Ari Khoudary

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Education

University of California, Irvine

Ph.D., Cognitive Sciences — Anticipated 2026
M.S., Cognitive Neuroscience — Anticipated 2023
Advisors: Dr. Aaron Bornstein and Dr. Megan Peters

Boston College

B.S., Psychology (honors) and Philosophy, *magna cum laude* — May 2019
Scholar of the College Thesis: *Securing the Reliability of Episodic Memory*
Advisors: Dr. Maureen Ritchey (psychology) and Dr. Richard Atkins (philosophy)

Research Experience

Graduate Student Researcher, Bornstein and Peters labs, UC Irvine — Fall 2021-present
Research Assistant & Lab Manager, De Brigard Lab, Duke University — Summer 2019-Summer 2021
Interactive Student, Neuromatch Academy — July 2020
Undergraduate Research Fellow, Ritchey Lab, Boston College — Fall 2017-Spring 2019
NSF-REU Fellow, Carrasco Lab, New York University — Summer 2018
Undergraduate Research Assistant, Cordes Lab, Boston College — Spring 2017-Fall 2017
Undergraduate Research Assistant, Dr. Gene Heyman, Boston College — Fall 2016

Peer-reviewed Publications *(* denotes equal contribution)*

NB: In August 2022, I started publishing using my affirmed name, Ari. I am still working on revising the documents of record published under my given name.

Khoudary, A., Hanna, E., O'Neill, K.G., Iyengar, V., Clifford, S., De Brigard, F.*, Cabeza, R.*, Sinnott-Armstrong, W.* (2022). A Functional Neuroimaging Investigation of Moral Foundations Theory. *Social Neuroscience*, 1-17. https://doi.org/10.1080/17470919.2022.2148737 [code]

Khoudary, A., O'Neill, K., Faul, L., Murray, S., Smallman, R., De Brigard, F. (2022). Neural differences between internal and external episodic counterfactual thoughts. *Philosophical Transactions of the Royal Society B*. https://doi.org/10.1098/rstb.2021.0337 [code]

Khoudary, A., Peters, M.A.K.*, Bornstein, A.M.* (2022) Precision-weighted evidence integration predicts time-varying influence of memory on perceptual decisions. *Conference on Cognitive Computational Neuroscience*. [code]

De Brigard, F., **Khoudary, M**., & Murray, S. (2022). Times Imagined and Remembered. In Hoerl, C., McCormack, T., & Fernandes, A. (Eds.). *Temporal Asymmetries in Philosophy and Psychology.* Oxford University Press. [code]

Mele, A., Nadelhoffer, T., **Khoudary, M**. (2021). Folk psychology and proximal intentions, *Philosophical Psychology,* 34:6, 761-783, DOI: 10.1080/09515089.2021.1915471 [code]

Talks and Presentations *(* denotes equal contribution)*

Khoudary, A., Bornstein, A.M.*, Peters, M. A. K.* (2023) Perceptual decisions result from dynamic precision-weighted integration of memory and visual information. *Talk to be given at the 26th Annual Meeting of the Association for the Scientific Study of Consciousness (ASSC)*.

Khoudary, A., Peters, M. A. K.*, Bornstein, A.M* (2023) Characterizing time-varying effects of memory on perceptual decisions. *Poster presented at the 2023 International Conference on Learning and Memory (LEARNMEM).*

Khoudary, A., Peters, M. A. K.*, Bornstein, A.M.* (2022). Precision-weighted evidence integration predicts time-varying influence of memory on perceptual decisions. *Poster presented at the 2022 Cognitive Computational Neuroscience (CCN) meeting.*

Khoudary, M., O'Neill, K.G., Faul, L., Murray, S., Smallman, R., De Brigard, F. (2021; 2022). Neural differences between internal and external episodic counterfactual thoughts. *Poster presented virtually at the 2021 Neuromatch Conference (NMC). Poster presented at the 2022 Cognitive Neuroscience Society (CNS) Annual Meeting.*

Chen, J.*, Elowsky, C.*, **Khoudary, M**.*, Revsine, C.* (2020) Predicting fMRI Responses: a Machine Learning Approach. *Neuromatch Academy project presented in fulfillment of the Interactive Track.*

