

EDUCATION

Ph.D. Psychology, University of California, Davis	August 2024
M.A. Psychology, University of California, Davis	December 2021
B.A. Psychology, Cum Laude, Sonoma State University	May 2019
A.A., Psychology (with Honors) and A.A., Sociology (with Honors), Cosumnes River College	May 2017

EXPERIENCE

Postdoctoral Scholar , Laboratory for the Neural Mechanisms of Attention, UC Davis, CA	2024 -
Lecturer of Psychology, UC Davis, CA	2024 - 2025
Neuroimaging Consultant , Lumos Labs (Lumosity), San Francisco, CA	2025
Visiting Scholar , Centre for Human Brain Health, University of Birmingham, Birmingham, UK	2025
Graduate Student Researcher , Laboratory for the Neural Mechanisms of Attention, UC Davis, CA	2019 - 2024
Research Assistant , Bengson Laboratory, Sonoma State University, CA	2018 - 2019

GRANTS AND FELLOWSHIPS

NSF BCS 2318886 (P.I., Mangun, G.R.) "Mechanisms of Willed Attention" Role: Postdoctoral Scholar	2023-2026
NEI T32 EY015387 (P.I., Burns, M.) "Training Program in Vision Science" Role: Trainee	2022-2024
NIMH R01 MH117991 (P.I., Mangun, G.R.) "Mechanisms of attentional control: Structure and dynamics from simultaneous EEG-fMRI and machine learning" Role: Graduate Student Researcher	2019-2022

HONORS AND AWARDS

Dukes Travel Award , University of California, Davis	2024
Trainee Professional Development Award , Society for Neuroscience	2023
Michael S. Gazzaniga Prize , UC Davis Center for Mind and Brain	2023
Psychology Department Best Poster Award , University of California, Davis	2023
Graduate Student Association Travel Award , University of California, Davis	2023
Early Career Scientist Travel Grant , National Eye Institute	2023
Psychology Diverse Mentoring Initiative Award , University of California, Davis	2021-2024
Dukes Travel Award , University of California, Davis	2021
Student Research Award , Sonoma State University	2018-2019
School of Social Sciences Student Travel Award , Sonoma State University	2018-2019

PUBLICATIONS

- Nadra, J. G.,** Sullivan, G., & Mangun, G. R. (2025). Volitional Attention to Color: Breaking Willed Attention out of the Spatial Domain. *bioRxiv*. doi: 10.1101/2025.07.10.664245.
- Nadra, J. G.,** Bengson, J. J., & Mangun, G. R. (2025). Unconscious Neural Activity Predicts Overt Attention in Visual Search. *bioRxiv*. doi: 10.1101/2025.02.21.639607.
- Nadra, J. G.,** & Mangun, G. R. (2023). Placing willed attention in context: A review of attention and free will. *Frontiers in Cognition*, 2. doi: 10.3389/fcogn.2023.1205618.
- Nadra, J. G.,** Bengson, J. J., Morales, A. B., & Mangun, G. R. (2023). Attention Without Constraint: Alpha Lateralization in Uncued Willed Attention. *eNeuro*, doi: 10.1523/ENEURO.0258-22.2023. PMID: 37236786

INVITED TALKS

- Nadra, J. G.** (2025, August). *Decoding the Electrophysiological Correlates of Willed Attention: Beyond the Cue-to-Target Paradigm*. Invited talk, Neuroimaging of Perception and Attention Laboratory, Michigan State University (virtual).
- Nadra, J. G.** (2025, August). *Decoding the Electrophysiological Correlates of Willed Attention: Beyond the Cue-to-Target Paradigm*. Invited talk, BrainStörmer Lab Meeting, Dartmouth College (virtual).
- Nadra, J. G.** (2025, July). *Decoding the Electrophysiological Correlates of Willed Attention: Investigating Temporal Freedom and Visual Search*. Invited talk, Wu Tsai Institute, Yale University.
- Nadra, J. G.** (2025, May). *Decoding the Electrophysiological Correlates of Willed Attention: Expanding Beyond Covert Spatial Attention*. Invited talk, Neuronal Oscillations Laboratory, University of Birmingham and University of Oxford.
- Nadra, J. G.** (2025, April). *Decoding the Electrophysiological Correlates of Willed Attention: Integrating Spatial and Non-spatial Attention*. Invited talk, Vrije Universiteit Amsterdam.
- Nadra, J. G.** (2024, December). *Breaking into Research: Cognitive Neuroscience with EEG and Machine Learning*. Invited talk, Neurotech@Davis, University of California, Davis.
- Nadra, J. G.** (2024, February). *The Electrophysiological Correlates of Willed Attention*. Invited talk, Joint Lab Meeting (Courtney, Egeth, and Fischer labs), Johns Hopkins University (virtual).
- Nadra, J. G.** (2024, January). *Does Volitional Attention Operate the Same Across Domains? An Investigation of Willed Attention to Color*. Invited talk, Center for Vision Science, University of California, Davis.
- Nadra, J. G.** (2023, January). *The Neural Mechanisms of Willed Attention to Vision*. Invited talk, Center for Vision Science, University of California, Davis.
- Nadra, J. G.** (2022, April). *The Temporal Dynamics of Willed Attention*. Invited talk, Hickey Laboratory Meeting, University of Birmingham (virtual).

