

**Jacob B. Harth**  
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## **Academic History**

### **Education**

**University of Georgia, Athens, GA**

**Doctoral Student**

**Aug. 2020 – Jul. 2022**

**Doctoral Candidate**

**Aug. 2022 – Present**

- Interdisciplinary Neuroscience PhD Program
- Neuroscience Graduate Student Association
  - Member of executive board (2021-2023)
  - Officer for professional development and outreach (2022-2023)
- Member of Advocates for Anti-Racism in the Life-Sciences (AARLS)
- Member of Nu Rho Psi Honor Society
- Graduate student member of American Public Health Association (APHA)
- Graduate student member of Society of Behavioral Medicine (SBM)

**Millsaps College, Jackson, MS**

**Graduation: May 2020**

**Bachelor of Science**

- Double Major: Psychology, Neuroscience & Cognitive Studies
- Graduated *summa cum laude*
- Member of Phi Beta Kappa Honor Society
- Chapter President of Nu Rho Psi Honor Society
- Member of Psi Chi Honor Society
- Undergraduate student member of Southeastern Psychological Association (SEPA)
- Presidential Scholar and Robinson Fellow
- Recipient of the Mary Whiton Calkins Award for Outstanding Research in Psychology (2020)

### **Research Positions**

**Graduate Research Assistant**

**Jan. 2021 – Present**

**University of Georgia, Institute of Gerontology, College of Public Health**

- Principal Investigator: Dr. Lisa M. Renzi-Hammond
- Develop and refine novel methods of testing visual function
- Mentor undergraduate research assistants
  - Enable learning and development of skills relevant to psychophysical investigations

- Complete study design, data collection/reporting, and manuscript preparation for vision science clinical trials
  - Alcon Laboratories
    - Safety and benefit assessment of yellow filters on visual function
  - Johnson and Johnson Vision Care, Inc.
    - Visual performance of senofilcon A with and without new UV/HEV
    - The effects of light filtration via contact lenses on novel metrics of visual function
    - Evaluation of multifocal and spherical soft contact lens designs with and without HEV blocker on visual function
  - Transitions Optical
    - Using photochromic spectacle lenses to attenuate light stress in adults

**Undergraduate Research Assistant  
Millsaps College, Psychology Department**

**Jan. 2018 – May 2020**

- Principal Investigator: Dr. Sabrina N. Grondhuis
- Designed and conducted an investigation of motivational theory in professional athletes
- Collaborated with fellow researchers on data collection and entry

<b>Skills</b>
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- Adept in the design, construction, and utilization of optical systems for psychophysical testing
- Trained in Good Clinical Practice
- Capable of running clinical trials for regulatory review
- Proficient in statistical analysis using Rstudio

<b>Certifications and Professional Development</b>
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- Collaborative Institutional Training Initiative (CITI)
  - Human Research
    - Social & Behavioral
      - Basic, Children, Internet
    - Bio-Medical
  - Good Clinical Practice (GCP)
    - Clinical Trials with Investigational Drugs and Medical Devices (U.S. FDA Focus)
    - Social and Behavioral Research Best Practices for Clinical Research
    - Clinical Trials with Investigational Drugs and Biologics (ICH Focus)
  - Responsible Conduct of Research
    - Basic, Biomedical
- American Heart Association, Basic Life Support (CPR and AED) Provider

## Instruction

### **Graduate Lab Assistant**

**Jan. 2021 – May 2021**

#### **University of Georgia, Biology Department**

- Orchestrated scientific investigation through instruction and assessment for an inquiry-based hybrid online and in-person lab for undergraduate biology majors (BIOL 1107L)

### **Ford Fellow**

**Aug. 2018 – May 2019**

#### **Millsaps College, Psychology Department**

- Lectured students, outlined class curriculum, and graded assignments as a fellow to Dr. Sabrina N. Grondhuis in Statistics for the Behavioral Sciences (PSYC 2100)
- Administered questionnaires and analyzed data on teaching methodology

### **Teaching Assistant**

**Aug. 2017 – May 2018**

#### **Millsaps College, Chemistry Department**

- Coordinated and supervised an inorganic chemistry lab (CHEM 1221) with Dr. Cory Toyota

## Scholarly Activities

<b>Manuscripts</b>
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### Peer-Reviewed Publications

- **Harth, J. B.**, Renzi-Hammond, L. M., & Hammond, B. R., (2023). A dietary strategy for optimizing the visual range of athletes. *Exercise and Sport Sciences Reviews*, 51(3), 103–108. <https://doi.org/10.1249/JES.0000000000000318>

### Published Abstracts

- Hammond, B. R., **Harth, J. B.**, & Renzi-Hammond, L. M. (2023, July). Functional effects of macular pigment density on the central nervous system [Published abstract, see oral presentations]. In *An Interdisciplinary Journal of Research on Carotenoids*, 25, 90.
- Nightingale, J., **Harth, J. B.**, Gardner, C., Leathers, T., Rogers, A., Hammond, B. R., & Renzi-Hammond, L. M. (2023, April). Implementation of technology to measure health biomarkers in underserved rural and eldercare settings [Published abstract, see poster presentations]. In *2023 ABM Annual Meeting Abstracts Supplement, Annals of Behavioral Medicine*, 57(1), S304. <https://doi.org/10.1093/abm/kaad011>
- Nightingale, J., **Harth, J. B.**, Gardner, C., Leathers, T., Rogers, A., Hammond, B. R. & Renzi-Hammond, L.M. (2022, November). Measuring ocular health and diet quality in diverse populations, in community settings [Published abstract, see poster presentations]. In *APHA 2022 Annual Meeting and Expo*. American Public Health Association.

