

Patrick Sadil

POSTDOCTORAL RESEARCH FELLOW

Johns Hopkins Bloomberg School of Public Health; Biostatistics

✉ psadil1@jh.edu | 🏠 psadil.github.io/psadil | ☎ 0000-0003-4141-1343 | 📧 psadil | 🌐 psadil

Education

PhD, Cognitive Psychology

UNIVERSITY OF MASSACHUSETTS, AMHERST

Amherst, MA

2019–2020

MS, Cognitive Psychology

UNIVERSITY OF MASSACHUSETTS, AMHERST

Amherst, MA

2015–2019

BA, Biology

REED COLLEGE

Portland, OR

2010–2014

Publications

PREPRINTS

Sadil, P., Cowell, R. A., & Huber, D. E. (2021). Every Response is both an Attraction to the Prior Response and a Repulsion from the Prior Stimulus. In *PsyArXiv*. <https://doi.org/10.31234/osf.io/f52yz>

Sadil, P., Huber, D. E., & Cowell, R. A. (2021). NeuroModulation Modeling (NMM): Inferring the form of neuromodulation from fMRI tuning functions. In *bioRxiv*. <https://doi.org/10.1101/2021.03.04.433362>

PEER-REVIEWED

Cowell, R. A., Barense, M. D., & Sadil, P. (2019). A Roadmap for Understanding Memory: Decomposing Cognitive Processes into Operations and Representations. *eNeuro*, 6(4). <https://doi.org/10.31234/osf.io/b7e8k>

Sadil, P., Cowell, R. A., & Huber, D. E. (2019). A hierarchical Bayesian state trace analysis for assessing monotonicity while factoring out subject, item, and trial level dependencies. *Journal of Mathematical Psychology*; IF: 2.176, 90, 118–131. <https://doi.org/10.1016/j.jmp.2019.01.003>

Sadil, P., Potter, K. W., Huber, D. E., & Cowell, R. A. (2019). Connecting the dots without top-down knowledge: Evidence for rapidly-learned low-level associations that are independent of object identity. *Journal of Experimental Psychology: General*; IF: 4.107, 148(6), 1058–1070. <https://doi.org/10.17605/osf.io/bqp32>

Ross, D. A., Sadil, P., Wilson, M. D., & Cowell, R. A. (2017). Hippocampal Engagement during Recall Depends on Memory Content. *Cerebral Cortex*; IF: 6.308, 28(8), 2685–2698. <https://doi.org/10.1093/cercor/bhx147>

Sadil, P., & Cowell, R. A. (2017). A Computational Model of Perceptual and Mnemonic Deficits in Medial Temporal Lobe Amnesia. *Journal of Cognitive Neuroscience*; IF: 3.468, 29(6), 1075–1088. https://doi.org/10.1162/jocn_a_01106

Sadil, P., & Cowell, R. A. (2016). A Computational Model of Perceptual Deficits in Medial Temporal Lobe Amnesia. *Proceedings of the 38th Annual Meeting of the Cognitive Science Society*.

Grants and Awards

Oracle for Research

\$50,000.00

- Study biases in automated diagnoses from medical imaging

Johns Hopkins Bloomberg School of
Public Health

2021

Keith Rayner Memorial Graduate Student Research Award

\$1,500.00

University of Massachusetts,
Amherst

2018

Center for Research on Families Travel Grant

\$300.00

- Presented research at the 14th annual Context and Episodic Memory Symposium.

University of Massachusetts,
Amherst

2018

Edna M. Dahlquist Scholarship

\$2,000.00

University of Massachusetts,

Amherst

2016

Biology Undergraduate Research Proposal

\$1,500.00

Reed College

2014

- Characterized serotonin's role in generating rhythmic, vocal behavior in South African claw-toed frog with electrophysiology

Summer Undergraduate Research Fellowship

\$5,500.00

Reed College

2013

- Set up immunohistochemistry protocols including tract tracing and Golgi Staining.

Presentations

Sadil, P., Cowell, R. A., & Huber, D. E. (2022). *Uncovering the neural and behavioral factors that underlie changes in processing visual orientation*. Invited talk given at Arizona State University seminar series.

Sadil, P., & Lindquist, M. (2022). *Reliability of effect sizes and spatial localization with population-level sample sizes*. Poster presented at the 2022 Annual Meeting of the Organization for Human Brain Mapping.

Sadil, P., Cowell, R. A., & Huber, D. E. (2020). *The serial dependence effect is both attraction to the previous response and repulsion from the previous stimulus*. Poster presented at the 61st annual Psychonomics Society Meeting. Virtual.

Sadil, P., Cowell, R. A., & Huber, D. E. (2019). *A hierarchical bayesian state trace analysis for assessing monotonicity factoring out subject, item, and trial level dependencies*. Poster presented at the 52nd Annual Meeting of the Society for Mathematical Psychology Montreal, Quebec. CA.

Sadil, P., Huber, D. E., & Cowell, R. A. (2018). *A hierarchical bayesian model for inferring neural subpopulation tuning functions from fMRI*. Poster presented at the 1st Annual UMass Interdisciplinary Neurosciences Conference. Amherst, MA.

Sadil, P., Huber, D. E., & Cowell, R. A. (2018). *A hierarchical bayesian model for inferring neural tuning functions from voxel tuning functions*. Talk given at the annual Vision Science Society Meeting. St. Pete Beach, Florida.

Sadil, P., Huber, D. E., & Cowell, R. A. (2018). *Episodic-like retrieval mechanisms for non-episodic memories: Visual recollection in the absence of identification*. Talk given at the 14th annual Context and Episodic Memory Symposium. Philadelphia, PA.

Sadil, P., Huber, D. E., & Cowell, R. A. (2017). *A novel method for fMRI analysis: Inferring neural mechanisms from voxel tuning*. Poster presented at the 1st annual Conference on Cognitive Computational Neuroscience. New York, NY.

Sadil, P., Potter, K., Huber, D. E., & Cowell, R. A. (2017). *A continuous flash suppression study of implicit visual recollection*. Talk given at the 13th annual Context and Episodic Memory Symposium. Philadelphia, PA.

Sadil, P., Huber, D. E., & Cowell, R. A. (2016). *Computational model of perceptual deficits in medial temporal lobe amnesia*. Poster presented at the 12th annual Context and Episodic Memory Symposium. Philadelphia, PA.

Sadil, P., Potter, K., Huber, D. E., & Cowell, R. A. (2016). *A continuous flash suppression study of implicit visual recollection*. Poster presented at the 57th annual Psychonomics Society Meeting. Boston, MA.

Sadil, P., Huber, D. E., & Cowell, R. A. (2015). *Visual recollection*. Poster presented at the 11th annual Context and Episodic Memory Symposium. Philadelphia, PA.

Peer Review

AD HOC BOOK REVIEW

- Springer

AD HOC REVIEW FOR JOURNALS

- Frontiers Aging Neuroscience
- Journal of Mathematical Psychology

Workshops Attended

- 2018 New England Statistics Symposium – Introduction to Bayesian Inference with Stan
- 2016 NIH funded training course in fMRI

*University of
Massachusetts,
Amherst
University of
Michigan*