

SARAH HENNESSY

(907) 792-9183

hennesss@usc.edu

shennessy@arizona.edu

sarahlouisehennessy.com

TRAINING

University of Arizona

Postdoctoral Fellow

start September 2024

Advisors: Dr. Jessica Andrews-Hanna, Dr. Matthew Grilli

University of Southern California

Ph.D., Psychology

2019-2024

M.A., Psychology

2019-2021

Emphasis: *Brain and Cognitive Sciences*

Advisors: Dr. Assal Habibi, Dr. Antonio Damasio

Dissertation: *Behavioral and Neural Correlates of Music-Evoked Nostalgia Across the Lifespan*

GPA: 4.0

Occidental College

B.A., Psychology

2013-2017

Minor: *Ethnomusicology*

Honors Thesis: *Psychophysiological Responses During Music-Induced Nostalgia in Younger and Older Adults*

Advisor: Dr. Anne Schell, Department of Psychology

GPA: 3.76, *magna cum laude*, *Departmental Honors*, *Departmental Distinction*

RESEARCH GRANTS

- NIH T32 Pre-Doctoral Fellowship *Hearing and Communication Neuroscience (2023-)*
- USC Graduate School Summer Research and Writing Grant (\$2000) (2023)
- Gold Family Fellowship (\$5000) (2023)
- SEMPRE 50th Anniversary Research Award (\$16,000) (2022)
- GRAMMY Museum Scientific Research Grant (\$20,000) (2022)
- USC Department of Psychology Doctoral Research Grant Award (\$1000) (2022)
- USC Department of Psychology Doctoral Research Grant Award (\$3250) (2021)
- Dornsife PhD Academy Research Award (\$500/yr) (2021, 2022, 2023)
- USC Psychology Research Continuity Award (\$1000) (2020)
- USC Psychology Department Travel Award (\$1000/yr) (2020, 2021)
- USC Fellowship Bootcamp Award (\$1000/yr) (2019, 2021)

PUBLICATIONS

* = trainee author (student)

Hennessy, S., Greer, T., Narayanan, S., Habibi, A., (2024). Unique affective profile of nostalgic music: An extension and conceptual replication of Barrett et al., 2010. *Emotion*.

Hennessy, S., Herschel, E., Goldsworthy, R., Cahn, R., Habibi, A. (2022). Effects of online choir or mindfulness interventions on auditory perception and well-being in middle- and older-aged adults during the COVID-19 pandemic: a randomized controlled trial. *Music and Science*.

Hennessy, S., Mack, W. J., & Habibi, A. (2022). Speech-in-noise perception in musicians and non-musicians: a multi-level meta-analysis. *Hearing Research*, 108442.

Hennessy, S., Sachs, M., Kaplan, J., & Habibi, A. (2021). Music and mood regulation during the early-stages of the COVID-19 pandemic. *PLOS One*.

Hennessy, S., Wood, A., Wilcox, R., & Habibi, A. (2021). Neurophysiological improvements in speech-in-noise task after short-term choir training in older adults. *Aging*.

Hennessey, S., Sachs, M., Ilari, B., & Habibi, A. (2019). Effects of Music Training on Inhibitory Control and Associated Neural Networks in School-Aged Children: A Longitudinal Study. *Frontiers in Neuroscience: Auditory Cognitive Neuroscience*.

Hennessey, S., Greer, T., Habibi, A., Narayanan, S., (*under review*). What Makes Music Nostalgic? A validation of a music recommendation tool.

Papadopoulos, J., Nowlen, F., **Hennessey, S.,** Herschel, E., Habibi, A., Goldsworthy, R., (*under review*). Relationships between short term choir participation, well-being, and singing abilities of adult cochlear implant users.

Hennessey, S., Kaplan, J., Ginsberg, T.*, Janata, P., Habibi, A., (*in preparation*). Neural correlates of music-evoked nostalgia in younger and older adults.

Hennessey, S., Kaplan, J., Habibi, A., (*in preparation*). “We read the news today, oh boy”: Intersubject neural synchronization during a shared nostalgic music listening experience.

Hennessey, S., Ishak, M.*, Noel, C.*, Habibi, A., (*in preparation*). Music-evoked nostalgia and autobiographical memory in BIPOC older adults.

Hennessey, S., Habibi, A., (*in preparation*). Affect and content of autobiographical memories evoked by nostalgic music.

PRESENTATIONS

* = trainee author (student)

Ishak, M.*, **Hennessey S.,** Habibi, A., (July 2024). Exploring the Role of Lyrics in Shaping Emotional Responses to Music. Poster presentation at Society for Music Perception and Cognition, Banff, AB.

