

Anna Mynick

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Education

Dartmouth College, Hanover, NH — PhD student in Cognitive Neuroscience, 2019-Present
Advisor: Caroline Robertson
Wellesley College, Wellesley, MA — Bachelor of Arts in Neuroscience, 2013-2017
Advisor: Mike Wiest

Academic Positions

Technical Associate, Kanwisher Lab, MIT — 2017-2019
Supervisor: Nancy Kanwisher
Undergraduate Researcher, Kanwisher Lab, MIT — 2014-2017
Advisor: Caroline Robertson

Awards

National Eye Institute Early Career Scientist Travel Grant — 2024
CVS Active Vision Symposium Travel Award — 2022
NSF Graduate Research Fellowship Program, Honorable Mention — 2020
Sigma Xi Scientific Honor Society — 2017

Skills

MATLAB, Unix, Git, R. Some experience with: Python, Unity, C#, SPSS

Publications

Journal Articles

- Mynick, A.**, Steel, A., Jayaraman, A., Botch, T. L., Burrows, A., & Robertson, C. E. (2024). Memory-based predictions prime perceptual judgments across head turns in immersive, real-world scenes. PsyArXiv.
- Steel, A., Garcia, B. D., Goyal, K., **Mynick, A.**, & Robertson, C. E. (2023). Scene Perception and Visuospatial Memory Converge at the Anterior Edge of Visually Responsive Cortex. *Journal of Neuroscience*, 43(31), 5723-5737.
- Mynick, A.**, Steel, A., Jayaraman, A., Botch, T.L., Burrows, A., Robertson, C. (2023). Memory-based predictions prime perceptual judgments across head turns in immersive, real-world scenes. Manuscript submitted for publication.
- Kosakowski, H. L., Norman-Haignere, S., **Mynick, A.**, Takahashi, A., Saxe, R., & Kanwisher, N. (2023). Preliminary evidence for selective cortical responses to music in one-month-old infants. *Developmental Science*, e13387.

- Mynick, A.**, & Steel, A. (2023). Dissociating Hippocampal and Cortical Contributions to Predictive Processing. *Journal of Neuroscience (Opinion Article)*, 43(2), 184-186.
- Murty, N. A. R., Teng, S., Beeler, D., **Mynick, A.**, Oliva, A., & Kanwisher, N. (2020). Visual experience is not necessary for the development of face-selectivity in the lateral fusiform gyrus. *Proceedings of the National Academy of Sciences*, 117(37), 23011-23020.
- Isik, L., **Mynick, A.**, Pantazis, D., & Kanwisher, N. (2020). The speed of human social interaction perception. *NeuroImage*, 215, 116844.
- Robertson, C. E., Hermann, K. L., **Mynick, A.**, Kravitz, D. J., & Kanwisher, N. (2016). Neural representations integrate the current field of view with the remembered 360 panorama in scene-selective cortex. *Current Biology*, 26(18), 2463-2468.

Talks

- Mynick, A.**, Burrows, A., Garcia, B., Botch, T.L., Steel, A., Robertson, C. (2024). Memory-based predictions prime perceptual judgments of upcoming scene views in real-world, 360° environments. Guest lecture, Real World Scene Perception course, Dartmouth College.
- Mynick, A.**, Cohen, M.A., Jayaraman, A., Goyal, K., Robertson, C. (2024). Predictive processing of upcoming scene views in immersive environments: evidence from continuous flash suppression. Dartmouth College Cognitive Brown Bag Meeting.
- Mynick, A.**, Cohen, M.A., Jayaraman, A., Goyal, K., Robertson, C. (2023). Examining the role of spatial reference frames on visual memory in immersive, real-world environments. Dartmouth College Cognitive Brown Bag Meeting.
- Mynick, A.**, Burrows, A., Garcia, B., Botch, T.L., Steel, A., Robertson, C. (2022). Memory-based predictions in real-world, 360° environments. Dartmouth College Cognitive Brown Bag Meeting.
- Mynick, A.**, Robertson, C., & Kanwisher, N. (2017). Active Exploration Benefits Memory for 360° Scenes Experienced with Headmounted Virtual Reality. Vision Sciences Society Annual Meeting.

