

Abigail Hsiung

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LSRC B353

Durham, NC 27704

EDUCATION

2023 (expected)	Duke University, Durham, NC 27704 PhD, Psychology & Neuroscience, Cognitive Neuroscience Advisors: R. Alison Adcock, MD, PhD & Scott Huettel, PhD Committee Members: R. John Pearson, PhD & Tobias Egner, PhD
2015	University of Maryland, College Park, MD 20740 B.S., Psychology, <i>magna cum laude</i> Research Mentor: Tracy Riggins, PhD B.S., Kinesiology, <i>summa cum laude</i> Research Mentor: Bradley Hatfield, PhD

RESEARCH EXPERIENCE

2015 - 2017	National Institutes of Mental Health, Bethesda, MD 20817 Post-bac IRTA Fellow, Section on Neurobiology of Fear & Anxiety Principal Investigators: Christian Grillon, PhD, Monique Ernst, MD, PhD
2012 - 2015	University of Maryland, College Park, MD, 20740 Research Assistant, Neurocognitive Development Lab Principal Investigator: Tracy Riggins, PhD
2013 - 2015	University of Maryland, College Park, MD, 20740 Research Assistant, Cognitive Motor Neuroscience Lab Principal Investigator: Bradley Hatfield, PhD

HONORS & AWARDS

2021	Vertical Integration Program Mentor, Duke University
2018	Graduate Travel Award, Charles Lafitte Foundation
2018	Honorable Mention, Graduate Research Fellowship Program, National Science Foundation
2017	Chancellor's Scholarship, Duke University
2015	Intramural Training Research Award, National Institutes of Health

2015 Undergraduate Research Award, University of Maryland
2015 Outstanding Psychology Research Award, University of Maryland

GRANTS AND FELLOWSHIPS

2021 Undergraduate Mentorship Grant, Charles Lafitte Foundation
2020 Special Topics COVID-19 Research Grant, Charles Lafitte Foundation
2018 National Defense Science and Engineering Graduate Fellowship, DoD
2018 Graduate Research Grant, Charles Lafitte Foundation

PUBLICATIONS

1. Poh, J.-H., Vu, M.A. T., Stanek, J. K., **Hsiung, A.**, Egner, E., Adcock, R. A. (2021). Tuned to Learn: An anticipatory hippocampal convergence state conducive to memory formation revealed during midbrain activation. bioRxiv, doi: <https://doi.org/10.1101/2021.07.15.452391>.
2. Balderston, N. L., Flook, E., **Hsiung, A.**, Liu, J., Thongarong, A., Stahl, S., Makhoul, W., Sheline, Y., Ernst, M., & Grillon, C. (2020). Patients with anxiety disorders rely on bilateral dlPFC activation during verbal working memory. *Social Cognitive and Affective Neuroscience*, 15(12), 1288–1298.
3. Lago, T.R., **Hsiung, A.**, Leitner, B.P., Duckworth, C.J., Balderston, N.L., Chen, K.Y., Ernst, M. & Grillon, C. (2019). Exercise modulates the interaction between cognition and anxiety in humans. *Cognition and Emotion*, doi: 10.1080/02699931.2018.1500445.
4. **Hsiung, A.**, Hakimi, S., & Adcock, R. A. (2018) Unpacking the Different Flavors of Curiosity. *IEEE Cognitive and Developmental Systems (CDS) Newsletter*, 14(2), 10.
5. Lago, T.R., **Hsiung, A.**, Leitner, B.P., Duckworth, C.J., Chen, K.Y., Ernst, M. & Grillon, C. (2018). Exercise decreases defensive responses to unpredictable, but not predictable, threat. *Depression & Anxiety*, 35:868-875. DOI: 10.1002/da.22748
6. Balderston, N. L., **Hsiung, A.**, Ernst, M. & Grillon, C. (2017). The effect of threat on right dlPFC activity during behavioral pattern separation. *Journal of Neuroscience*. DOI: 10.1523/JNEUROSCI.0717-17.2017
7. Balderston, N. L., Hale, E., **Hsiung, A.**, Torrisi, S., Holroyd, T., Carver, F., Ernst, M. & Grillon, C. (2017). Threat of shock increases excitability and connectivity of the intraparietal cortex. *Elife*, 30, 6. DOI: 10.7554/eLife.23608.
8. Balderston, N. L., **Hsiung, A.**, Liu, J. Y.-T., Ernst, M. & Grillon, C. (2017). How to reduce state anxiety using working memory maintenance. *Journal of Visualized Experiments*, 125. DOI: 10.3791/55727

MANUSCRIPTS IN PREP

Hsiung, A., Poh, J. H., Hakimi, S., Adcock, R. A., Pearson, J. M., Huettel, S. A. (*submitted*). Between heuristics and optimality: Information sampling strategies use flexible criteria but remain non-optimal even under incentives

Hsiung, A., Poh, J. H., Eom, K., Dickerson, K., Huettel, S. A., Adcock, R. A. (*in prep*). Curiosity predicts suspending uncertainty during continuous information gathering.

