

# - LUCY WHITMORE -

• developmental cognitive neuroscientist •

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## RESEARCH INTERESTS

Social, Cognitive, & Brain Development • Longitudinal Modeling

## EDUCATION

University of Oregon

Sept. 2021-Current

PhD Student, Psychology

Advisor: Kathryn Mills, PhD

University of California, Berkeley

Aug. 2015-May 2019

B.A. Cognitive Science, with honors

Honors Thesis: Neural Correlates of Hierarchical Reinforcement Learning

Thesis Advisor: Anne Collins, PhD

## RESEARCH EXPERIENCE

### Developing Brains in Context Lab

June 2019- Aug 2021

#### University of Oregon

Lab Manager

- Mentor: Dr. Kathryn Mills
- Data collection, processing, analysis, and dissemination for multiple research projects involving adolescents and adults
- Programmed five cognitive tasks and designed three studies for online data collection
- Conducted ten-wave online study on adolescent social connections during COVID-19
- Designed, collected, and analyzed cognitive behavioral study of entire middle school (300+ students)
- Secondary data analysis of neuroimaging data, including ABCD study
- Manuscript preparation, including conducting literature review
- Supervised and trained research assistants

### Computational Cognitive Neuroscience Lab

Feb. 2017-May 2019

#### University of California, Berkeley

Research Assistant

- Mentor: Dr. Anne Collins

Data collection (behavioral and saliva samples) for study focusing on reinforcement learning and working memory in children, adolescents, and adults

- Data collection for behavioral study focusing on hierarchical reinforcement learning in adults
- Pre-processing of previously collected EEG dataset
- Supervised and trained research assistants
- Conducted independent research project to explore neural correlates of hierarchical reinforcement learning using EEG
  - Collected, processed, analyzed, and presented behavioral and EEG data for independent research project

## PUBLICATIONS

Weng, T. B., Vela, R. D., Weber, W., Dodla, M., Heinsfeld, A. S., Parker, S. D., Simon, B., Demeter, D. V., Nugiel, T., **Whitmore, L.**, Mills, K. L., Church, J. A., Haberman, M. R., & Craddock, R. C. (Under Review). The impact of customized head molds on motion and motion-related artifacts from structural and functional MRI scans in children. MedRxiv, 2021.03.24.21253213. <https://doi.org/10.1101/2021.03.24.21253213>

Weinstein, N. Y., **Whitmore, L.B.**, Mills, K.L. (2022). Individual Differences in Mentalizing Tendencies. Collabra: Psychology.

van Duijvenvoorde, A.C.K, **Whitmore, L.B.**, Westhoff, B., Mills, K.L. (2022). A methodological perspective on learning in the developing brain. NPJ Science of Learning.

Saragosa-Harris, N. M., Chaku, N., MacSweeney, N., Guazzelli Williamson, V., Scheuplein, M., Feola, B., ... Mills, K. L. (2022). A practical guide for researchers and reviewers using the ABCD Study and other large longitudinal datasets. Developmental Cognitive Neuroscience. <https://doi.org/10.31234/osf.io/aqckx>

**Whitmore, L.B.** and Mills, K.L. (2021). Co-creating Developmental Science. Infant and Child Development. DOI: 10.1002/icd.2273

Gau, R., Noble, S., Heuer, K., Bottenhorn, K. L., Bilgin, I. P., Yang, Y.-F., Huntenburg, J. M., Bayer, J. M. M., Bethlehem, R. A. I., Rhoads, S. A., Vogelbacher, C., Borghesani, V., Levitis, E., Wang, H.-T., Van Den Bossche, S., Kobeleva, X., Legarreta, J. H., Guay, S., Atay, S. M., ... Zuo, X.-N. (2021). Brainhack: Developing a culture of open, inclusive, community-driven neuroscience. Neuron, 109(11), 1769–1775. <https://doi.org/10.1016/j.neuron.2021.04.001>

## CONFERENCE PRESENTATIONS

**Whitmore, L.B.**, van Duijvenvoorde, A., Mills, K.L. (October 2020) Making the most of longitudinal MRI to understand learning, reading, and language development. Society for the Neurobiology of Language symposium: “Capturing developmental brain dynamics: methods from longitudinal language research”. Virtual.

