Skyler G. Jennings
College of Health
Dept. of Communication Sciences and Disorders
Address: 390 South 1530 East, Suite 1201 BEHS, Salt Lake City, UT 84112
Phone: (801) 557-5394
Email: skyler.jennings@hsc.utah.edu

## I. EDUCATION

| | | |
|---|---|---|
| Utah State University<br>900 Old Main Hill<br>Logan UT 24322 | B.S. | 2004<br>*summa cum laude* |
| Purdue University<br>610 Purdue Mall<br>West Lafayette, IN 47907 | M.S. | 2007 |
| Purdue University<br>610 Purdue Mall<br>West Lafayette, IN 47907 | Au.D. | 2008 |
| Purdue University<br>610 Purdue Mall<br>West Lafayette, IN 47907 | Ph.D. | 2011<br>Advisor: Elizabeth Strickland |

## II. CERTIFICATIONS

ASHA Certificate of Clinical Competence in Audiology — 2010 – Present

## III. EMPLOYMENT

Associate Professor and
PhD Program Director
The University of Utah
390 S. 1530 E. BEHS 1201
Salt Lake City, 84112

Dept. of Communication Sciences and Disorders
2018 – Present

Adjunct Faculty
The University of Utah
50 N. Medical Dr. SOM SC120
Salt Lake City, 84132

Division of Otolaryngology, Head / Neck Surgery
2018 – Present

Adjunct Faculty
The University of Utah
20 S. 2023 E. 390A BPRB
Salt Lake City, 84112

Neuroscience Program
2015 – Present

Visiting Associate Professor
University of Rochester
201 Robert B. Goergen Hall
Rochester, NY 14627

Dept. of Biomedical Engineering
Summer 2019

Visiting Assistant Professor
Medical University of
South Carolina
96 Jonathan Lucas St.
Charleston, SC 29425

Dept. of Otolaryngology, Head / Neck Surgery
Summers 2012 – 2018

Assistant Professor
The University of Utah
390 S. 1530 E. BEHS 1201
Salt Lake City, 84112

Dept. of Communication Sciences and Disorders
2011 – 2018

## IV. PROFESSIONAL AFFILIATIONS

| | |
|---|---|
| American Speech Language Hearing Association | Member |
| Acoustical Society of America | Member |
| Association for Research in Otolaryngology | Member |

## V. PUBLICATIONS

Peer Reviewed Articles

Alamri Y, & Jennings SG (2023). "Computational Modeling of the Human Compound Action Potential." *J. Acoust. Soc. Am. (in review).*

Lobdell A, Trujillo T, Jennings SG (2023). "Assessment of Cochlear Synaptopathy with Standard Clinical Equipment" *J Am Acad Audiol* (in press)

Rabbitt RD, Pastras C, Gholami N, Jennings SG, Zhu H, Zhou W, Brown D, Curthoys I (2023). "A Mathematical Model for Mechanical Activation and Compound Action Potential Generation by the Utricle in Response to Sound and Vibration." Front. Neurol. 14, 482-494

Jennings SG, Aviles ES (2023). “Middle Ear Muscle and Medial Olivocochlear Activity Inferred from Individual Human Ears Via Cochlear Potentials.” *J. Acoust. Soc. Am. 153*(3), 1723-1732.

Goodman SS, Lichtenhan JT, & Jennings SG (2023). “Minimum Detectable Differences in Electrocochleography Measurements: Bayesian-Based Predictions.” *J. Assoc. Res. Otolaryngol.*, 1-21.

Chen J, & Jennings SG (2022). “Temporal Envelope Coding of the Human Auditory Nerve Inferred from Electrocochleography: Comparison with Envelope Following Responses.” *J. Assoc. Res. Otolaryngol.*, 1-12.

Jennings SG, Dominguez J (2022). “Firing Rate Adaptation of the Human Auditory Nerve Optimizes Neural Signal-to-Noise Ratios,” *J. Assoc. Res. Otolaryngol.* 23(3), 365-378.

Morgan SD, Ferguson SH, Crain AD, Jennings SG (2022). “Perceived Anger in Clear and Conversational Speech: Contributions of Age and Hearing Loss,” *Brain Sciences*. 12(2), 210.

Jennings SG (2021). “The Role of the Medial Olivocochlear Reflex in Psychophysical Masking and Intensity Resolution in Humans: A Review,” *J. Neurophys.* 125(6), 2279-2308.

Jennings SG, Chen J (2020). “Masking of Short Tones in Noise: Evidence for Envelope-Based, Rather than Energy-Based Detection,” *J. Acoust. Soc. Am. 148*(1), 211-221.

