EMILY A. YEARLING

eyearlin@iu.edu
emily.yearling@uconn.edu

Bloomington, IN 47404
Storrs Mansfield, CT 06269

EDUCATION

PhD Psychological Sciences **Feb 2024**
University of Connecticut, Storrs, CT
Committee: Dr. Gerry Altmann, Dr. Umay Suanda, Dr. Kimberly Cuevas

MS Psychological Sciences **Dec 2019**
University of Connecticut, Storrs, CT
Committee: Dr. Gerry Altmann, Dr. Adam Sheya, & Dr. Umay Suanda

BS Neuroscience **May 2017**
Indiana University, Bloomington, IN
Minored in Psychology

RESEARCH EXPERIENCE

Post-Doctoral Fellow **2024 – present**
Smith Cognitive Development Lab
Advisor: Dr. Linda Smith

- Explore how patterns in infant play indicative of memory for individual tokens and their episodic relations across time and space.

Dissertation **2021 – 2024**
Words, Objects, and the Representation of Knowledge (WORK) lab, UConn
Advisor: Dr. Gerry Altmann

- ***Study 1:*** Utilize a dynamic visual world eye-tracking paradigm to examine how state change events shape the object representations through time by exploring whether continuous and discontinuous transformations are more likely evoke an object representation where the end-state inherits a history in the form of its state prior to the onset of the change event.
- ***Study 2:*** Explore the developmental trajectory of toddler's representations of dynamic state change events by adapting the eye-tracking study into a preferential looking paradigm suitable for children 3 – 6 years of age.
- ***Study 3****:* Examine individual differences in the relationship between the binding of object states across time and episodic memory for the spatial locations via collection of eye-tracking data and reaction time data online.

Neuroimaging Research **2022 –present**
Words, Objects, and the Representation of Knowledge (WORK) lab, UConn
Advisors: Dr. Gerry Altmann & Dr. Roeland Hancock

- Utilized representational similarity analysis (RSA) to evaluate the extent to which the pattern of neural activity upon viewing an object after it undergoes a state change resembles the previous activation pattern for the initial state before the onset of the state change event (e.g. a cube will morph into a sphere).

Master's Thesis **2017 – 2019**
Words, Objects, and the Representation of Knowledge (WORK) lab, UConn
Advisor: Dr. Gerry Altmann

- Examined the developmental trajectory of the ability to keep track of change to objects that affords both knowing that an object remains the same object despite change and interacting with the object because of that change with a forced choice task

Graduate Research Assistant **Spring 2018**
Landi Lab, UConn & Haskins Laboratories, Yale University
Supervisor: Dr. Nicole Landi & Dr. Roeland Hancock

- Aided in the data collection and analysis of a fMRI study with simultaneous eye-tracking aimed at understanding the relationship between brain activity and eye-movements during reading and comprehension in adolescents and elementary school aged children with specific language impairment (SLI)

FELLOWSHIPS, GRANTS, & AWARDS

SLAC - NSF Research Traineeship **2020 - 2022**

- The Science of Learning and Art of Communication (SLAC) NRT Fellowship provides graduate students with funding and training to engage in thoughtful, clear, and understandable science communication with all audiences from expertt peers to school children, as well as engage in high quality collaborative data science.

SLAC Innovation Award Grant Recipient **2021 & 2022**

- Two-time recipient of the Science of Learning and Art of Communication (SLAC) innovation award. This internal grant provides research funding to graduate students with a commitment to engaging in interdisciplinary research

IBACS-BIRC Research Assistantship **2018 – 2020**

- Research traineeship in neuroimaging methods, data science, and reproducibility. Assistants received a stipend and funding for MRI scan time in return for participating in the assistantship.

IBACS Summer Graduate Fellowship **2018**

- Summer grant-writing traineeship awarded to graduate students engaging in interdisciplinary research in the brain and cognitive sciences. Awarded by the CT Institute for the Brain and Cognitive Sciences (IBACS) Program.

