, New Orleans, Louisiana, USA.

Bejjanki, V. R., **Gaillard, E.**, Taliaferro, M., & Taylor, J. (2023, July 26-29). *Explicit strategies for sensorimotor learning depend on task complexity* [Poster Presentation]. Proceedings of the Annual Meeting of the Cognitive Science Society, Darling Harbour, Sydney, Australia.

AWARDS

The Senior Prize in Neuroscience

May 2023

Awarded to the graduating concentrator with the most outstanding performance in the neuroscience program.

Sigma Xi Honor Society (Hamilton Chapter)

May 2023

Membership in Sigma Xi honors commitment to and excellence in scientific investigation as well as a present desire to attend graduate school in an area of scientific research.

Research Fellowship, *Sergei S. Zlinkoff Student Medical Research Fund*

June 2022

This award provides research support for pre-medical students or for students engaged in research related to the field of medicine.

Psi Chi Honor Society (Hamilton Chapter)

March 2022

Membership in Psi Chi, the International Honor Society in Psychology, is awarded to concentrators in Psychology or Neuroscience who have achieved a minimum 3.5 GPA in at least four Psychology courses and are in the top 1/3rd of their graduating class.

SKILLS

- **Programming Languages:** RStudio, MATLAB (Psychtoolbox), Python
- **Neuroimaging and Physiological Recording Methods:** Functional Near-Infrared Spectroscopy (fNIRS), Electrocardiogram (EKG)
- **Experimental Design and Analysis:** Qualtrics, Inquisit, EPrime, SPSS
- **Experimental Implementation:** Amazon Mechanical Turk, Prolific, CloudResearch, SONA Systems