Simpson MH, Jennings SG, Margolis B (2020). “Techniques for Obtaining High-quality Recordings in Electrocochleograpy,” *Front. Sys. Neuro. 14.*

Jennings SG, Sivas J, Stone C (2018). “Effects of Masker Envelope Fluctuations on the Temporal Effect,” *J. Assoc. Res. Otolaryngol.* 19(6), 717-727

Jennings SG, Chen J, Fultz SE, Ahlstrom JB, Dubno JR (2018). “Amplitude Modulation Detection with a Short-Duration Carrier: Effects of a Precursor and Hearing Loss,” *J. Acoust. Soc. Am.* 143, 2232-2243

Almishaal A, Bidelman GM, Jennings SG (2017). “Notched-Noise Precursors Improve Detection of Low-Frequency Amplitude Modulation,” *J. Acoust. Soc. Am.* 141, 324-333

Jennings SG, Ahlstrom JB, and Dubno JR (2016). “Effects of Age, Hearing Impairment, and Efferent Feedback on Overshoot,” *J. Acoust. Soc. Am.* 140, 2481-2493

Bidelman GM, Jennings SG, and Strickland EA (2015). “PsyAcoustX: A flexible MATLAB® package for psychoacoustics research,” *Front. Psychol.* 6

Jennings SG, Ahlstrom JB, and Dubno JR (2014). “Computational Modeling of Individual Differences in Behavioral Estimates of Cochlear Nonlinearities,” *J. Assoc. Res. Otolaryngol.* 15, 945-960

Bidelman GM, Schug JM, Jennings SG, and Bhagat SP (2014). “Psychophysical Auditory Filter Estimates Suggest Sharper Cochlear Tuning in Musicians,” *J. Acoust. Soc. Am.* 136, EL33-39

Jennings SG, and Strickland EA (2012). “Evaluating the Effects of Olivocochlear Feedback on Psychophysical Measures of Frequency Selectivity,” *J. Acoust. Soc. Am.* 132, 2497-2513

Jennings SG, and Strickland EA (2012). “Auditory Filter Tuning Inferred with Short Sinusoidal and Notched-noise Maskers,” *J. Acoust. Soc. Am.* 132, 2483-2496

Chintanpalli AK, Jennings SG, Heinz MG, and Strickland EA (2012). “Modeling the anti-masking effects of the olivocochlear reflex in auditory-nerve responses to tones in sustained noise,” *J. Assoc. Res. Otolaryngol.* 13, 219-235

Jennings SG, Heinz MG, and Strickland EA (2011). “Evaluating Proposed Mechanisms of Psychophysical Overshoot Using a Computational Model of the Auditory Periphery,” *J. Assoc. Res. Otolaryngol.* 12, 345-360

Jennings SG, Strickland EA, and Heinz MG (2009). “Precursor Effects on Behavioral Estimates of Frequency Selectivity and Gain in Forward Masking,” *J. Acoust. Soc. Am.* 125, 2172-2181

<u>Book Chapters / Entries</u>

Jennings SG (2019). “*Digital Signal Processing*” *In J.S. Damico, and M.J. Ball (Eds.) The SAGE Encyclopedia of Human Communication Sciences and Disorders. Thousand Oaks, CA: Sage.*

Jennings SG, and Strickland EA (2010). “The Frequency Selectivity of Gain Reduction Masking: Analysis Using Two Equally Effective Maskers,” *In E. A. Lopez-Poveda, A. R. Palmer, and R. Meddis (Eds.) The Neurophysiological Bases of Auditory Perception. New York: Springer., 47-58*

Other Articles

Jennings SG, Dubno JR (2012). “The medial olivocochlear reflex: Nature’s automatic gain control?” *Audiology Today* 5, 58-61

Strickland EA, and Jennings SG (2007). “An Adjustable Auditory System,” *Acoustics Today*. 3(4), 27-28

## VI. PRESENTATIONS, INVITED LECTURES AND SYMPOSIA-FREE COMMUNICATIONS

Conference Talks/Seminars (* indicates student projects)

Ghitza O, Ahissar E, Jennings SG, Lackner J (2022). “Gravity dependent cortical control of sensation.” *Airforce Office of Sponsored Research* (Cambridge, MA)

*Chen J, Jennings (2022). "Temporal envelope coding of the human auditory nerve inferred from electrocochleography: Comparison with envelope following responses." *University of California Irvine Center for Hearing Research* (Virtual Presentation)

Jennings SG (2022). “Temporal Processing of the Human Auditory Nerve and Brainstem.” *Forty-fifth Annual Midwinter Meeting of the Association for Research in Otolaryngology* (Virtual Conference)

Jennings SG (2022). “Temporal Processing of the Human Auditory Nerve and Brainstem.” *University of Utah Inner Ear Seminar Series* (Salt Lake City, Utah)

Farhadi A, Jennings SG, Strickland EA, Carney LH (2021). “A Closed-loop Gain-control Feedback Model for the Medial Efferent System of the Descending Auditory Pathway.” *In ICASSP 2021-2021 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) (pp. 291-295). IEEE*.