Khoudary, M., Hanna, E., O'Neill, K.G., Iyengar, V., Clifford, S., De Brigard, F., Cabeza, R., Sinnott-Armstrong, W. (2020; 2021). A Functional Neuroimaging Investigation of Moral Foundations Theory. *Poster presented virtually at the Cognitive Neuroscience Society (CNS) Annual Meeting. Poster presented virtually at the 2021 meeting of the Society for Philosophy and Psychology (SPP).*

Khoudary, M., Cooper, R., Ritchey, M. (2019). Effects of divided attention on item and source memory. *Poster presented at the Boston College Psychology Undergraduate Research Conference (PURC).*

Khoudary, M. (2019). How attention alters perception. *Talk given at Nu Rho Psi outreach event, "What's New in the Brain?"*

Khoudary, M., Jigo, M., Carrasco, M. (2018). Characterizing the effects of covert exogenous attention on contrast sensitivity across the visual field. *Poster presented at the NYU Summer Student Research Conference; talk given at the Center for Neural Science Summer Undergraduate Research Program Symposium.*

Awards and Honors

Summer Program Travel Award, RIKEN Center for Brain Science — Summer 2023

Jared M. Roberts Memorial Award, UCI Center for Neurobiology of Learning and Memory — Spring 2023

Graduate Research Fellowship Honorable Mention, National Science Foundation — Spring 2023

DECADE Professional Development Award, University of California, Irvine — Winter 2022

Diversity Recruitment Fellowship, University of California, Irvine — Spring 2021

Phi Beta Kappa, Boston College — Spring 2019

Scholar of the College, Boston College — Spring 2019

Order of the Cross and Crown, Boston College — Spring 2019

Research Experience for Undergraduates Fellow, National Science Foundation — Summer 2018

Dean's List, First Honors — Spring 2016, Spring 2017, Fall 2017, Spring 2018, Fall 2018, Spring 2019

Nu Rho Psi, National Honor Society in Neuroscience — Fall 2018

Psi Chi, National Honor Society in Psychology — Fall 2017

Honors Program, Boston College Psychology Department — Fall 2017

Honors Program, Boston College Morrissey College of Arts and Sciences — Spring 2015

Professional Experience

Teaching Assistant, Memory, Prof. Aaron Bornstein — Spring 2023

Teaching Assistant, Intro to Human Memory, Prof. Christine Lofgren — Winter 2023

Teaching Assistant, Neurobiology of Cognition, Prof. Alyssa Brewer — Fall 2022

Teaching Assistant, Honors Research Methods, Profs. Aaron Bornstein & Nadia Chernyak — Spring 2022

Teaching Assistant, Intro to Human Memory, Prof. Christine Lofgren — Winter 2022

Teaching Assistant, Sensation and Perception, Prof. Virginia Richards — Fall 2021

Program Coordinator, Summer Seminars in Neuroscience and Philosophy — Summer 2019-Summer 2021

Selected Leadership & Outreach

Representative, Diverse Educational Community & Doctoral Experience, UC Irvine — Fall 2022-present

Strike Captain, UAW 2865, UC Irvine — Fall 2022

Contributor, DIBS Methods Meetings Journal Club, Duke University — Fall 2020-Spring 2021

Founder, Philosophy and Neuroscience Journal Club, Duke University — Spring 2020-Spring 2021

Mentor, Psychology Department Mentorship Program, Boston College — Fall 2018-Spring 2019

President and Co-Founder, Nu Rho Psi, Boston College — Spring 2018-Spring 2019

Tutor, Connor's Family Learning Center, Boston College — Fall 2017-Spring 2019

President, Students for Education Reform, Boston College — Fall 2016-Spring 2018

Skills

Programming and Software

Intermediate proficiency: R; Python; MATLAB; Git; PLS Toolbox for MATLAB; PsychoPy; Google Colab

Novice proficiency: JASP; TensorFlow; EEGLAB, MGL, and Psych toolboxes for MATLAB

Data Collection (human subjects)

fMRI (8 coil 3T GE MR750)

Behavioral (Qualtrics, Amazon Mechanical Turk, Prolific)

EEG (BioSemi 64 channel gel)

Eye Tracking (EyeLink 1000)

Languages

Arabic (Native Levantine; novice Modern Standard)

References

Aaron Bornstein, Ph.D.
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Cognitive Sciences
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Felipe De Brigard, Ph.D.
Associate Professor
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Maureen Ritchey, Ph.D.
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