Christopher S. Iyer

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Education & Training

Ph.D. (in progress)	Columbia University	Psychology (advisor: Daphna Shohamy)	2024–
B.S.	Stanford University	Symbolic Systems (departmental honors & university distinction)	2018–2022

Awards & Honors

Honorable Mention, NSF Graduate Research Fellowship	2023
J.E. Wallace Sterling Award for Scholastic Achievement, Stanford University	2022
Finalist, Rhodes Scholarship	2021
Phi Beta Kappa, Stanford University Chapter	2021
National Merit Scholar	2018
National AP Scholar	2018
Faculty Multidisciplinary Award, Menlo-Atherton HS	2018

Research Interests

Learning and memory – *How do multiple systems cooperate to learn the structure of the world?*
Medial temporal lobe function – *What unifying computations underlie mnemonic and spatial processes?*
Naturalistic behavior – *How do our learning systems optimize to guide adaptive behavior?*
Neuroconnectionist models – *How to formalize psychological constructs to infer across tasks, species, etc.?*

Publications

Iyer, C.S. (2023). 'Neuralizing' Injustice: How neuroscience misunderstands racism, addiction, and crime. *Intersect: The Stanford Journal of Science, Technology, and Society*, *16*(1). https://doi.org/10.25740/mh353rg5893

Englund, M., Faridjoo, S., Iyer, C. S., & Krubitzer, L. (2020). Available Sensory Input Determines Motor Performance and Strategy in Early Blind and Sighted Short-Tailed Opossums. *iScience*, *23*(9), 101527. https://doi.org/10.1016/j.isci.2020.101527

Englund, M., Faridjoo, S., Iyer, C. S., & Krubitzer, L. (2020). Kinematic analysis of sensorimotor behavior during variable ladder rung walking in short-tailed opossums (*Monodelphis domestica*). *STAR Protocols, 2*(2), 100421. https://doi.org/10.1016/j.xpro.2021.100421

Invited/Departmental Talks

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Conference Presentations & Posters

Iyer, C. S., Bonnen, T., Wagner, A. D. (2023, March). Towards a Multiple-Systems Understanding of Race-Related Biases in Human Memory. Poster at Cognitive Neuroscience Society 2023, San Francisco. https://searchworks.stanford.edu/view/ym602qk4242

Iyer, C. S., Wang, S-F., Wagner, A. D. (2020, June). Semantic mediated false memory increases with depth of processing during encoding. Poster at UCLA Psychology Undergraduate Research Conference. https://doi.org/10.17605/OSF.IO/WV4CU

Research Experience

Learning Lab, Columbia University 2024–
Advisor: Daphna Shohamy
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Poldrack Lab, Stanford University 2022–2024
Advisors: Russell Poldrack, Patrick Bissett
Carried out large-scale behavioral and fMRI acquisitions of cognitive control tasks, to build reliable ontologies of cognitive control processes and test predictions of diagnostic frameworks like RDoC. Collected, preprocessed (fMRIPrep), and analyzed (GLM, decoding; Nibabel/Nilearn) fMRI data. Independent research on how to use connectivity-based Shared Response Modeling to align fMRI data of frontoparietal control network processes during cognitive control tasks.

Stanford Memory Lab, Stanford University 2019–2022
Advisors: Anthony Wagner, tyler bonnen
Independent honors research on how to disentangle perceptual and mnemonic contributions to race-related memory bias. Assisted with behavioral experiments to predict false memories in a list-learning paradigm with embeddings from language models. Assisted with fMRI experiments (image pre-processing, hippocampal ROI segmentation, GLM analysis) on neural substrates of memory-guided attention during scene perception.

Stanford Human Rights in Trauma Mental Health Program 2021
Contributed to drafting briefs to the International Criminal Court on trauma-sensitive eyewitness practices.

Laboratory of Evolutionary Neurobiology, UC Davis 2017
Advisors: Leah Krubitzer, Mackenzie Englund
Studied the impact of vision loss on somatosensation and motor control in *Monodelphis domestica*. Performed motor control behavioral experiments; cut, stained, mounted, and analyzed neural tissue samples.

Teaching & Mentorship

Graduate teaching assistant, The Science of Psychology Fall 2024
Instructor: Sarah DeMoya, PhD

Private tutor (middle-, high-, and college-level mathematics, English, statistics) 2022–

Professional Experience

Investigator, Habeas Corpus Resource Center (San Francisco, CA) 2023–2024
Conducted client/witness interviews, racial bias data analysis, psychological literature reviews, and case research for capital mitigation on state habeas appeals of death sentences in California.

Data Analyst, Asian Americans Advancing Justice – ALC (San Francisco, CA) 2023–2023
Description

Legal Intern, UnCommon Law (Oakland, CA) 2020
Intake, communications, and document drafting to provide pro-bono, trauma-informed representation to parole-eligible people serving life sentences in CA prisons.

Research Intern, Center for Science & Law (Houston, TX) 2020
Drafted literature reviews to inform criminal policy with behavioral neuroscience insights.

Academic & Volunteer Service

Columbia University Center for Justice (New York, NY) 2024–
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Columbia University Neuroscience Outreach (New York, NY) 2024–
Volunteer and lead community neuroscience workshops for local adults & children.

Volunteer, Parole Prep Project (New York, NY) 2024–
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Bilingual Hotline Volunteer, Freedom for Immigrants (Oakland, CA) 2020–
Document abuse in detention facilities and connect asylum-seekers to legal resources.

Media

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References

Dr. Daphna Shohamy ds2619@columbia.edu
Dr. Anthony Wagner awagner@stanford.edu
Dr. Russell Poldrack russpold@stanford.edu
Dr. Patrick Bissett pbissett@stanford.edu