*Alamri Y, Jennings SG (2021). “Simulating the Human Compound Action Potential Elicited by Clicks and Amplitude Modulated Carriers” *Forty-fourth Annual Midwinter Meeting of the Association for Research in Otolaryngology* (Virtual Conference)

*Fakhrtabatabaie A, Jennings SG (2021). “Evaluating Tenney’s Critical Band Using a Computational Model of the Human Cochlea” *Future Directions of Music Cognition* (Virtual Conference)

Jennings SG (2019), “Does Olivocochlear Efferent Feedback Improve Perception of the Temporal Envelope?” presented to *The Boston University Hearing Research Center* (Boston, Massachusetts)

*Chen J, Simpson MJ, Jennings SG, (2019). “Simultaneous Measurement of Electrocochleography and Ear Canal Pressure in Normal-Hearing Humans” *One-Hundred Seventy-Seventh Meeting of the Acoustical Society of America* (Louisville, Kentucky)

Jennings SG (2018). “Acoustic Priming Improves Perceptual and Neural Intensity Resolution in Humans,” presented to *The University of Rochester Hearing Research Group* (Rochester, New York)

Jennings SG (2018). “Electrocochleography: Classic and Innovative Applications,” presented at the *The Utah Speech-Language-Hearing Association* (Salt Lake City, Utah)

Jennings SG (2017). “Humble Suggestions from a Previous Lessons for Success Attendee,” presented at *The Fifteenth Annual Lessons for Success of the American Speech-Language-Hearing Association* (Rockville, MD)

Jennings SG (2016). “Hidden Hearing Loss: The Effects of Noise Exposure and Aging,” presented at the *Spring Audiology Symposium of Intermountain Universities* (Salt Lake City, Utah)

Jennings SG (2016). “Hidden Hearing Loss: The Effects of Noise Exposure and Aging,” presented at the *The Utah Speech-Language-Hearing Association* (Provo, Utah)

Jennings SG (2015). “Efferent Influences on Auditory Performance in Background Noise,” presented to *The University of Utah Inner Ear Research Group* (Salt Lake City, Utah)

Jennings SG (2015). “Physiological Mechanisms for Robust Speech Perception in Noise,” presented to *The Utah Speech-Language-Hearing Association* (Ogden, Utah)

Jennings SG (2014). “Evidence for Olivocochlear Processing in Psychoacoustics: Past Research and Future Directions,” presented to *Primary Children's Hospital: Department of Audiology* (Salt Lake City, Utah)

Jennings SG (2011). “Reducing Cochlear Amplification Increases Auditory Contrast,” presented to *The Department of Otolaryngology at the Medical University of South Carolina* (Charleston, South Carolina)

Jennings SG (2011). “Reducing Cochlear Amplification Increases Auditory Contrast,” presented to *The Department of Communication Sciences and Disorders at the University of Utah* (Salt Lake City, Utah)

Jennings SG (2009). “The Frequency Selectivity of Gain Reduction Masking: Analysis Using Two Equally Effective Maskers,” *The 15th International Symposium on Hearing* (Salamanca, Spain)

Strickland EA, and Jennings SG (2008). “What Psychoacoustics may tell us about Auditory Efferent Feedback,” *Purdue Speech, Language, and Hearing Sciences Brown Bag Lecture Series* (West Lafayette, IN)

<u>Poster Presentations (* indicates student projects)</u>

*Haysley S, Goodman SS, Jennings SG (2023). “Contralateral noise enhances the cochlear microphonic for frequency-swept tones: Evidence for the medial olivocochlear reflex.” *Forty-sixth Annual Midwinter Meeting of the Association for Research in Otolaryngology* (Orlando, Florida)

Goodman SS, Lichtenhan JT, Jennings SG (2023). “Evidence-Based Recommendations for Determining Sample Sizes for Experiments Assessing Auditory Nerve Function Using Electrocochleography.” *Forty-sixth Annual Midwinter Meeting of the Association for Research in Otolaryngology* (Orlando, Florida)

Jennings SG (2023). “Assessment of the Medial Olivocochlear Reflex Using Electrocochleography in Humans.” *Forty-sixth Annual Midwinter Meeting of the Association for Research in Otolaryngology* (Orlando, Florida)

*Park RK, Jennings SG (2023). “Test-Retest Reliability of Electrocochleography Measured with Ear Canal and Tympanic Membrane Electrodes.” *Forty-sixth Annual Midwinter Meeting of the Association for Research in Otolaryngology* (Orlando, Florida)

