

Julie Freschl
Developmental and Brain Sciences PhD
University of Massachusetts Boston
100 Morrissey Blvd., Boston, MA 02125
Julie.Freschl001@umb.edu

EDUCATION

University of Massachusetts Boston, Boston, MA PhD Developmental and Brain Sciences Advisor: Dr. Erik Blaser	2016 - present
University of California, Irvine, Irvine, CA B.A., Psychology (Cognitive Science)	2011 - 2015

AWARDS AND HONORS

Elsevier/Vision Research Travel Award (Vision Science Society)	2020
Cold Spring Harbor Laboratory course on Vision: A Platform for Linking Circuits, Behavior and Perception (funded by National Eye Institute)	2019
NSF Directors Meeting at UC Berkeley (representing the Center for Brains Minds and Machines)	2018
Dr. Robert W. Spayne Research Grant	2017
UMass Boston First Year Fellowship	2016 - 2017
Graduate Assistantship	2016 - present
UC Irvine Undergraduate Research Opportunities (UROP) Grant Project title: Acoustic startle response in patients with schizophrenia and bipolar disorder	2014 -2015
UC Irvine Undergraduate Research Opportunities (UROP) Grant Project title: The effect of continuous background noise on N100 and P200 evoked brain potentials in schizophrenia and bipolar disorder	2013 - 2014

RESEARCH EXPERIENCE

PhD candidate, Developmental and Brain Sciences 9/2016 - present
University of Massachusetts Boston
Advisor: Dr. Erik Blaser

- Investigating visual temporal processing across typical and atypical development and the role of neural oscillations using psychophysical, eye tracking, and EEG techniques.

Research Assistant, Visual Perception and Neuroimaging Lab 5/2015 - 8/2016
University of California, Irvine
Advisor: Dr. Emily Grossman

- Investigated visual working memory capacity in blind and sighted individuals using psychophysical techniques.

Research Assistant, Hearing Lab, 1/2015 - 5/2016
University of California, Irvine
Advisor: Dr. Bruce Berg

- Investigated the role of attention on various characteristics of complex sounds such as roughness, loudness, and pitch using psychophysical techniques.

Junior Specialist, Dept. of Psychiatry and Human Behavior 6/2015 - 8/2016
University of California, Irvine Medical Center
Advisor: Dr. Julie V. Patterson

- Trained undergraduate research assistants in electroencephalography (EEG) set up, analysis, data entry, and running EEG experiments using Matlab.
- Processed and analyzed EEG, Event Related Potential (ERP), and Electrooculography (EOG) data using EMSE Suite Data Editor (Cortech Solutions, Inc.)
- Completed project: Acoustic startle response in patients with schizophrenia and bipolar disorder
- Measured the prepulse inhibition and startle habituation in subjects diagnosed with schizophrenia and bipolar disorder using EMSE Suite Data Editor (Cortech Solutions, Inc.)

Research Assistant, Dept. Psychiatry and Human Behavior 6/2013 - 6/ 2015
University of California, Irvine Medical Center
Advisor: Dr. Julie V. Patterson

- Worked directly with subjects diagnosed with bipolar I disorder, schizophrenia, and major depressive disorder
- Experienced in setting up, conducting EEG experiments, and processing/analyzing EEG/ERP data

Freschl, J., Melcher, D., Kaldy, Z., & Blaser, E. (2018). Visual temporal integration windows are adult-like in typically developing 5-7-year-old children. *Journal of Vision*, 18(10), 781–781.

Freschl, J., Melcher, D., Carter, A. S., Kaldy, Z., & Blaser, E. (2018). *Visual Temporal Integration Windows are longer in 2-year-old toddlers with Autism Spectrum Disorder*. Poster presented at the International Conference on Infant Studies, June 30-July 3, 2018, Philadelphia, PA

Freschl, J., Maniar A., Shah A., Patterson, J.V., Bunney W.E., Acoustic startle response in patients with schizophrenia and bipolar disorder. Program No. 227.05.2015, Neuroscience Meeting : Society for Neuroscience, 2015. Chicago, IL

Freschl, J.L., Maniar A., Shah A., Patterson, J.V., Bunney, W.E. (2015). Acoustic startle response in patients with schizophrenia and bipolar disorder. Poster Presentation: Undergraduate Research Opportunities Program 22nd Annual Symposium '15, Irvine, CA

