

# Maria Khoudary

pronouns: they/them

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## Education

**Boston College**, Chestnut Hill, MA

May 2019

Bachelor of Science, Psychology (honors) and Philosophy, *magna cum laude*

Scholar of the College Thesis: *Securing the Reliability of Episodic Memory*

Advisors: Dr. Maureen Ritchey (psychology) and Dr. Richard Atkins (philosophy)

## Research Experience

Interactive Student, [Neuromatch Academy](#)

July 2020

- Participated in a three-week online summer school in computational neuroscience covering fundamentals of modelling, Bayesian statistics, linear dynamical systems, and machine learning.
- With three classmates, built five different convolutional neural networks to investigate architectural constraints on successful prediction of the early visual BOLD response to natural images.

Lab Manager and Research Assistant, [De Brigard Lab](#), Duke University

Summer 2019-present

- Program and conduct behavioral and fMRI experiments investigating memory, metacognition, and counterfactual thinking; re-analyze moral judgment fMRI data using spatiotemporal partial least squares; conduct and assist with several online, survey-based studies.
- Manage over 10 IRB protocols, oversee lab finances, create and maintain lab website.
- Coordinate the [Summer Seminars in Neuroscience and Philosophy](#), a two-week summer school for early career researchers; assist with editing a volume on neuroscience and philosophy by providing editorial comments and co-authoring a glossary with contributing authors.

Undergraduate Research Fellow, [Ritchey Lab](#), Boston College

Fall 2017-Spring

2019

- Designed and conducted honors thesis experiment testing the effects of divided attention on semantically induced memory distortions.
- Collected and manually rejected EEG data, administered behavioral studies examining how context, context reinstatement, emotion, and emotion regulation modulate episodic memory.

NSF-REU Fellow, [Carrasco Lab](#), New York University

Summer 2018

- Worked with a graduate student to design, pilot, and conduct a behavioral experiment quantifying the effects of covert exogenous attention on contrast sensitivity across the visual field; conducted comprehensive literature review, wrote MATLAB scripts to organize and visualize data.
- Participated in wet lab and MATLAB bootcamps, brown-bag faculty lectures for fellows, and a philosophy journal club organized by graduate students in computational neuroscience.

Undergraduate Research Assistant, [Cordes Lab](#), Boston College Spring 2017-Fall 2017

- Conducted behavioral experiments testing numerical cognition in 2- and 3-year-old human participants, assisted with behavioral experiments testing numerical cognition in infants.

Undergraduate Research Assistant, [Dr. Gene Heyman](#), Boston College Fall 2016

- Calibrated stimulus duration for an experiment testing rapid attention allocation.

## Awards and Honors

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

Undergraduate Research Fellowship, Boston College  
Spring 2018

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

## Articles

De Brigard, F., **Khoudary, M.**, & Murray, S. (In press). Times imagined and remembered. In Hoerl, C., McCormack, T., & Fernandes, A. (Eds.). *Temporal Asymmetries in Philosophy and Psychology*. Oxford University Press.

Mele, A., Nadelhoffer, T., **Khoudary, M.** (Forthcoming). Folk Psychology and Proximal Intentions.

## *Philosophical Psychology.*

**Khoudary, M.** (Resubmitted). Effects of divided attention on picture misattributions. *Mental Note, undergraduate cognitive science journal at Rutgers University.*

**Khoudary, M.**, Hanna, E., O'Neill, K.G., Iyengar, V., Clifford, S., De Brigard, F., Cabeza, R., Sinnott-Armstrong, W. (in prep). A Functional Neuroimaging Investigation of Moral Foundations Theory.

