

HARINI BABU
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Department of Psychology
University of Michigan
530 Church Street
Ann Arbor, MI 48109

EDUCATION

M.S., Psychology

Expected Graduation: May 2023

The University of Michigan

Advisor: Dr. Patricia Reuter-Lorenz

M.A., Bioethics and Medical Humanities

Case Western Reserve University

Graduation: May 2021

B.S., Psychology, Neuroscience Option

Minors: (1) Bioethics and Medical Humanities; (2) Biology

The Pennsylvania State University

Graduation: May 2020

RESEARCH EXPERIENCE

Graduate Research Experience

Department of Bioethics, Case Western Reserve University

Cleveland, OH

Seed Sprint Research Assistant

November 2020 – July 2021

- Provide support in study designs and tools (e.g., questionnaires, interview guide, qualitative methods)
- Develop visual presentations summarizing key findings to be presented in conferences
- Compose annotated bibliography and maintain literature database

Departmental Research Assistant

August 2020 – May 2021

- Collaborate in various student-led outreach programs to facilitate student engagement
- Provide research support by conducting literature reviews in various bioethical projects
- Communicate with graduate professors on bioethical projects on topics ranging from: surrogacy, organ donation, and consent.

Undergraduate Research Experience

Department of Psychology, Pennsylvania State University

University Park, PA

Cognitive, Aging, and Neuroscience Laboratory of Dr. Nancy Dennis

Research Assistant

January 2017 - May 2020

- Recruited and tested both older and younger adults in behavioral and neuroimaging studies designed to assess memory functioning
- Supervised and mentored a team of research assistants to collect and analyze data for associative memory studies for both younger and older adults
- Provided general support in study design and stimuli development (e.g., experimental piloting, provided feedback for design improvements)
- Programming of behavioral studies using E-Prime

- Responsible for collecting, pre-processing, and analyzing fMRI data using FSL and R-Studio
- Coordinated data collection in several projects on site at Penn State, and liaised with team members at Elon University (NC) to conduct follow up analyses
- Developed research papers and posters for publication based on experimental results and analysis

Projects included (but not limited to):

- Project 1: *The effect of Gestalt psychology on associative memory in older and younger adults*
- Project 2: *The effect of directed forgetting on memory*
- Project 3: *The effect of stimuli properties on associative memory*

PUBLICATIONS

- Gerver, C. R., Overman, A. A., **Babu, H. J.**, Hultman, C. E., & Dennis, N. A. (2020). Examining the Neural Basis of Congruent and Incongruent Configural Contexts during Associative Retrieval. *Journal of Cognitive Neuroscience*, 1-17. <https://doi.org/10.1162/jocn.a.01593>.
- Kurkela, K. A., Carpenter, C. M., **Babu, H.**, Chamberlain, J. D., Allen, C., & Dennis, N. A. (2021). The effect of memory cue duration on performance in the directed forgetting task in healthy aging. *Neuropsychology, development, and cognition. Section B, Aging, neuropsychology and cognition*, 1–22. Advance online publication. <https://doi.org/10.1080/13825585.2021.1942427>

IN PREP/UNDER REVIEW PUBLICATIONS

- Webb, C. E., Carpenter, C., **Babu, H.J.**, Overman, A. A., & Dennis, N. A. (in prep). Interference from contextual similarity negatively affects associative memory performance across age.