SELECTED PRESENTATIONS

** indicates undergraduate research mentee*

A. Hsiung, K. Eom, J.-H. Poh, A. Khan*, B. Nieves, S. A. Huettel, R. A. Adcock (2021). Wait wait, Don't tell me! When curiosity prioritizes the information gathering process over the outcome—Poster, Presented at the Society for Neuroeconomics Annual Meeting, virtual.

P. Athimuthu*, **A. Hsiung**, S. A. Huettel (2021). Information Seeking as a function of Aesthetic Properties—Poster, Presented at the Vertical Integration Program Commencement, Duke University, virtual.

A. Hsiung, K. Eom, A. Khan*, B. Nieves, S. A. Huettel, K. Dickerson, R. A. Adcock (2021). Wait wait, Don't tell me! Curiosity is sensitive to changes in uncertainty and impacts information seeking choices—Poster, Presented at the Cognitive Neuroscience Society Annual Meeting, virtual.

A. Hsiung, A. Khan*, B. Nieves, S. A. Huettel, K. Dickerson, R. A. Adcock (2019). Characterizing the Determinants of Curiosity—Poster, Presented at the Association for Psychological Sciences Annual Convention 2019, Washington, D.C.

J. E. Seo*, **A. Hsiung**, A. H. Sinclair, R. A. Adcock (2019). Characterizing the Interactions Amongst Curiosity, Engagement, and Memory—Poster, Presented at the Biological Sciences Undergraduate Research Fellowship Commencement, Duke University, Durham, NC.

A. Hsiung, R. A. Adcock, J. M. Pearson, S. A. Huettel (2018). The effects of evidence accumulation on incidental memory—Poster, Presented at the Society for Neuroeconomics Annual Meeting, Philadelphia, PA.

A. Hsiung, B. P. Leitner, T. Lago, C. Duckworth, K. Chen, C. Grillon, & M. Ernst (2017). Acute moderate exercise improves working memory efficiency in humans—Poster, Presented at American College of Sports Medicine Annual Meeting, Denver, CO.

A. Hsiung, N. L. Balderston, M. Ernst, & C. Grillon (2016). Anxiety enhances right dorsolateral prefrontal cortex activity during retrieval in behavioral pattern separation paradigm—Poster, Presented at Society for Neuroscience Annual Meeting, San Diego, CA.

A. Hsiung, N. L. Balderston, E. Hale, S. Torrisi, K. O'Connell, M. Ernst & C. Grillon, (2015). Threat of shock affects resting state brain connectivity—Poster, Presented at National Institute of Mental Health Scientific Training Day, Bethesda, MD.

A. Hsiung, M. Sundel, S. Blankenship, L. Marti, E. Mulligan, & T. Riggins, (2015). The effects of emotional valence and arousal on item and source memory across development—Poster,

Presented at the 2015 Society for Research on Child Development Biennial Meeting, Philadelphia, PA.

A. Hsiung, K. Jaquess, L. C. Lo, H. Oh, Y. Tan, C. Domingues, R. Gentili, & B. Hatfield, (2015). EEG and ERP evidence in determining cognitive load and its effects on motor performance—Poster, Presented at University of Maryland’s Public Health Research Day, College Park, MD.

TEACHING

2021	Instructor, Introduction to Computer Programming for Experimental Design Cognitive Neuroscience Research Internship, Duke University
2021	Guest Lecturer, “Curiosity, Information Seeking, And Affective States” Cognitive Neuroscience Research Internship, Duke University
2021	Instructor, Introduction to Python Programming Cognitive Neuroscience Research Internship, Duke University
2020	Teaching Assistant, Fundamentals of Decision Sciences Department of Psychology & Neuroscience, Duke University
2020	Teaching Assistant, Psychology Honors Thesis Workshop Department of Psychology & Neuroscience, Duke University
2019	Teaching Assistant, Biological Basis of Behavior Department of Psychology & Neuroscience, Duke University

CONTRIBUTIONS SUPPORTING EQUITY, DIVERSITY, & INCLUSION

2021 - Present	Leadership Board, Scientists Promoting Equity and Knowledge (SPEAK) Center for Cognitive Neuroscience, Duke University
2020 - Present	Founder, Cognitive Neuroscience Research Internship (CNRI) Department of Psychology & Neuroscience, Duke University
2018 - 2019	Project Mentor, the BOOST Program Duke University

PROFESSIONAL AFFILIATIONS

Society for Neuroscience
Association for Psychological Science
Society for Neuroeconomics
Cognitive Neuroscience Society