**Whitmore, L.B.** (August 2018) Examining Generalization and Flexibility in Structure Learning With EEG. Summer Undergraduate Research Fellowship Annual Conference. Berkeley, CA.

## POSTERS

**Whitmore, L.B.**, Mills, K.L. (March 2022) Social environmental influences on temporal discounting behavior and functional brain connectivity in early adolescence. Society for Research on Adolescence 2022.

**Whitmore, L.B.**, Hval, L., Freudmann, N., Mills, K.L. (May 2021). The Role of Digital Technology Use in Maintaining Social Connections During Social Distancing. APS 2021.

Ochoa, K.D., **Whitmore, L.B.**, Hval, L., Mills, K.L. (May 2021). Perceived Social Support Predicts feelings of Gratitude for Adolescents during Social Distancing. APS 2021.

**Whitmore, L.B.**, Mills, K.L. (September 2020) Self-reported screen time and risk-taking in the transition into adolescence. Flux Congress 2020.

## AWARDS & HONORS

Honorable Mention, NSF Graduate Research Fellowship	2022
First Year Merit Award, University of Oregon	2022
Summer Undergraduate Research Fellowship, \$4500	2018
Graphic Packaging International Scholarship, \$1000/year	2015-2019
California Alumni Association Leadership Award, \$2000	2015
Inspire Foundation Scholarship, \$500	2015
Chico Women's Club Scholarship, \$500	2015

## EMPLOYMENT

July 2016-May 2019

### Lawrence Hall of Science (Amgen Biotech Experience)

- Assisted with professional development trainings for Bay Area teachers
- Worked as science/content communicator in exhibit hall
- Prepared materials and reagents for genetic transformation experiments

### Cognitive Science Student Association, UC Berkeley

2015-2019

President, 2018-2019

Vice President 2017-2018

Alumni Coordinator, 2016-2017

- Organized events for Cognitive Science community, including alumni panels, course enrollment nights, and research/industry talks
- Organized annual California Cognitive Science Conference, with an annual attendance of 300 people
- Led meetings and represented student community to faculty and staff

### Hoyt Hall, Berkeley Student Cooperative

2017-2019

President, Spring 2018

Secretary, Fall 2018

- Led weekly manager meetings and house council
- Facilitated creation of house policy
- Organized workshops focused on consent, disability justice, and related topics

### Classroom Assistant, CalTeach Program

2016

Chabot Elementary, Spring 2016

Berkeley High School, Fall 2016

- Assisted students with classwork and lesson materials
- Created lesson plans
- Led independent lessons

## PUBLIC OUTREACH

Classroom Outreach, North Eugene High School	2022
Living Lab Day, Eugene Science Center	2020
Classroom Outreach, Spencer Butte Middle School	2020
Cognitive Science Student Association at Cal Day	2016-2019 (annual)
Organizing Team of California Cognitive Science Conference	2016-2019 (annual)
Bay Area Science Festival	2015-2018 (annual)

## SOCIETY MEMBERSHIP

Flux Society	2020-2022
Society for Research on Adolescence	2022
Social and Affective Neuroscience Society	2021
Association for Psychological Science	2021
Society for the Neurobiology of Language	2021
Cognitive Science Society	2016, 2020

## TRAININGS & WORKSHOPS

NeuroHackademy	July-August 2022
Flux Computational Modeling in Development Workshop	September 2021
ABCD Workshop on Brain Development and Mental Health	June-July 2021
The Origins of Common Sense in Humans & Machines, CogSci 2020	July 2020
Equity-Centered Design Workshop, hosted by Creative Reaction Lab	July 2020
State Space Grid Workshop	July 2020
Brainhack Global Eugene <b>*organized</b>	November 2019
MRI Safety Training, Lewis Center for Neuroimaging	June 2019
UC Berkeley Summer Undergraduate Fellowship Workshops	July 2018

## TECHNICAL SKILLS

Programming Languages: R, Python, Matlab, javascript, html, tidyverse

Programs: Git, Jupyter, Network Canvas, Gorilla.sc, Qualtrics, RedCap, EEGLAB, Zotero,

OSF