CONFERENCE PRESENTATIONS

*Denotes undergraduates mentored by Dr. Nadra

- Fischel, S.*, **Nadra, J.**, Das, S., & Mangun, G. (2025, May). An Investigation of Alpha Band Oscillations Within a Distractor Suppression Paradigm. Poster presentation. UC Davis Psychology Spring Conference, Davis, CA.
- Hutchins, A.*, **Nadra, J.**, Sullivan, G.*, Fischel, S.*, Meyyappan, S., Ding, M., & Mangun, G. (2025, May). Attention Without Constraint: Decoding the Neural Correlates of Volitional Attention. Poster presentation. UC Davis Psychology Spring Conference, Davis, CA.

- Sullivan, G.*, Hutchins, A.*, Fischel, S.*, **Nadra, J.**, Mangun, G. R., (2025, May). Modulating Pseudoneglect in Visual Search: A Study of Overt Willed Attention. Poster presentation. UC Davis Psychology Spring Conference, Davis, CA.
- Nadra, J.**, Hutchins, A. *, Sullivan, G.*, Fischel, S. *, Meyyappan, S., Ding, M., & Mangun, G. (2025, March). Choosing When and Where to Attend: Decoding the Electrophysiological Correlates of Self-paced Willed Attention. Poster presentation. Cognitive Neuroscience Society Annual Meeting, Boston, MA.
- Seewald, J., Khodayari, N., **Nadra, J.**, Egeth, H. & Courtney, S. (2025, March). Alpha Lateralization from Distractors: Suppression-Specific and Domain-General. Poster presentation. Cognitive Neuroscience Society Annual Meeting, Boston, MA.
- Hutchins, A. *, **Nadra, J.**, Bengson, J., Ding, M., & Mangun, G. (2024, May). Overt Willed Attention: Decoding EEG to Predict Saccades. Poster presentation. Psychology Spring Conference at UC Davis, Davis, CA.
- Sullivan, G. *, **Nadra, J.**, Ding, M., & Mangun, G. (2024, May). Analyzing Event Related Potentials in Color-Based Attention: An Examination of the Attention Validity Effect. Poster presentation. Psychology Spring Conference at UC Davis, Davis, CA.
- Nadra, J.**, Bengson, J., Ding, M., & Mangun, G. (2024, April). Decoding EEG Correlates of Willed Overt Attention During Visual Search. Poster presentation. Cognitive Neuroscience Society Annual Meeting, Toronto, Canada.
- Nadra, J.**, Ding, M., & Mangun, G. (2023, November). Does volitional attention operate the same across domains? An investigation of willed attention to color. Poster presentation. Neuroscience 2023, Washington D.C.
- Nadra, J.**, Bengson, J., Ding, M., & Mangun, G. (2023, May). Predicting a Volitional Eye Movement Before a Visual Search: An Investigation of Overt Willed Attention. Poster presentation. Vision Sciences Society Annual Meeting, St. Pete's Beach, FL.
- Nadra, J.**, Ding, M., & Mangun, G. (2023, March). The Neural Mechanisms of Color Willed Attention. Poster presentation. Cognitive Neuroscience Society Annual Meeting, San Francisco, CA.
- Nadra, J.**, Bengson, J., Ding, M., & Mangun, G. (2022, April). Neural Mechanisms of Willed Attention in Overt Visual Search. Poster presentation. Cognitive Neuroscience Society Annual Meeting, San Francisco, CA.
- Nadra, J.**, Bengson, J., Ding, M., & Mangun, G. (2021, May). Tracking the Onset of Willed Attention: EEG, Alpha Oscillations & Machine Learning. Poster presentation. Association for Psychological Science Annual Meeting, Virtual.
- Nadra, J.**, Mittal, A. *, Bengson, J. & Mangun, G. (2020, May). Mechanisms of overt attention in visual search: Eye tracking, hemifield bias and willed attention. Poster presentation. Cognitive Neuroscience Society Annual Meeting, Virtual.
- Nadra, J.**, Holm, A., Falk, R., Liu, D. & Bengson, J.J. (2019, January). Inference of willed attentional focus via local field potentials in humans. Poster presentation. California State University Annual Biotechnology Symposium at Hyatt Regency Orange County, Garden Grove, California.
- Nadra, J.**, Holm, A., Falk, R. & Bengson, J.J. (2018, November). Predicting Where You Will Attend: The Neural Circuitry of Decision Driven Attention. Poster presentation. Southern California Conferences for Undergraduate Research at Pasadena City College, Pasadena, California.

TEACHING

Instructor:

Introduction to Cognitive Neuroscience (Psychology 130)

Perception (Psychology 131)

Perception (Psychology 131)

Introduction to Cognitive Neuroscience (Psychology 130; co-taught with Dr. George R. Mangun)

Summer 2025

Winter 2024

Fall 2024

Winter 2022

Teaching Assistant:

Human Memory (Psychology 130)	Spring 2022
Introduction to Cognitive Neuroscience (Psychology 135)	Winter 2022
Introduction to Cognitive Neuroscience (Psychology 135)	Winter 2021
Introduction to Cognitive Neuroscience (Psychology 135)	Winter 2020
Health Psychology (Psychology 126)	Fall 2020
Human Memory (Psychology 130)	Fall 2019

SERVICE AND VOLUNTEER EXPERIENCE

EMG Demonstration, Neurofest, University of California, Davis	2025
Invited Reviewer, IEEE Transactions on Neural Systems & Rehabilitation Engineering	2024
Invited Reviewer, Brain Research	2023
Marketing Lead, 2022 Games User Research Summit	2022
Invited Reviewer, European Journal of Neuroscience	2021
EEG Laboratory Demonstration, AvenueB, University of California, Davis	2021
Brain Computer Interface Demonstration, Hanna Boys Center for At-Risk Youth	2019