Ginsburg, T*, **Hennessey S.,** Habibi, A., (July, 2024). Age-related changes in neural activation associated with semantic details of music-evoked autobiographical memories. Symposium talk presentation at Society for Music Perception and Cognition, Banff, AB.

Hennessey, S., Janata, P., Ginsberg, T., Kaplan, J., Habibi, A., (June 2024). Neural correlates of music-evoked nostalgia across the lifespan. Poster presentation at Neurosciences of Music, Helsinki, Finland.

Hennessey, S., Janata, P., Habibi, A., (October 2023). Neural correlates of music-evoked nostalgia across the lifespan. Poster presentation at NeuroMusic, Hamilton, ON.

Hennessey, S., Mack, W. J., & Habibi, A. (August 2022). Speech-in-noise perception in musicians and non-musicians: a multi-level meta-analysis. Post presentation Society for Music Perception and Cognition, Portland, OR.

Hennessey, S., Wood, A., Wilcox, R., & Habibi, A., (November 2021). *Short-Term Music Training on Auditory Processing in Older Adults*. Poster presentation at Society for Neuroscience (virtual).

Hennessey, S., Wood, A., & Habibi, A., (June 2021). *Short-Term Music Training on Auditory Processing in Older Adults*. Poster presentation at Neuroscience and Music VII: Connecting with music across the lifespan, Aarhus, Denmark (virtual).

Hennessey, S., Sachs, M., Ilari, B., & Habibi, A., (September 2019). *Effects of Music Training on Inhibitory Control and Associated Neural Networks in School-Aged Children: A Longitudinal Study*. Symposium presentation at the Society for Music Perception and Cognition, New York City, NY.

Hennessey, S., Perez, P., & Habibi, A., (September 2018). *Longitudinal effects of music training on inhibitory control in school-aged children*. Poster presented at The International Mind, Brain, and Education Society, Los Angeles, CA.

Hennessey, S., & Schell, A. (October 2017). *Psychophysiological responses during music-induced nostalgia in younger and older adults*. Poster presented at Society for Psychophysiological Research Convention, Vienna, Austria.

Hennessey, S., & Schell, A. (May 2017). *Psychophysiological responses during music-induced nostalgia in younger and older adults*. Poster presented at the Psychology Undergraduate Research Conference of the University of California Los Angeles, Los Angeles, CA.

INVITED TALKS

- “Music-evoked memory, and implications for healthy aging” 2023, 2024
Lecture given to Mind-Body Connection (PSYC 374)
USC Psychology Department
- “Music and Memory: Nostalgia and Health” 2022, 2023
Lecture given to Accelerated Summer Psychology Course
University of Southern California
- “Music-evoked Memory and Nostalgia” 2022
Lecture given to Music, Mind, and Brain
USC Psychology Department
- “Confounds and Obscuring Variables” 2021
Lecture given to Experimental Research Methods
USC Psychology Department
- “COVID-19 Vaccination: Myths and Facts” 2021
Lecture given to Drugs, Behavior, and Society
USC Psychology Department
- “Music Training and Child Development” 2019
Lecture given to Reporting and Writing
USC Annenberg School for Communication and Journalism

TEACHING

- Founder, Instructor** 2023-
Brain and Music Lab Workshop Series
Monthly 2-hour workshops
Sample Topics: R Programming, resume building, neuroanatomy, fMRI methods
University of Southern California, Los Angeles, CA
- Teaching Assistant** Spring 2022
Course: *Music, Mind, and Brain*
Instructor: Dr. Assal Habibi and Dr. Beatriz ILari
Department of Psychology
University of Southern California, Los Angeles, CA
Mean overall rating: 3.8/4
- Certification Received** Fall 2021
Center for Excellence in Teaching Future Faculty Training Institute
Center for Excellence in Teaching
University of Southern California, Los Angeles, CA
- Teaching Assistant** Fall 2021
Course: *Experimental Research Methods*
Instructor: Dr. Corinne Bower
Department of Psychology
University of Southern California, Los Angeles, CA
Mean overall rating: 3.7/4
- Teaching Assistant** Spring 2021
Course: *Drugs, Behavior, and Society*

Instructor: Dr. John Monterosso
Department of Psychology
University of Southern California, Los Angeles, CA
Mean overall rating: 3.9/4

Teaching Assistant

Fall 2020

Course: *Introduction to Psychology*
Instructor: Dr. Jo Ann Farver
Department of Psychology
University of Southern California, Los Angeles, CA
Mean overall rating: 3.9/4

MENTORSHIP

Brain and Music Lab Research Assistants 2017-
Trained, managed, and mentored over 80 undergraduate and masters-level researcher assistants. Led monthly workshops on statistical methods, research methods, coding, post-baccalaureate career paths. Mentored independent projects and theses (see below).

