# Aoi Anne Hunsaker

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## Education

PhD in Psychology (Neural Systems and Behavior) 2024 - Present
*Sisneros Laboratory*
*University of Washington, Seattle, WA*
Co-advised by Joseph Sisneros and Andrew Brown

B.S. in Speech and Hearing Sciences and Minor in Spanish 2016 - 2019
*University of Washington, Seattle, WA*
Graduated *Magna Cum Laude* and with Departmental Honors
Thesis Title: Methods for Improvement of Bone Conduction Auditory Brainstem Response Measurements (2019)

## Research Positions

Research Study Coordinator February 2022 - September 2024
*University of Washington Spatial Hearing Laboratory, Seattle, WA*
Conducted psychoacoustic experiments
Performed acoustic measurements
Hardware and software control (e.g. MATLAB, Blender, Arduino)
Managed laboratory operations

Research Assistant June 2019 - July 2019
*University of Washington Spatial Hearing Laboratory, Seattle, WA*
Conducted psychoacoustic experiments

UW Speech and Hearing Sciences Honors Research Student June 2018 - June 2019
*University of Washington Spatial Hearing Laboratory, Seattle, WA*
Conducted Auditory Brainstem Response (ABR) measurements

## Publications

Hunsaker, A. A., Sisneros, J. A., & Brown, A. D. (in press). Auditory evoked potentials in aquatic animals: A review of threshold determination methods. In A. N. Popper, J. A. Sisneros, P. Lepper, & K. J. Vigness-Raposa (Eds.), The effects of noise on aquatic life IV. Springer Nature.

Audet, D. J., Hunsaker, A. A., Butler, M. A., Sammeth, C. A., Podolski, A., Argo, T. F., Anderson, D. A., Greene, N. T., & Brown, A. D. (2026). Two-dimensional sound localization during hearing protector use: Human performance and acoustic prediction. The Journal of the Acoustical Society of America, 159(4), 3130–3147.

Hunsaker, A. A., Uhler, K. M., Greene, N. T., & Brown, A. D. (2025). Toward improved measurements of bone conduction auditory brainstem responses in infants and adults: Mitigation of stimulus artifact. International Journal of Audiology, 64(10), 1055–1062.

**Contributed as an illustrator**
Brown, A. D., Hayward, T., Portfors, C. V., & Coffin, A. B. (2023). On the value of diverse organisms in auditory research: From fish to flies to humans. Hearing Research, 108754.

## Conference Presentations

### Podium Talks

Hunsaker, A. A., Brown, A. D., & Sisneros, J. A. (2025). Novel auditory evoked potential recordings in a holocephalan species, the spotted ratfish (Hydrolagus colliei). 188th Meeting of the Acoustical Society of America, Honolulu, HI.

Hunsaker, A. A., Brown, A. D., Dall'Osto, D. R., Dahl, P. H., & Sisneros, J. A. (2025). Novel auditory threshold measurements in a chimaeroid species, spotted ratfish (Hydrolagus colliei), using an adaptive auditory evoked potential (AEP) technique. The Effects of Noise on Aquatic Life Conference, Prague, Czech Republic.

### Posters

Hunsaker, A. A., Argo, T. F., & Brown, A. D. (2025). Sound source localization during the use of a bone conduction headset. Association for Research in Otolaryngology MidWinter Meeting, Orlando, FL.

Hunsaker, A. A., Audet, D. J., Greene, N. T., Butler, M. A., Argo, T. F., & Brown, A. D. (2024). Examining individual variability in the acoustic effects of hearing protectors on cues for sound source localization. Association for Research in Otolaryngology MidWinter Meeting, Anaheim, CA.

Brown, A. D., Greene, N. T., Audet, D. J., Hunsaker, A. A., Sammeth, C. A., Butler, M. A., Podolski, A., Jerding, J., Anderson, D. A., & Argo, T. F. (2023). Quantifying impacts of hearing protection devices on sound localization in azimuth and elevation: Refinement of acoustic predictors. Northwest Auditory and Vestibular Research Meeting, Portland, OR.

Brown, A. D., Greene, N. T., Audet, D. J., Hunsaker, A. A., Sammeth, C. A., Butler, M. A., Podolski, A., Jerding, J., Anderson, D. A., & Argo, T. F. (2023). Quantifying impacts of hearing protection devices on sound localization in azimuth and elevation: Refinement of acoustic predictors. 184th Meeting of the Acoustical Society of America, Chicago, IL.

## Seminar Presentations

Title: On testing hearing sensitivity across the animal kingdom more quickly and accurately

1. University of Washington Data Science Seminar, Spring 2026
2. University of Washington Biology Department Graduate Student Seminar, Spring 2026

## Academic Service Positions

Student Council Member for the Acoustical Society of America (ASA) representing the Speech Communication Technical Committee (2026 – present)

## Awards and Recognitions

1. NIH Auditory Neuroscience T32 Training Grant (2025 – present)
2. Opsanus Grant (2026)
3. University of Washington Mary Gates Research Scholarship (2018-2019)

## Academic Teaching Experience

Teaching Assistant

1. PSYCH 300, Animal Behavior, Fall 2024, with Dr. Loma Pendergraft
2. PSYCH 210, Human Sexuality, Winter 2025, with Dr. Nicole McNichols
3. PSYCH 300, Animal Behavior, Fall 2025, with Dr. Sama Ahmed

## Other Work Experience

JET Programme Assistant Language Teacher — July 2019 - October 2021
*Nichinan Elementary and Junior High School, Nichinan, Japan*

Assisted Japanese Teachers of English (JTE) conduct English classes
Created original class materials and provided one-on-one instruction to students

MEDNAX Newborn Hearing Screener — July 2017 - July 2018
*Evergreen Health Hospital, Kirkland, WA*

Performed Auditory Brainstem Response tests on newborn infants

## Volunteering

Zoo Volunteer — June 2023 - February 2024
*Woodland Park Zoo, Seattle, WA*

Share information about exhibit animals to guests
Collect data on animal visibility in exhibits

Otolaryngology-Head and Neck Surgery Center Volunteer — November 2018 - June 2019
*University of Washington Medical Center, Seattle, WA*

Input referral orders for diagnostic audiometry and other clinic services
Stocked, organized, and performed inventory on clinic supplies

## Languages

**English:** Fluent

**Spanish:** Conversational/professional

**Japanese:** Conversational/professional

## Software

MATLAB
Blender (CAD software)
Autodesk Fusion 360 (CAD software)
Adobe Illustrator and Photoshop
EXScan H (3D scanning software)
Arduino (Microcontroller)

## Skills

Human Auditory Brainstem Response
3D modeling and printing
Scientific illustration
Hardware and software troubleshooting
Photography and video editing