POSTER PRESENTATIONS

- **Babu, H.J** (Presenter)., Carpenter, C., Webb, C. E., Overman, A. A., & Dennis, N. A. (2020). Contextual interference negatively impacts associative memory across age. *Poster to be presented at the 2020 Psi Chi Undergraduate Research Conference, University Park, PA. *canceled due to COVID-2019.*
- Carpenter, C.M., **Babu, H.J.**, Kurkela, K. A., & Dennis, N.A. (2020). The effect of memory cue duration on directed forgetting performance in healthy aging. *Poster to be presented at the 2020 Psi Chi Undergraduate Research Conference, University Park, PA. *canceled due to COVID-2019.*
- **Babu, H.J** (Presenter)., Carpenter, C., Webb, C. E., Overman, A. A., & Dennis, N. A. (2020). Contextual interference negatively impacts associative memory across age. *Poster to be presented at the 2020 Undergraduate Exhibition, University Park, PA. *canceled due to COVID-2019.*
- Carpenter, C.M., **Babu, H.J.**, Kurkela, K. A., & Dennis, N.A. (2020). The effect of memory cue duration on directed forgetting performance in healthy aging. *Poster to be presented at the 2020 Undergraduate Exhibition, University Park, PA. *canceled due to COVID-2019.*
- **Babu, H.J** (Presenter)., Carpenter, C., Webb, C. E., Overman, A. A., & Dennis, N. A. (2020). Contextual interference negatively impacts associative memory across age. *Poster to be presented at the 2020 Cognitive Aging Conference, Atlanta, GA. *canceled due to COVID-2019.*

- Carpenter, C.M., **Babu, H.J.**, Kurkela, K. A., & Dennis, N.A. (2020). The effect of memory cue duration on directed forgetting performance in healthy aging. *Poster to be presented at the 2020 Cognitive Aging Conference, Atlanta, GA. *canceled due to COVID-2019.*
- Gray, C. R., Chamberlain, J. D., McGraw, K. E., **Babu, H.J.**, Overman, A. A., & Dennis, N. A. (2020). The Influence of Memory Performance on Neural Representations Supporting Associative Retrieval. *Presented at the Cognitive Neuroscience Society Annual Meeting, San Francisco, CA.*
- **Babu, H.J** (Presenter)., Wong, J., & Pearson, N. (2019). Effect of MRgFUS treatment and cognitive rehabilitation on the cognitive decline of Alzheimer's patients. *Poster presented at the 2019 Psi Chi Undergraduate Research Conference, University Park, PA.*
- McCormick-Huhn, J. M., Gray, C. R., Iriondo, **Babu, H.J.**, Richardson, H., & Dennis, N. A. (2018). Using Perceptual Manipulations as a New Approach for Promoting Unitization in Older Adults. *Presented at the 2018 Cognitive Aging Conference, Atlanta GA.*
- McCormick-Huhn, J. M., R., Iriondo, **Babu, H.J.**, Richardson, H., & Dennis, N. A (2017). Distinctiveness and Configuration of Stimuli Modify Associative Memory. *Presented at the 58th Annual Meeting of the Psychonomic Society, Vancouver, British Columbia, Canada.*

AWARDS AND SCHOLARSHIPS

Graduate

- (Research) Student Assistantship (\$5,000) 2020 – 2021

Undergraduate

- Dean's List (Seven Semesters) Fall 2016 to Fall 2017; Fall 2018 to Spring 2020
- Undergraduate Travel Award (\$100) 2020
- Mona Shibley Bird Memorial Scholarship (\$700) 2019
- Costello Family Scholarship in Psychology (\$530) 2019
- Liberal Arts Enrichment Funding (\$7,907) 2017-2019
- Student Engagement Network Grant (\$1,000) Summer 2018
- Segal AmeriCorps Education Award (\$1,222) 2017

TUTORING

Penn State Learning

University Park, PA

Guided Study Group, Supporting Chemistry 110 (Biology Section)

August 2018-May 2020

- Provided and created concept review slides and practice problems for students currently taking Chemistry 110
- Instructed students in weekly review sessions as well as exam review sessions
- Communicated with professors to maintain current information on important or confusing subject matter

MEMBERSHIPS

- National Honor Society in Psychology- Psi Chi Spring 2018 – Present
- National Society of Leadership and Success - NSLS Spring 2017 – Present

SKILLS

- Proficient in Microsoft Office Suite, E-Prime, and Irfanview.
- Beginner at SPM, SPSS, FSL, MATLAB, R-Studio, Qualtrics, and PsychoPy
- fMRI Safety Certified: Pennsylvania State University's Social, Life, and Engineering Sciences Imaging Center