Zeaman Graduate Award **2019**

- Internal funding grant for graduate students that demonstrate need and commitment to developmental research

Provost's Letter of Recognition for Teaching Excellence (UConn) **2018**

- Award for outstanding commitment to teaching as evinced by exemplary reviews from undergraduate students

MENTORSHIP EXPERIENCE

Primary mentor and research supervisor for 3 to 5 undergraduate researchers each semester. Created individualized education plans for each student, depending on career goals. Supervised 1+ independent student research project per year. Active role in lab management, budgeting, training, scheduling, creating lab manuals, and troubleshooting technical issues for other graduate and undergraduate researchers' experiments.

- 8/2022 – present*:* Alyssa Fennell
- 8/2022 – present*:* Joslyn Hoang
- 1/2022 – present*:* Elton Cross, IBACS scholar
- 8/2021 – present: Lucy Arce
- 8/2021 – present*:* Lauren Bernstein
- 8/2021 – 5/2022*:* Valerie Duque
- 8/2021 – 5/2022: Samiksha Pant
- 1/2018 – 5/2021: Kristen Shubert, IDEA grant scholar
- 1/2019 – 5/2021: Samantha Purushotham,
- 5/2018 – 5/2021: Meghan Lindsay
- 5/2018 – 12/2018: Nicolas Martin
- 5/2018 – 8/2018: Andrea Ionescu , RISE Scholar

TEACHING EXPERIENCE

Assistant Professor of Teaching **Fall 2023 – May 2024**
Department of Psychological Science, Ball State University

- Taught *Developmental Psychology 321,* an undergraduate lecture course with a maximum of 40 students covering a broad range of topics intrinsic to developmental science including: social & emotional development, the prenatal period, object cognition in infancy, language development, socioeconomic context, learning & memory
- *Principles of Research in Psychology 284* an undergraduate quantitative and intensive writing course covering the following topics: of experimental design, neurobiology, statistics for data analysis (in SPSS), and the basics of scientific literacy

- *Introduction to Statistics 241* an undergraduate quantitative course covering the basics of statistics for psychological sciences.
- Developed quizzes, exams, lecture slides, and homework. Designed special topics lectures to expand on the material in the textbook, link current events, and engage with the material through the lens of diversity, equity, and inclusion.

Instructor of Record **Summer 2020 & Fall 2022**

Department of Psychological Sciences, UConn

- Taught *Developmental Psychology 2400,* an undergraduate lecture course with a maximum of 62 students covering a broad range of topics intrinsic to developmental science including: social & emotional development, the prenatal period, object cognition in infancy, language development, socioeconomic context, learning & memory
- Developed quizzes, exams, lecture slides, and homework. Designed special topics lectures to expand on the material in the textbook, link current events, and engage with the material through the lens of diversity, equity, and inclusion

Lab Instructor **2017-2020; 2021 - present**

Department of Psychological Sciences, UConn

- Taught multiple sections of *Principles of Research in Psychology 2100WQ*, an undergraduate quantitative and intensive writing lab course covering the following topics: of experimental design, neurobiology, statistics for data analysis (in SPSS), and the basics of scientific literacy
- Taught multiple lab courses for *Introductory Psychology 1100,* that focused on basic psychological principles and history of the field. Adapted the requirements of the course for general education and honors sections

Course Assistant **2018–2020, 2021-2022**

Department of Psychological Sciences, UConn

- Aided faculty professors for multiple sections of *Developmental Psychology 2400* with up to 150 students per section. Developed, administered, and graded exams, quizzes, and homework. Organized due dates and helped troubleshoot technical issues with the online textbook activities.
- Aided faculty professor with *Experimental methods in Developmental Psychology 3850.* Aided student learning of statistical methods specific to developmental science by providing individual instruction during and outside of lecture.