## **Talks and Presentations** (\* denotes equal contribution)

Chen, J.\*, Elowsky, C.\*, **Khoudary, M.\***, Revsine, C.\* (July 2020) Predicting fMRI Responses: a Machine

Learning Approach. *Neuromatch Academy project presented in fulfillment of the Interactive Track.*

**Khoudary, M.**, Stanley, M., Yang, B.W., Cabeza, R., De Brigard, F. (June 2020). Memory vividness and

source monitoring. *Poster accepted to the Society for Philosophy and Psychology Annual Meeting (postponed due to COVID-19).*

**Khoudary, M.**, Hanna, E., O'Neill, K.G., Iyengar, V., Clifford, S., De Brigard, F., Cabeza, R., Sinnott-Armstrong, W. (May 2020). A Functional Neuroimaging Investigation of Moral Foundations Theory. *Poster presented virtually at the Cognitive Neuroscience Society Annual Meeting. Poster accepted to the North Carolina Cognition Conference (postponed due to COVID-19). Poster accepted to the Society for Philosophy and Psychology Annual Meeting (postponed).*

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

**Khoudary, M.** (April 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. (July 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.*

## **Skills**

### *Programming and Software*

Intermediate proficiency: R; Python; MATLAB; Git; PLS Toolbox for MATLAB; PsychoPy; Google Colab  
Novice proficiency: JavaScript; TensorFlow; EEGLAB, MGL, and Psych toolboxes for MATLAB; SPSS

### *Data Collection (human subjects)*

fMRI (8 coil 3T GE MR750)

EEG (BioSemi 64 channel gel)

Behavioral (Qualtrics, Amazon Mechanical Turk, Prolific)    Eye Tracking (EyeLink 1000)

### Languages

Arabic (Native Levantine; novice Modern Standard)

## Relevant Coursework

### *Boston College*

Cognitive Psychology

Sensation and Perception

Psychopharmacology

Research Practicum in Cognition Psychology

Intro to Behavioral Statistics and Research

Experimental Design and Statistics (grad/undergrad)

Selected Readings in Phenomenology (grad/undergrad)

Developmental Psychology

Cognitive Neuroscience

Behavioral Neuroscience

Neural Circuits of Emotional Memory

Computer Science I

Philosophy of Mind

Philosophy of Science (grad/undergrad)

### *Tufts University* – grad/undergrad seminars

50 Years of Consciousness Research

Current Topics in Consciousness Research

### *Duke University* – audited courses

Functional Neuroimaging

Memory: Philosophical and Scientific Issues (grad/undergrad)

## Selected Leadership & Outreach

Founder, Philosophy and Neuroscience Journal Club, Duke University

Spring

2020-present

- Create a journal club for neuroscientists, psychologists, and philosophers to read and discuss issues in philosophy of neuro/science and mind; secure funding, run and schedule meetings, work with faculty and administration to book internal and external speakers.

FM DJ, WZBC-Newton, Boston College

Fall

2018-present

- Host a radio show (*default mode*) wherein I play variants of psychedelic music and interview researchers in psychology, neuroscience, and/or philosophy.

Mentor, Psychology Department Mentorship Program, Boston College

Fall 2018-Spring

2019

- Met monthly with three undergraduate psychology students to offer advice about courses, career development, research opportunities, and time management.

President and Co-Founder, Nu Rho Psi, Boston College

Spring 2018-Spring 2019

- Worked with a graduate student, three undergraduates, and university administration to establish a Boston College chapter of the national honor society in neuroscience.

Tutor, Connor's Family Learning Center, Boston College

Fall 2017-Spring 2019

Subjects tutored: Behavioral Neuroscience, Sensation and Perception, Intro to Behavioral Statistics and Research, Research Methods for Social Sciences, Intro to Psychology as a Natural Science, Intro to Psychology as a Social Science, Developmental Psychology, Philosophy

President, Students for Education Reform, Boston College  
2018

Fall 2016-Spring

- Organized campus- and city-wide events to raise awareness about inequity in the K-12 education system and provide opportunities for grassroots political action.

## References

### **Felipe De Brigard, Ph.D.**

*Associate Professor*

Philosophy

Psychology & Neuroscience

Center for Cognitive Neuroscience

Duke University

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### **Maureen Ritchey, Ph.D.**

*Assistant Professor*

Psychology & Neuroscience

Boston College

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### **Richard Atkins, Ph.D.**

*Associate Professor*

Philosophy

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