Abstracts

- Mynick, A.**, Cohen, M.A., Jayaraman, A., Goyal, K., Robertson, C. (2024). Predictive processing of upcoming scene views in immersive environments: evidence from continuous flash suppression. Vision Sciences Society Annual Meeting .
- Mynick, A.**, Botch, T.L., Burrows, A., Jayaraman, A., Steel, A., Robertson, C. (2023). Memory-based predictions facilitate perceptual judgements across head-turns in naturalistic scene perception. Conference on Cognitive Computational Neuroscience Annual Meeting.
- Mynick, A.**, Botch, T.L., Burrows, A., Garcia, B., Jayaraman, A., Steel, A., Robertson, C. (2023). Memory-based predictions facilitate perceptual judgements across head-turns in naturalistic scene perception. Vision Sciences Society Annual Meeting .
- Mynick, A.**, Burrows, A., Garcia, B., Botch, T.L., Steel, A., Robertson, C. (2022). Memory-based predictions across head-turns in naturalistic scene perception. Center for Visual Science Active Vision Symposium Annual Meeting.

- Mynick, A.**, Burrows, A., Garcia, B., Botch, T.L., Steel, A., Robertson, C. (2022). Memory-based predictions across head-turns in naturalistic scene perception. Vision Sciences Society Annual Meeting.
- Garcia, B., Steel, A., **Mynick, A.**, Goyal, K., Robertson, C. (2022). A cortical network representing spatial context of visual scenes in posterior cerebral cortex. Vision Sciences Society Annual Meeting.
- Steel, A., Garcia, B., Goyal, K., **Mynick, A.**, Robertson, C. (2022). Representation of known spatial context in posterior cerebral cortex. Cognitive Neuroscience Society Annual Meeting.
- Mynick, A.**, Burrows, A., Garcia, B., Botch, T.L., Robertson, C. (2021). Discrete scene snapshots prime perception of 360° space in immersive real-world scenes. Society for Neuroscience Annual Meeting.
- Mynick, A.**, Garcia, B., & Robertson, C. (2021). Discrete field-of-view primes reinstate holistic representations of 360° space. Vision Sciences Society Annual Meeting.
- Murty, N. A. R., Teng, S., Beeler, D., **Mynick, A.**, Oliva, A., & Kanwisher, N. (2019). Strong face selectivity in the fusiform can develop in the absence of visual experience. Vision Sciences Society Annual Meeting.
- Isik, L., **Mynick, A.**, Koldewyn, K., & Kanwisher, N. (2018). Rapid detection of social interactions in the human brain. Vision Sciences Society Annual Meeting.
- Robertson, C., Hermann, K., **Mynick, A.**, Kravitz, D., & Kanwisher, N. (2016). Panoramic Memory Shapes Visual Representations of Scenes. Vision Sciences Society Annual Meeting.
- Robertson, C., **Mynick, A.**, Raja, S., & Kanwisher, N. (2015). Advancing a Biomarker of Reduced GABAergic Action in the Autistic Brain. Society for Neuroscience Annual Meeting.

Teaching Experience

Dartmouth College

Teaching Assistant, PSYC36: Systems Neuroscience — 2022

Teaching Assistant, PSYC 38: Cognitive Neuroscience — 2022

Teaching Assistant, PSYC 10: Experimental Design, Methodology, and Data Analysis Procedures — 2021

Teaching Assistant, PSYC 6: Introduction to Neuroscience — 2020

Community and Mentorship

Dartmouth College

Graduate Committee graduate student liaison — 2021 -2023

Undergraduate research mentor, Adithi Jayaraman '24 — 2021-present

Undergraduate research mentor, Jeremy Gart '25 — 2024-present