Hunt L, Jennings SG, Ayliffe T, McGinnis M, Rabbitt RK (2023). “The oZ Method to Measure Wide-band Reflectance in Less Than Two Seconds.” *Forty-sixth Annual Midwinter Meeting of the Association for Research in Otolaryngology* (Orlando, Florida)

Gholami N, Rabbitt RD, Pastras C, Jennings SG, Zhu H, Zhou W, Brown D, Curthoys I (2023). "A Simple Model for Mechanical Activation and Compound Action Potential Generation by the Utricle in Response to Sound and Vibration." *Forty-sixth Annual Midwinter Meeting of the Association for Research in Otolaryngology* (Orlando, Florida)

*Haysley S, Jennings SG (2022). “Assessment of an Auditory Reflex That Facilitates Listening in Background Noise.” *Undergraduate Research Symposium, University of Utah (Salt Lake City, Utah)*

*Jennings SG, Whitmore T, (2022). “Simultaneous measurement of human auditory nerve and brainstem potentials: Effect of upward spread of excitation” *The Journal of the Acoustical Society of America*, 151(4)

*Chen J, Jennings SG (2022). “The Time Course of Auditory Nerve and Brainstem Temporal Envelope Responses to Gated Noise.” *Forty-fifth Annual Midwinter Meeting of the Association for Research in Otolaryngology* (Virtual Conference)

*Park R, Jennings SG (2021). “The Effect of the Medial Olivocochlear Reflex on Auditory Nerve and Auditory Brainstem Potentials in Humans.” *Undergraduate Research Symposium, University of Utah (Salt Lake City, Utah)*

*Chen J, Jennings SG, (2020). “Comparison of Cochlear and Brainstem/Cortical Following Responses Evoked by Amplitude-modulated Tones in Normal-hearing Adults” *Forty-third Annual Midwinter Meeting of the Association for Research in Otolaryngology* (San Jose, California)

Jennings SG, Chen J, (2019). “Masking of short tones in noise: Evidence for envelope-based, rather than energy-based detection” *One-Hundred Seventy-Seventh Meeting of the Acoustical Society of America* (Louisville, Kentucky)

*Chen J, Simpson MJ, Jennings SG, (2019). “Effects of High-level Contralateral Noise on Simultaneous Measurement of Electrocochleography and Ear Canal Pressure in Normal-Hearing Adults” *Forty-second Annual Midwinter Meeting of the Association for Research in Otolaryngology* (Baltimore, Maryland)

Jennings SG, (2018). “Effects of a Noise Precursor on Signal-to-noise Ratios Measured from the Human Auditory Nerve” *Forty-first Annual Midwinter Meeting of the Association for Research in Otolaryngology* (San Diego, California)

*Chen J, Jennings SG, Ahlstrom JB, Fultz SE, and Dubno JR (2017). “Amplitude Modulation Detection with a Short Pure-tone Carrier: Effects of a Noise Precursor and Hearing Loss” *Fortieth Annual Midwinter Meeting of the Association for Research in Otolaryngology* (Baltimore, Maryland)

*Morgan SD, Jennings SG, and Ferguson SH (2016). “Perceived emotion in clear speech: Effect of simulated hearing loss” *Academy of Rehabilitative Audiology Institute* (Vancouver, British Columbia)

*Chen J, and Jennings SG (2016). “Evaluating whether increment detection at mid-to-high pedestal frequencies is consistent with cochlear compression” *One-Hundred Seventy-First Meeting of the Acoustical Society of America* (Salt Lake City, Utah)

*Almishaal A, and Jennings SG (2016). “Effects of a precursor on amplitude modulation detection are consistent with efferent feedback” *One-Hundred Seventy-First Meeting of the Acoustical Society of America* (Salt Lake City, Utah)

*Morgan SD, Jennings SG, and Ferguson SH (2016). “Perceived emotion in clear speech: Effect of simulated hearing loss” *One-Hundred Seventy-First Meeting of the Acoustical Society of America* (Salt Lake City, Utah)

*Almishaal A, and Jennings SG (2015). “Effects of Carrier Intensity on Amplitude Modulation Detection using High and Low-fluctuating Noises” *Thirty-eighth Annual Midwinter Meeting of the Association for Research in Otolaryngology* (Baltimore, Maryland)

*Chen J, and Jennings SG (2015). “Improved Decrement Detection with Decrement Location May Result from Efferent Processing” *Thirty-eighth Annual Midwinter Meeting of the Association for Research in Otolaryngology* (Baltimore, Maryland)