## Presentations

### Oral Presentations \*i indicates an invited talk

- \*Hammond, B. R., **Harth, J. B.**, & Renzi-Hammond, L. M. (2023, July 9-14). *Functional effects of macular pigment density on the central nervous system* [Invited lecture]. The 19<sup>th</sup> International Symposium on Carotenoids, Toyama, Japan.

### Poster Presentations \*i indicates first or co-presenter

- Nightingale, J., \***Harth, J. B.**, Gardner, C., Leathers, T., Rogers, A., Hammond, B. R., & Renzi-Hammond, L. M. (2023, April 27). *Implementation of technology to measure health biomarkers in underserved rural and eldercare settings* [Poster presentation]. Society of Behavioral Medicine 2023 Annual Meeting and Scientific Sessions, Phoenix, AZ.
- Talebi, N., Reina, A.M., **Harth, J.B.**, Gardner, C., Renzi-Hammond, L.M. (2023, April 3). *Examining the relationship between macular pigment optical density (MPOD) and blood pressure* [Poster presentation]. University of Georgia 2023 CURO Symposium, Athens, GA.
- Wysocky, C., Bozocca, A., **Harth, J.B.**, Putnam, B., Hammond, B.R., Renzi-Hammond, L.M. (2022, November 12). *The relation between contrast sensitivity and macular pigment optical density* [Abstract presentation]. Georgia Undergraduate Research Conference, Valdosta, GA.
- Nightingale, J., \***Harth, J.B.**, Gardner, C., Leathers, T., Rogers, A., Hammond, B.R., & Renzi-Hammond, L.M. (2022, November 6). *Measuring ocular health and diet quality in diverse populations, in community settings* [Poster presentation]. American Public Health Association 2022 Annual Meeting and Expo, Boston, MA.
- \***Harth, J.B.**, Nightingale, J., Gardner, C., Leathers, T., Rogers, A., Hammond, B.R., & Renzi-Hammond, L.M. (2022, October 27). *Measuring MPOD as a biomarker in community settings* [Poster presentation]. State of the Public's Health 2022 Conference, University of Georgia, Athens, GA.
- \***Harth, J.B.** & Grondhuis, S.N. (2020, April 1-4). *Monetary motivational theory in major league baseball* [Poster presentation]. Southeastern Psychological Association 66<sup>th</sup> Annual Meeting, New Orleans, LA. (Online Repository).
- Hawkins, B., Swinney, M., Maddox, S., Blady, S., **Harth, J.B.**, & Grondhuis, S.N. (2020, April 1-4). *The effects of stress, anxiety, and gender: Memory differences for emotional and neutral material in college students* [Poster presentation]. Southeastern Psychological Association 66<sup>th</sup> Annual Meeting, New Orleans, LA. (Online Repository).
- Blady, S., **Harth, J.B.**, Hawkins, B., Maddox, S., Pullman, N., & Grondhuis, S.N. (2020, February 7). *Comparison of management style preferences* [Poster presentation]. Millsaps Student Science Research Symposium, Jackson, MS.

- Swinney, M., Taylor, M., **Harth, J.B.**, Maddox, S., & Grondhuis, S.N. (2019, April 11-13). *Problematic mobile phone usage and its association with psychological consequences* [Poster presentation]. National Conference on Undergraduate Research, Kennesaw, GA.

### **Non-Peer-Reviewed Community Presentations**

- **Harth, J.B.** (2022, September 14-21). *Guest lecture series on TBI, neuroimaging, and brain health* [Guest lecturer]. International Baccalaureate Psychology, Saint Andrew's School, Boca Raton, FL.
- **Harth, J.B.** (2022, April 1). *Brain health is for everyone: invest in the fundamentals* [Presenter]. TEDxUGA Wonder, Athens, GA. <https://youtu.be/OZOOPINq9pM>

### **Service and Involvement**

#### **McDuffie County Health Fair, Thomson, GA**

**Mar. 2023**

- Conducted measurements of macular pigment optical density and engaged members of the community in conversations about diet and its impact on eye/brain health to empower health literacy and improve communication with healthcare providers

#### **UGA Undergraduate Neuroscience Organization Panel, Athens, GA**

**Feb. 2023**

- Presented to student members and participated in discussion with undergraduate students about the pursuit of graduate degrees in neuroscience and related fields

#### **UGA Neuroscience Symposium, Athens, GA**

**Oct. 2022**

- Participated in planning, organizing, and implementing the 2022 UGA Neuroscience Symposium
- Acted as a host for presentations: coordinated timing and introduced student presenters

#### **Washington County Health Fair, Tennille, GA**

**Mar. 2022**

- Conducted measurements of macular pigment optical density and engaged members of the community in conversations about diet and its impact on eye/brain health to empower health literacy and improve communication with healthcare providers

#### **GED Prosperity Center, Jackson, MS**

**2016 – 2017**

- Provided tutoring in math, science, history, English, and social studies to individuals earning their GED

#### **Boyd Elementary Outreach Program, Jackson, MS**

**2013 – 2016**

- Created and implemented weekly lessons in math, science, and robotics for after-school-care students