Freschl, J.L., Chow, M., Tran, T., Patterson, J.V., Bunney, W.E.(2014). The effect of continuous background noise on P50, P200, and N100 evoked brain potentials in schizophrenia and bipolar disorder. Poster Presentation: Undergraduate Research Opportunities Program 21st Annual Symposium '14, Irvine, CA

TEACHING EXPERIENCE

Instructor of Record

PSYCH255 Perception	Fall 2019
PSYCH255 Perception	Spring 2020

Graduate Teaching Assistant

PSYCH250 Learning and Memory	Spring 2019
PSYCH255 Perception	Spring 2018
Developmental and Brain Sciences Program Coordinator	Fall 2018
PSYCH255 Perception	Spring 2018
PSYCH255 Perception	Fall 2017
PSYCH255 Perception	Spring 2017
PSYCH101 Introduction to Psychology	Fall 2016

Guest Lecturer, University of Massachusetts Boston

PSYCH201 Introduction to Behavioral Research Methods	Spring 2018
PSYCH255 Perception	Spring 2018
PSYCH475 Experimental Methods: Learning and Perception	Fall 2018

PSYCH250 Learning and Memory

Spring 2019

MENTORING EXPERIENCE

University of Massachusetts, Boston

PSYCH 286 Introduction to Research Apprenticeship

Spring 2020

- Student Mentored: Minh Mai
- Met weekly to discuss scientific research articles related to developmental cognitive neuroscience (including psychophysical, eye tracking, and EEG techniques)

Meta-analysis training

Spring 2020 - present

- Students Mentored: Lina Al Zizi, Lilyann Balboa
- Trained students on meta-analysis methods including literature search, abstract and full text screening for a systematic review investigating the development of occipital peak alpha frequency (manuscript in preparation).

Laboratory research mentor (UMass Boston Baby Lab)

2016 - present

- Students mentored: Victoria DiPrizio, Nicole DiCienzo, Sophonie Soulouque, Mary Glynn, Alexandra Cook, Elicia Kelley, Amanda Sutton, Ashley Ross, and Dennis Yang Chen

University of California, Irvine Medical Center

Laboratory research mentor (Psychiatry and Human Behavior)

6/2015 - 8/2016

- Trained undergraduate research assistants in electroencephalography (EEG) set up, analysis, data entry, and running EEG experiments using Matlab.

CLINICAL EXPERIENCE

Behavior Therapist, Novata Behavioral Health

3/2014 - 6/2015

San Diego, CA

- Provided in home, Applied Behavioral Analysis (ABA), to children diagnosed with autism spectrum disorder (ages 2-6 years).

Volunteer, Mendability: Sensory Enrichment Therapy

10/ 2013 - 6/2015

Orange County, CA

- Implemented a home-based sensory enrichment therapy utilizing repetitive sensory stimulation (auditory, visual, olfactory, and touch stimuli).

Volunteer, CampCare Nevada

7/2013

Zephyr Cove, Nevada

SKILLS

Matlab Programming

Psychophysical experimental design and analysis

Eye Tracking (Tobii Studio)

EEG acquisition and analysis (EMSE Suite, Cortech Solutions; EEGLAB)

fMRI data preprocessing (BrainVoyager)

Statistical analysis (R, JASP Bayesian Statistics, SPSS, NCSS)

Clinical assessments (Mullen Scales of Early Learning, Structured clinical Interview for DSM-V, Beck Depression Inventory)

REFERENCES

Dr. Erik Blaser, PhD

Professor, Department of Psychology

University of Massachusetts Boston

Tel: 617-287-6420

Email: erik.blaser@umb.edu

Dr. Zsuzsa Kaldy, PhD

Professor, Department of Psychology

University of Massachusetts Boston

Tel: 617-287-6363

Email: zsuzsa.kaldy@umb.edu

Dr. David Melcher, PhD

Professor of Psychology

NYU Abu Dhabi

Email: david.melcher@nyu.edu

Dr. Emily Grossman, PhD

Professor, Department of Cognitive Sciences

University of California Irvine

Tel: 949-824-1530

Email: grossman@uci.edu