Jennings SG, *Hirschmugl KJ (2015). “The Effects of Masker Fluctuation on Overshoot Measured with Narrowband-Noise Maskers” *Thirty-eighth Annual Midwinter Meeting of the Association for Research in Otolaryngology* (Baltimore, Maryland)

Jennings SG, Ahlstrom JB, and Dubno JR (2014). “Modeling Individual Differences in Overshoot: Effects of Age, Hearing Loss, and Efferent Feedback” *One-Hundred Sixty-Seventh Meeting of the Acoustical Society of America* (Providence, Rhode Island)

Jennings SG, Ahlstrom JB, and Dubno JR (2014). “Effects of Age, Hearing Impairment and Efferent Feedback on Overshoot” *Forty-First Annual Scientific and Technology Conference of the American Auditory Society* (Scottsdale, Arizona)

Jennings SG, and Almishaal A (2013). “The Effects of Compression, Masker Duration and Target Duration on Estimates of Frequency Resolution,” *Twenty-fifth Annual Midwinter Meeting of the Association for Research in Otolaryngology* (Baltimore, Maryland)

Jennings SG, and Strickland EA (2011). “Modeling the Effects of the Medial Olivocochlear Reflex, Temporal Integration, and Off-Frequency Listening on Estimates of Frequency Selectivity” *One-Hundred Sixty-First Meeting of the Acoustical Society of America* (Seattle, Washington)

Chintanpalli AK, Jennings SG, Heinz MG, and Strickland EA (2011). “Modeling the Anti-Masking Effects of the Olivocochlear Reflex in Auditory-Nerve Responses to Tones in Noise” *One-Hundred Sixty-First Meeting of the Acoustical Society of America* (Seattle, Washington)

Jennings SG, and Strickland EA (2011). “Perceptual and Modeling Estimates of Frequency Selectivity Suggest that Acoustic Stimulation Reduces Cochlear Gain” *Twenty-fourth Annual Midwinter Meeting of the Association for Research in Otolaryngology* (Baltimore, Maryland)

Jennings SG, Francis A, and Strickland EA (2010). “An Efferent Hypothesis May Explain Why Long Duration Vowels Enhance Spectral Contrast in Vowel Masking Patterns” *Twenty-third Annual Midwinter Meeting of the Association for Research in Otolaryngology* (Anaheim, California)

Jennings SG, Heinz MG, and Strickland EA (2008). “Exploring the Psychophysical Temporal Effect in Masking Using a Model of the Auditory Periphery” *J. Acoust. Soc. Am.* 123, 3860 (Paris, France)

Jennings SG, and Strickland EA (2007). “Reductions in Gain from Pre-Masker Stimulation at the Signal Frequency (A),” *J. Acoust. Soc. Am.* 121, 3197 (Salt Lake City, Utah)

## VII. GRANT WRITING AND RELATED ACTIVITIES

Active

“Gravity Dependent Cortical Control of Sensation,” (Jennings, coPI; Ghitza, PI), United States Airforce Office of Scientific Research - FA9550-22-1-0346. Total direct costs: $2,119,871.00

“Influences of the Efferent System on Human Auditory Function," (S.G. Jennings, PI), National Institute on Deafness and Other Communication Disorders - K23 (1K23DC014752). Total direct costs: $750,000

"Influences of the Efferent System on Human Auditory Function," (S.G. Jennings, PI), National Institute on Deafness and Other Communication Disorders – Administrative Supplement - K23 (3K23DC014752-05S1). Total direct costs: $49,115

Under Review

"Temporal Coding of the Human Auditory Nerve," (Jennings, PI), National Institute on Deafness and Other Communication Disorders – (1R01DC020435-01)

Completed

"Determining the Influence of the Medial Olivocochlear Reflex on Speech Perception in Noisy Environments," (S.G. Jennings, PI), University of Utah College of Health Research Grant. Total direct costs: $5,000

"Clinic Expansion of Audiological Services," (M. Blomgren, S. Ferguson, S. Jennings co-PIs), Dumke Foundation. Total direct costs: $55,000

## VIII. TEACHING, ADVISING AND OTHER ASSIGNMENTS

Courses Taught

| | |
|---|---|
| CSD 7835 - Advanced Physiology of Hearing II | Spring 2023<br>10 Students |
| CSD 4201 - Hearing Science Laboratory | Spring 2023<br>26 Students |
| CSD 4200 - Hearing Science | Spring 2023<br>26 Students |
| CSD 7835 - Elements of Research in Audiology | Fall 2022<br>11 Students |
| CSD 6650 - Advanced Physiology of Hearing I | Fall 2022<br>11 Students |
| CSD 7835 - Advanced Physiology of Hearing II | Spring 2022<br>18 Students |
| CSD 4201 - Hearing Science Laboratory | Spring 2022<br>33 Students |
| CSD 4200 - Hearing Science | Spring 2022<br>33 Students |
| CSD 7835 - Elements of Research in Audiology | Fall 2021<br>16 Students |
| CSD 6650 - Advanced Physiology of Hearing I | Fall 2021<br>14 Students |
| CSD 7420 - Psychoacoustics | Spring 2021 |

