Austin J. Mendoza, Ph.D.

Postdoctoral Research Associate

Lehigh University, Bethlehem, PA, USA

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Education

| 2019 - 2025 | Lehigh University, Bethlehem, PA |
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| | Ph.D. in Biology, Neuroscience focus |
| | Electrical synapses and sensory attention at the thalamic reticular nucleus., Advised by Julie S. Haas, Ph.D. |
| 2017 - 2019 | University of California, Fresno, Fresno, CA |
| | University of California, Fresno, Fresno, CA M.S. in Biology, with distinction |
| | Modeling visual preception, learning, and memory of wood ants navigating in naturalistic environments., |
| | Advised by David D. Lent, Ph.D. |
| 2012 - 2017 | University of California, Fresno, Fresno, CA |
| | University of California, Fresno, Fresno, CA B.S. in Biology |

Publications

- 1. **Mendoza. AJ** & JS Haas. (2025). Electrical coupling within thalamocortical networks cumulatively reduces cortical correlation to sensory inputs. In Submission, J. neurosci. BioRxiv. Doi:10.1101/2025.08.21.671565
- Rolón-Martínez, S, Mendoza, AJ, Angeloni, CF, Diaz-Nieves, IA, Chen, R, Haas, JS, & MN Geffen. (2025). Inhibitory neuron types of the TRN differentially modulate auditory thalamic sound responses. In Review, PLoS Biology. BioRxiv. Doi:10.1101/2024.06.29.601250
- 3. **Mendoza. AJ** & JS Haas. (2022). Intrinsic sources and functional impacts of asymmetry at electrical synapses. eNeuro. Doi:10.1523/ENEURO.0469-21.2022

Honors & Awards

| 2022 | Thorne Fellowship, Lehigh University, Department of Biological Sciences Semester long department research fellowship recognizing research progress of select Ph.D. Candidates. |
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| 2022 | Summer Fellowship , Lehigh University, College of Arts and Sciences Summer research fellowship awarded to a select few graduate students in the College, nominated by department. |

Conference Presentations

- 1. Organization for Computational Neurosciences (2025). Electrical coupling within thalamocortical networks cumulatively reduces cortical correlation to sensory inputs. Poster.
- 2. Society for Neuroscience (2023). Understanding variations in MGB tone responses due to TRN synaptic connectivity. Poster.
- 3. Organization for Computational Neurosciences (2021). Neuronal heterogeneity underlies electrical synapse asymmetry and spike time variability in coupled neurons. Poster.
- 4. Society for Neuroscience (2018) Modeling visual perception, learning, and memory of wood ants navigating in naturalistic environments. Poster.