RELEVANT PAPERS

Team Science

Botvinik-Nezer, R., Holzmeister, F., Camerer, C. F., Dreber, A., Huber, J., Johannesson, M., Kirchler, M. et al. (2020). Variability in the analysis of a single neuroimaging dataset by many teams. Nature, 582(7810), 84–88. https://doi.org/10.1038/s41586-020-2314-9

Theses

Yearling, E. (2019). Keeping track of change: Developmental insights into the ability to represent objects in episodic terms [Master's thesis, University of Connecticut]. OpenCommons@UConn. https://opencommons.uconn.edu/cgi/viewcontent.cgi?article=2600&context=gs_theses

Yearling, E. (in Prep.). Now you see it, now you don't: the developmental and neurobiological origins of representations of change-in-state [Doctoral Dissertation, University of Connecticut]. OpenCommons@UConn.

Manuscripts in preparation

Yearling, E. & Altmann, G. T. M., (2023). Tracking trajectories of change: The episodic origins of object permanence [Manuscript in Preparation]. Department of Psychological Sciences, University of Connecticut.

POSTER PRESENTATIONS

Yearling, E. & Altmann, G. (2019, Oct). *Keeping Track of Change: Developmental Insights into the Ability to Represent Events in Terms of Token-States*. Poster presented at the presented at the Cognitive Development Society Biennial Conference, Louisville, KY.

Shubert, K., Yearling, E. & Altmann, G. (2019, Oct) *The Effect of Feedback on the Ability to Represent an Object's History in Developing Children.* Poster presented at the presented at the University of Connecticut Frontiers in Undergraduate Research Annual Fall Poster Night, Storrs, CT.

Shubert, K., Lindsay, M., Purushotham, S., Yearling, E., & Altmann, G. (2019, May). *The Developing Ability to Represent Events as Trajectories of Object Histories.* Poster presented at the presented at the University of Connecticut Department of Psychological Sciences' Annual Language Fest, Storrs, CT.

Yearling, E., Vinci-Booher, S., & James, K.H. (2017, Apr). *Investigating changes in functional connectivity between visual and motor systems after handwriting practice*. Poster presented at the Center of Excellence for Women in Technology Conference, Bloomington, IN.

Yearling, E., Hart, E., & Smith, L. (2014, Dec). *The Role of Focal Types in Identifying the Processes behind Infant Noun Learning. Poster Presented at Smith Cognitive Development Lab Research Assistant Poster Session*, Bloomington, IN

SERVICE

Co-Organizer for weekly talk series for the UConn Developmental Psychology Program **2021 - 2022**

- Responsibilities included: recruiting and scheduling faculty, post-docs and graduate students from other universities and from other departments as invited speakers. Arranging one-on-one meetings with the invited speaker on the day of their visit, advertising weekly talks to the UConn community, managing in-person and virtual options for the weekly talks, coordinating with university disability services to provide a sign language interpreter each week, **&** updating the developmental psychology program website with relevant dates and accomplishments.

DIVERSITY, EQUITY, AND INCLUSION

Dept. of Psychological Science, Diversity, Equity, and Inclusion Committee Member **2023-Present**
Ball State University, Muncie IN

- Belonged to an interdisciplinary team of faculty with a commitment to increasing diversity, equity, and inclusion within the Ball State Department of Psychological Sciences

SLAC Diversity, Equity, and Inclusion Committee Member **2018-Present**
University of Connecticut, Storrs CT

- Belonged to an interdisciplinary team of faculty and graduate students with a commitment to increasing diversity, equity, and inclusion within the Science of Learning and Art of Communication (SLAC) community.

Presentation: Amplifying autistic voices in developmental science **2022**
University of Connecticut, Storrs CT

- Presented a talk to the developmental psychology program about my experiences as an autistic individual and scientist aimed to encourage responsible research and engagement with neurodiverse populations through the use of more humanizing identity first language a focus on differences rather than deficits.