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|---|---|
| | 15 Students |
| CSD 6650 - Advanced Anatomy and Physiology of Hearing | Fall 2020<br>8 Students |
| CSD 7880 - Advanced Electrophysiology | Spring 2020<br>10 Students |
| CSD 6650 - Advanced Anatomy and Physiology of Hearing | Fall 2019<br>15 Students |
| CSD 7420 - Psychoacoustics | Spring 2019<br>12 Students |
| CSD 6650 - Advanced Anatomy and Physiology of Hearing | Fall 2018<br>12 Students |
| CSD 7420 - Psychoacoustics | Spring 2018<br>9 Students |
| CSD 6650 - Advanced Anatomy and Physiology of Hearing | Fall 2017<br>9 Students |
| CSD 7420 – Psychoacoustics | Spring 2017<br>19 Students |
| CSD 6650 - Advanced Anatomy and Physiology of Hearing | Fall 2016<br>12 Students |
| CSD 7880 - Advanced Electrophysiology | Spring 2016<br>9 Students |
| CSD 7050 - Signals and Systems in Hearing Disorders | Spring 2016<br>7 Students |
| CSD 6650 - Advanced Anatomy and Physiology of Hearing | Fall 2015<br>13 Students |
| CSD 4200 - Hearing Science | Fall 2015<br>29 Students |
| CSD 6650 - Advanced Anatomy and Physiology of Hearing | Fall 2014<br>9 Students |
| CSD 4200 - Hearing Science | Fall 2014<br>44 Students |
| CSD 7880 - Advanced Electrophysiology | Spring 2014<br>9 Students |
| CSD 7420 - Psychoacoustics | Spring 2014<br>20 Students |
| CSD 6650 - Advanced Anatomy and Physiology of Hearing | Fall 2013<br>19 Students |

| | |
|---|---|
| CSD 4200 - Hearing Science | Fall 2013<br>57 Students |
| CSD 7880 - Advanced Electrophysiology | Spring 2013<br>9 Students |
| CSD 7050 - Physical and Medical Aspects of Audiology | Fall 2012<br>8 Students |
| CSD 6650 - Advanced Anatomy and Physiology of Hearing | Fall 2012<br>10 Students |
| CSD 7880 - Advanced Electrophysiology | Spring 2012<br>7 Students |
| CSD 7420 – Psychoacoustics | Spring 2012<br>7 Students |
| CSD 6650 - Advanced Anatomy and Physiology of Hearing | Fall 2011<br>11 Students |
| SLHS 460 Basic Auditory Assessment (Laboratory Instructor) | Fall 2007<br>~25 students |
| SLHS 450 Aural Rehabilitation (Laboratory Instructor) | Fall 2006<br>~25 students |

Undergraduate Theses:

2023-present: Mia Brown (B.S., 2024). “Can Speech Processed to Simulate a Cochlear Implant Reveal the Acoustic Cues of Vocal Strain?" (Honors thesis, University of Utah)

2020-2022: Kristin Thompson (B.S., 2022). “Encoding of Dynamic Pitch by the Human Auditory Nerve." (Honors thesis, University of Utah)

2020-2022: Tabitha Whitmore (B.S., 2022). “Comparison of Click- and Chirp-Evoked Electrocochleography Using a Novel Eardrum Electrode." (Honors thesis, University of Utah)

2011-2012: Teah Caine (B.S., 2013). “The Influence of Compression on Behavioral Estimates of Frequency Resolution." (Honors thesis, University of Utah)

Undergraduate Research Supervision:

2022-2022: Sarah Haysley (B.S. expected 2023). “Assessment of an Auditory Reflex That Facilitates Listening in Background Noise.” (Summer Program for Undergraduate Research, University of Utah)

2022-2022: Crystal Ortiz (B.S, 2022). “Reliability of Ear Canal Versus Eardrum Electrodes for Electrocochleography.” (Undergraduate Research Opportunities Program, University of Utah)

2022-2022: Ryan Park (B.S. expected 2023). “Reliability of Ear Canal Versus Eardrum Electrodes for Electrocochleography” (Undergraduate Research Opportunities Program, University of Utah)

2021-2021: Ryan Park (B.S. expected 2023). “Effects of Contralateral Noise on the Human Compound Action Potential." (Summer Program for Undergraduate Research, University of Utah)

2020-2021: Yousef Alarmi (B.S., 2021). “Simulating the Human Auditory Nerve Compound Action Potential." (Undergraduate Research Opportunities Program, University of Utah)

