# Craig R. Poskanzer

craig.poskanzer@columbia.edu • Google Scholar • New York, NY

# **EDUCATION**

# Columbia University, New York, NY

2021-Present

Ph.D. Student

Department: Psychology Advisor: Mariam Aly

# Princeton University, Princeton, NJ

2014-2018

Bachelor of Arts cum Laude, History of Science and Technology

Certificate in Neuroscience

Senior Thesis: A Tale of Two Hemispheres: Split-Brain Research and the Popularization of Science

#### **WORK EXPERIENCE**

# Research Coordinator and Lab Manager in the Social and Cognitive Computational Neuroscience Lab 2019-202

Chestnut Hill, MA, Boston College, Advisor: Professor Stefano Anzellotti

- Analyzed fMRI data using Multivariate Pattern Dependence to study nonlinear connectivity in the brain
- Built and trained artificial neural networks using Pytorch to examine dynamic facial expressions
- Mentored undergraduate researchers involved in lab projects
- Attended conferences and symposia including: 2020 Annual Conference of the Cognitive Science Society; MIT Brains, Minds, and Machines 2020 Summer Course
- Presented at conferences including: Cognitive Neuroscience Society 2020 Annual Meeting; Boston Area Neuroscience Group Fall Symposium 2019

# Research Assistant in the Center for Sleep and Cognition

2018-2019

Boston, MA, Harvard Medical School, Advisor: Professor Robert Stickgold

- Ran behavioral experiments and collected data using EEG, polysomnography, and fMRI
- Used EEG microstate analysis and published a paper on memory consolidation during waking rest
- Attended Lectures and Conferences including: Sleep Grand Rounds, MIT Winter Dream Engineering Symposium, and the MIT Colloquium on Brain and Cognition with Sara Aton, Ph.D, SLEEP Annual Meeting (2019)
- Member of the Sleep Research Society

# Research Assistant in the Elison Lab

Summer, 2017

Minneapolis, MN, University of Minnesota, Advisor: Professor Jed Elison

- Compiled a literature review of Agenesis of the Corpus Callosum
- Participated in workshops on Diffusion Weighted Imaging
- Assisted in a Diffusion Weighted Imaging study on the development of white matter in infants

# Intern at the American Association for the Advancement of Science

Summer, 2016

Washington, D.C., Intern in the Office of Government Relations and the Office of International and Security Affairs

- Wrote newsletters on Congressional activities related to Science Policy
- Conducted political and internal research and designed and built websites on the political positions of Presidential candidates on issues of science policy

#### Research Assistant in the History of Science Department at Princeton University

Summer 2016

Princeton, NJ, Advisor: Professor D. Graham Burnett

- Created a literature review on the history of "Greebles" in Neuroscience
- Conducted interviews with the research team that created "Greebles"

# Research Assistant in the Cognitive Science Program at Carleton College

Summer 2015

Northfield, MN, Advisor: Professor Kathleen Galotti

Compiled a literature review and worked on grant proposals for a study on adolescent decision making

# **TECHNICAL SKILLS**

fMRI; EEG; Polysomnography; MATLAB; Python; Pytorch; R; JavaScript; Amazon Mechanical Turk Design

# **PUBLICATIONS**

#### First Author:

- **Poskanzer**, C., Denis, D., Herrick, A., and Stickgold, R. (2021). Using EEG Microstates to Examine Post-Encoding Quiet Rest and Subsequent Word-Pair Memory. *Neurobiology of Learning and Memory*, 181. https://doi.org/10.1016/j.nlm.2021.107424.
- **Poskanzer, C.,** Fang, M., Aglinskas, A., and Anzellotti, S. Controlling for spurious nonlinear dependence in connectivity analyses. (In Press).

#### Co-author:

- Fang, M., **Poskanzer**, **C.**, and Anzellotti, S. PyMVPD: A toolbox for multivariate pattern dependence. (Submitted)
- Denis., D., Schapiro, A.C., **Poskanzer, C.,** Bursal, V., Charon, L., Morgan, A., and Stickgold, R. (2020). The roles of item exposure and visualization success in the consolidation of memories across wake and sleep. *Learning and Memory* 27(11), 451-456. DOI: 10.1101/lm.051383.120
- Denis, D., Mylonas, D., **Poskanzer**, C., Bursal, V., Payne, J.D., and Stickgold, R. (2021). Sleep spindles preferentially consolidate weakly encoded memories. *The Journal of Neuroscience*. DOI: 10.1523/JNEUROSCI.0818-20.2021
- Tandoc, M., Bayda, M., **Poskanzer**, C., Cho, E., Cox, R., Stickgold, R., and Schapiro, A.C. Influences of time of day on generalization. (Submitted) Tandoc, M. C., Bayda, M., Poskanzer, C., Cho, E., Cox, R., Stickgold, R., & Schapiro, A. C. (2021). Examining the effects of time of day and sleep on generalization. *Plos one*, *16*(8), e0255423.
- Bayda, M., Chamberlain, J., **Poskanzer, C.**, Bursal, V., Manickas-Hill, O.P., Cox, R., Denis, D., Morgan, A., and Stickgold, R. (2019, April). The Evolution of Motor Sequence Memory Over Time and Sleep. In *Sleep* (Vol. 42). Journals Dept, 2001 Evans RD, Cary, NC 27513 USA: Oxford Univ Press Inc.

# **Posters Presented**

- **Poskanzer, C.,** Fang, M., Aglinskas, A., Anzellotti. S. Using fMRI to Model Nonlinear Interactions between Brain Regions. (Poster Presented at the Cognitive Neuroscience Society 2020 Annual Meeting and the Boston Area Neuroscience Group Fall Symposium 2019)
- Denis, D., Bursal, V., Poskanzer, C., Charon, L., and Stickgold, R. Predicting sleep-dependent memory consolidation from EEG activity during encoding. (Poster presented at MIT Winter Dream Engineering Symposium)

#### **PEER REVIEW**

• Reviewer for *Brain Connectivity*