Aanya Agarwal 2024
Cognitive Science Honors, Undergraduate
University of Southern California
Thesis: "Priming in autobiographical narratives"
Outcomes: USC Provost Summer Fellowship

Mark Feng 2024
Neuroscience Honors, Undergraduate
University of Southern California
Thesis: "Bodily maps of nostalgia evoked by music"
Outcomes: USC Provost Summer Fellowship

Alisha Huang 2024
Independent Research Project
University of Southern California
Project: "Culturally-tailored music therapy for older adults with dementia: a systematic literature review"
Outcomes: USC SOAR summer fellowship

Michael Ishak 2024
Independent Research Project
University of Southern California
Project: "Exploring the Role of Lyrics in Shaping Emotional Responses to Music"
Outcomes: Poster presented at *Society for Music Perception and Cognition* 2024

Jasmine Shapiro 2024
Speech and Language Pathology Capstone, Masters
University of Southern California
Thesis: "Music and autobiographical memory in aging"

Athena Fong 2024
Speech and Language Pathology Capstone, Masters
University of Southern California
Thesis: "Music and autobiographical memory in aging"

Ashley Melendres 2024
Neuroscience Honors, Undergraduate

University of Southern California
Thesis: “White Matter Predictors of Autobiographical Memory Recall from Music”

Talia Ginsberg 2024
Neuroscience Honors, Undergraduate
University of Southern California
Thesis: “Age-related changes in neural activation associated with semantic details of music-evoked autobiographical memories”
Outcome: USC Provost Summer Fellowship, Winner of USC Interdisciplinary Life Sciences Award, Symposium talk presented at *Society for Music Perception and Cognition 2024*, Neuroscience Honors Received

Edalyn Cayetano 2023
Speech and Language Pathology Capstone, Masters
University of Southern California
Thesis: “Music-evoked Autobiographical Memories”

Nona Hovhannisyan 2023
Speech and Language Pathology Capstone, Masters
University of Southern California
Thesis: “Music-evoked Autobiographical Memories”

Samhita Swamy 2019
Neuroscience Honors, Undergraduate
University of Southern California
Thesis: “Community Music Training and Neural Correlates of Emotional Well-being”
Outcomes: Neuroscience honors received

HONORS & SCHOLARSHIPS

- *Excellence in Scientific Writing Award*, USC Psychology Department (2024)
- University of Washington NeuroHackademy (2020)
- USC Dornsife/ Graduate School Fellowship (2019-)
- Occidental College Departmental Distinction, Psychology (2017)
- Occidental College Departmental Honors, Psychology (2017)
- Occidental College InternAway Summer Funding (\$3000) (2016)
- Occidental College Dean’s List (2014)
- Occidental College Presidential Scholarship (\$20,000/yr) (2013- 2017)

GRADUATE COURSEWORK

- Ethics in Biomedical Research
- Applied Machine Learning
- Classic and Modern Statistical Methods I
- Classic and Modern Statistical Methods II
- Multilevel Statistical Modeling
- Functional Neuroanatomy
- Hearing and Communication Neuroscience
- Social Neuroscience
- Gerontology: Mind Body Connection
- Practicum in Teaching Psychology
- Research Synthesis
- Introduction to fMRI
- Introduction to Data Science

PRE-DOCTORAL RESEARCH EXPERIENCE

NIH T32 Pre-Doctoral Research Fellow 2023-2024
Hearing and Communication Neuroscience Program
University of Southern California
Fellowship Committee: Dr. Assal Habibi, Dr. Jonas Kaplan, Dr. Shrikanth Narayanan

Designed and conducted a multi-study investigation of music-evoked nostalgia across the lifespan, utilizing behavioral and neuroimaging methods (fMRI) in younger and older adults. Fostered interdisciplinary connections across departments during workshops and collaborative publications. Trained, managed, and mentored a team of 50 undergraduate and graduate student Research Assistants.

Research Coordinator

2017- 2019

Brain and Creativity Institute

University of Southern California

Supervisor: Dr. Assal Habibi

Managed two longitudinal studies examining the cognitive, social, emotional, and neural effects of community-based music training on children from underserved neighborhoods of Los Angeles. Designated task protocol, collected and managed collection of behavioral, EEG, and fMRI data. Conducted behavioral and neuroimaging analyses.

Interviewed, trained, and scheduled teams of research assistants in behavioral and EEG data collection protocol. Lead monthly lab meetings, provided assignments, and mentored undergraduates in writing, coding, and statistical analysis.