Master’s Theses Committee Member Assignments:

2018 – 2019: Jacqueline McCook
2018 – 2019: David Castellanos-Fuentes

Doctor of Audiology Capstone Projects:

2022- current: Nathan Johansen (Au.D., expected 2025). “Determining Sources of the Compound Action Potential Envelope Following Response Using Group Delay Analysis”

2022- current: Allison Gayler (Au.D., expected 2025). “Effect of Attention on the Cochlear Microphonic Potential”

2022- current: Levi Lundquist (Au.D., expected 2024). “Evaluating Auditory Cues for Tone-in-noise Detection using Decision Variable Correlation”

2021-2022 current: Shelby Faubion (Au.D., expected 2023). “Contralateral Suppression of the Envelope-Following Response is Inconsistent with the Medial Olivocochlear Reflex”

2021-2022: Elizabeth Aviles (Au.D., expected 2023). “The Effects of the Medial Olivocochlear and Middle Ear Muscle Reflexes on Cochlear Potentials in Humans”

2020-2021: Bailey Enis (Au.D., 2022). “The Influence of the Olivocochlear Reflex on Cochlear and Brainstem Potentials: A Literature Review”

2019-2020: Monique Lander (Au.D., 2021). “Establishing Laboratory Normative Data for Electrocochleography Measures in Adults with Cochlear Hearing Loss”

2018-2020: Juan Dominguez (Au.D., 2021). “Effects of a Noise Precursor on Signal-to-noise Ratios Measured from the Human Auditory Nerve”

2018-2020: Tevan Trujillo (Au.D., 2021). “Clinical Assessment of Cochlear Synaptopathy: Middle Ear Reflex Measures”

2018-2019: Michael Simpson (Au.D., 2020). “Optimization of Electrocochleography Measured with a Tympanic Membrane Electrode”

2018-2019: Levi Asay (Au.D., 2020). “Influences of Middle Ear Muscle Activity on Human Electrocochleography”

2017-2018: Christa Nickel (Au.D., 2019). “Effects of Efferent Feedback on Consonant Identification”

2017-2018: Braden Syphus (Au.D., 2019). “Clinical Assessment of Cochlear Synaptopathy”

2015-2016: Andrea Page (Au.D., 2017). “Effects of Efferent Feedback on Speech-in-Noise Performance"

2015-2016: Caitlin Stone (Au.D., 2017). “Effects of Preceding Masker Fluctuation on Overshoot"

2015-2016: Gabriela Perez (Au.D., 2017). “Growth of Masking with Short and Long Probes"

2014-2015: Kayla Hirschmugl (Au.D., 2016). “Temporal Effects with Low-Fluctuating Maskers"

2014-2015: Paul Groesbeck (Au.D., 2016). “Case Studies in Electrophysiology"

2013-2014: Kelsey Woodard (Au.D., 2015). “Effects of Age, Hearing Impairment, and Efferent Feedback on Overshoot"

2013-2014: Hannah Meeker (Au.D., 2015). “Frequency Resolution in the Cochlea: Psychophysical Tuning Curves and Issues Associated with their Measurement"

Doctoral (Ph.D.) Students:

| | | |
|---|---|---|
| 2013 – current: | Jessica Chen | (expected graduation: 2023) |
| 2012 – 2017: | Ali Alimishaal | (dissertation title: “*Effects of Cochlear Compression and Efferent Feedback on Amplitude Modulation detection*”) |

Doctoral (Ph.D.) Committee Member Assignments:

| | | |
|---|---|---|
| 2021 – current | Kaitlyn Dwenger | (expected graduation: 2024) |
| 2021 – current | Jennie Nelson | (expected graduation: 2024) |
| 2019 – current | Maya Stevens | (expected graduation: 2023) |
| 2018 – 2021 | Chelsea Sommer | (dissertation title: “Speech Characteristics in Peruvian Monolingual Spanish-speaking Children with and without Cleft Palate”) |
| 2017 – 2021: | Jeong Min Lee | (dissertation title: “Personality in Children with Vocal Fold Nodules”) |
| 2016 – 2018: | Jennifer Pierce | (dissertation title: “Acoustic Voice Measurement Stability: a One-Week Longitudinal Study in Young Females With Healthy Voices”) |
| 2016 – 2019: | Shae Morgan | (dissertation title: “Informational Masking and Emotion in the Speech Signal) |

## IX. EDITORIAL EXPERIENCE

Frontiers in Auditory Cognitive Neuroscience (Review Editor)