Research Assistant

2015- 2017

Brain and Creativity Institute

University of Southern California

Supervisors: Dr. Assal Habibi, Dr. Beatriz Ilari, Dr. Matthew Sachs

Assisted in several studies investigating the effects of early music learning on socioemotional wellbeing, cognition, and brain structure and function. Recruited and scheduled participants, collected behavioral and physiological (EEG, fMRI) data. Created stimuli using MATLAB. Presented relevant literature and findings to peers at lab meetings.

Research Assistant

2017

Department of Psychology, Psychophysiology

Occidental College

Supervisor: Dr. Anne Schell

Processed and curated data for an investigation of the lateralization of galvanic skin responses to fear-conditioned stimuli.

Honors Thesis

2016-2017

Department of Psychology, Psychophysiology

Occidental College

Supervisor: Dr. Anne Schell

Designed, proposed, and obtained IRB approval for independent study: *Psychophysiological Responses During Music-Induced Nostalgia in Younger and Older Adults*. Collected and analyzed psychophysiological (skin conductance, heart rate, blood volume) data from undergraduates and members of a local retirement community. Presented at UCLA's Psychology Undergraduate Research Convention and the Society for Psychophysiological Research Convention. Completed manuscript for Departmental Honors in Psychology.

Research Assistant

2016

Department of Psychology, Thinking Lab

Occidental College

Supervisor: Dr. Andrew Shtulman

Recruited participants and collected interview data from children for a cognitive developmental study investigating children's differentiation of permissibility and possibility.

Research Assistant

2015

Department of Psychology, Cognitive Psychology

University of Alaska Anchorage

Supervisor: Dr. Yasuhiro Ozuru

Created stimulus materials and collected pilot data examining reactions to factual and opinionated statements in adult participants. Analyzed pilot data and wrote report to guide further research.

Research Assistant

2015

Department of Psychology, Rat Lab

Occidental College

Supervisor: Dr. Nancy Dess

Carried out data collection and entry for two meal patterning studies of rats selectively bred for low and high saccharine intake.

INDUSTRY EXPERIENCE

Research and Data Science Intern

2022-2023

Rubato Life

Los Angeles, CA

Worked with CEO to develop scientific protocol for several clinical trials investigating the effects of a personalized music-curation app for stress reduction in a variety of clinical populations. Worked with CTO to develop dynamic data visualization dashboard, integrating physiological (HR, HRV) and music information retrieval (MIR) data. Used SQL and Python to analyze large datasets (6m+ observations) and inform executives and shareholders.

COMMUNITY OUTREACH

Competition Judge

2023

National STEM Challenge

Provided scores and feedback for science projects for the National STEM Challenge in Washington D.C., for students grades 6-12.

High School Student Research Mentor

2023-

Polygence

Mentored high school students one-on-one over the course of ten sessions on a research project of their choosing. Provided instruction on research methods, design, statistics, and writing.

Personal Statement Editor

2020-

CAPTURE Increase Student Diversity Committee, University of Southern California

Gave feedback to underrepresented minority students applying to the USC psychology PhD program on their application essays.

PhD Application Mentor

2020-

Next Gen Scholars Program, University of Minnesota

Mentored undergraduate and post-baccalaureate students from underrepresented communities (BIPOC, low-income, first-gen, LGBTQ+, etc.) on navigating the psychology PhD application process, edited personal statements.

Lecture Series Organizer

2019-

Brain and Cognitive Sciences Area, USC Psychology

Organized weekly “brown bag” lectures on topics related to the field of brain and cognitive sciences. Invited student, post-doc, and faculty speakers from both within and outside of USC.

Education and Public Outreach Volunteer

2018-

Alzheimer’s Association, Southern California Chapter

Presented educational lectures and led discussions to community organizations in Los Angeles, addressing topics of Alzheimer’s Disease and other dementias. Represented the Alzheimer’s Association at health fairs and community events.

PROFESSIONAL AFFILIATIONS

Music and Dementia Research Network

Society for Neuroscience

Society for Psychophysiological Research

Society for Music Perception and Cognition

NeuroMusic
Society for Affective Neuroscience Research
American Psychological Association

INVITED PEER REVIEW

Psychological Science
Psychology of Music

RELEVANT SKILLS

Data Collection	EEG (Neuroscan, BrainVision), f/MRI (Seimens), skin conductance, heart rate, blood volume (Biopac), Qualtrics, RedCap
Imaging Analysis	Univariate functional analysis (FSL), functional connectivity, MVPA (pymvpa), ISC/ISFC (brainIAK), voxel-based morphometry (FSL), mask tracing (BrainSuite), ERP analysis (EEGLab, erplab), DTI (BrainSuite, DSI)
Statistics, Visualization	R statistics, IBM SPSS, MSAccess, SASViya, Tableau, QuickSight
Programming	Python, MATLAB, PsychToolbox, SuperLab, SQL, NoSQL, MongoDB