## X. REVIEWER EXPERIENCE

Journal of the Acoustical Society of America
PLOS ONE
Ear and Hearing
Hearing Research
Trends in Hearing
Journal of Neurophysiology
Journal of Speech Language Hearing Research
Journal of the American Academy of Audiology
Frontiers in Neuroscience
Scientific Data
Scientific Reports
Journal of Low Frequency Noise, Vibration & Active Control

## XI. GRANT REVIEW COMMITTEE/STUDY

Medical Research Council (MRC) Peer Reviewer

## XII. SYMPOSIUM/MEETING CHAIR/COORDINATOR

Organizing Committee Member, 171st Meeting of the ASA in Salt Lake City (2014-2016)
Organizer, ARO Young Investigator's Symposium (Feb 2015 meeting)

## XIII. AWARDS/RECOGNITION

*National*

| | |
|---|---|
| Lessons for Success Attendee, American Speech, Language, Hearing Association | 2015 |
| NIDCD Mentee in Otolaryngology and Audiology, NIH | 2012 |
| New Century Scholars Doctoral Scholarship, ASHA Foundation | 2009 |
| Leo Doerfler Memorial Scholarship, Audiology Foundation of America | 2008 |
| Outstanding Au.D. Student Award Nominee, Audiology Foundation of America | 2006 |
| Outstanding Au.D. Student Award Nominee, Audiology Foundation of America | 2005 |

*State*

| | |
|---|---|
| Outstanding Audiology Graduate Student, Indiana Speech and Hearing Association | 2006 |
| Outstanding Audiology Graduate Student, Indiana Speech and Hearing Association | 2005 |

*University*

| | |
|---|---|
| College of Health Teaching and Development Award, University of Utah | 2022 |
| R01 Early Stage Investigator Writing Group, University of Utah | 2019 |
| College of Health Banner Campaign Scholar, University of Utah | 2019 |
| Vice President's Clinical and Translational Scholar, The University of Utah | 2014 |
| Francis Patton Wilson Memorial Scholarship, Purdue University | 2008 |
| SLHS Alumni and Friends Scholarship, Purdue University | 2008 |
| Outstanding Graduate Teaching Assistant, Purdue University | 2007 |
| Earl and Eleanor Swansen Scholarship, Purdue University | 2007 |
| Susan and Bryan Erler Scholarship, Purdue University | 2006 |
| Francis Patton Wilson Memorial Scholarship, Purdue University | 2005 |
| Andrews Fellowship, Purdue University | 2004 |
| College of Education Tuition Scholarship, Utah State University | 2003 |

## XIV. SERVICE

University/College:

Member, Research Committee, College of Health (2022-current)
Member, College Council, College of Health (2016-2022)
Member, Admissions Committee, Neuroscience Program (2015-2018)
Member, Campus Health and Safety Committee (2013-2017)
Member, College of Health Realignment Committee (09/2014-12/2014)

Department:

Director, Ph.D. Program in Communication Sciences and Disorders (2018-current)
Member, Retention / Promotion Committee for Clinical Faculty (2016-current)
Member, Scholarship Committee (2015-current)
Member, Graduate Admissions Committee in Audiology (2012-current)
Member, Curriculum Committee in Audiology (2012-current)
Member, Audiology Faculty Search Committee (2014-2016)

National/International

Member, ASA Books Committee (2023-current)
Member, ASA Technical Committee (2020-current)
Member, ASA Committee on Standards (2014-2021)

## XV. MISCELLANEOUS SCHOLARSHIP

## XVI. CLINICAL EXPERIENCE

Doctor of Audiology Extern — Indiana University School of Medicine
*Indiana University / Clarian Hospitals* — 2007-2008
Assessed adult and pediatric patients with hearing and/or balance disorders using behavioral and electrophysiological techniques. Provided adult and pediatric aural (re)habilitation through the following services: hearing instrument fittings/adjustments, cochlear implant mapping/programming, bone-anchored hearing aid fittings, frequency compression hearing aid fittings. Monitored auditory health during surgery and during pharmacological treatment via intraoperative assessment and serial audiometric evaluations.

Audiology Intern — Clarian-Arnett Clinic, Lafayette, IN
Spring 2007
Assessed adult and pediatric patients with hearing complaints or disorders. Provided adult and pediatric aural (re)habilitation through hearing aid fittings/adjustments and counseling.

Graduate Student Clinician — Purdue University Audiology Clinic
2004-2006
Assessed adult and pediatric patients with hearing complaints or disorders. Provided adult and pediatric aural (re)habilitation through hearing aid fittings/adjustments, counseling, auditory training and speech-reading exercises.

Undergraduate Student Clinician — Utah State Speech/Language Clinic
2003-2004
Prepared and administered articulation therapy to a young child with a phonological disorder. Tracked clinical progress. Reported therapy outcomes via written documents and formal meetings with supervisors and parents.