### Marc Brennan

University of Nebraska-Lincoln 4075 East Campus Loop South Lincoln, NE 68583 402.472.3132 Marc.Brennan@unl.edu

### **Education**

## **University of Washington – Seattle**

Ph.D., Speech and Hearing Sciences, March 2011

# **University of Wisconsin – Madison**

M.S., Communicative Disorders, May 2001

# University of Wisconsin - Madison

B.S., Communicative Disorders, May 1999

## **Professional Experience**

2017 – present	Assistant Professor, Special Education and Communication Disorders, University of Nebraska-Lincoln, Lincoln, NE
2014 – 2017	Director, Amplification and Perception Laboratory, Boys Town National Research Hospital, Omaha, NE
2013 – 2015	Adjunct Professor, Special Education and Communication Disorders, University of Nebraska, Omaha, NE
2011 – 2013	Postdoctoral Fellow, Boys Town National Research Hospital, Omaha, NE
2010 – 2010	Visiting Predoctoral Research Assistant, Communication Sciences and Disorders, Northwestern University, Evanston, IL
2006 – 2010	Research Assistant, Hearing Aid Laboratory, University of Washington, Seattle, WA
2004 – 2006	Audiologist, William S. Middleton VA Medical Center, Madison, WI
2001 – 2004	Audiologist, Boys Town National Research Hospital, Omaha, NE
Funded Grants	
2022 – 2027	Co-Director, <i>Mid-Plains Professional Upgrade Partnership Speech-Language Pathology</i> , <i>Audiology</i> , <i>and Deaf Education (MPUP-SPADE)</i> , Department of Education, H325K220098.
2023 – 2025	Co-Investigator. Assessing the role of envelope fluctuations on communication difficulties for individuals with minimal hearing loss, Hearing Industry Research Consortium.

2018 – 2023	Principal Investigator. Restoration of Spectral Resolution with Hearing-Aid Amplification, NIH R21 DC017588.
2016 - 2021	Collaborator. <i>Open Design Tools for Speech Signal Processing</i> , NIH R44 DC015445.
2016 - 2017	Collaborator. Field Deployable Otoacoustic Emissions Probe for Objective Tracking of Noise Induced Hearing Loss, US Army Medical Research & Material Command W81XWH-16-C-0187.
2014 – 2017	Project Leader. <i>Temporal Resolution in Children with Hearing Loss</i> , NIH P20 GM 109023.
2013 – 2016	Co-Investigator. Complex Listening Skills in School-Age Hard of Hearing Children, NIH R01 DC 013591.
2013 – 2016	Co-Investigator. The Loudness of Broadband Sounds in Listeners with Sensorineural Hearing Loss, NIH R01 DC 011806.
2012 – 2013	Principal Investigator. Optimizing Temporal Resolution and Speech Recognition with Amplification, NIH F32 F32DC012709.
2011 – 2012	Post-doctoral Trainee, National Institute of Health Training Grant, Boys Town National Research Hospital, Omaha, NE, NIH T32 DC000033.
2010 – 2011	Principal Investigator. Relationship Between Psychoacoustic Thresholds and Speech Recognition for Aided Listeners, NIH F31 DC010978.
2006 – 2008	Pre-doctoral Trainee, National Institute of Health Training Grant, Speech and Hearing Sciences, University of Washington, Seattle, WA, NIH T32 DC0003315.

#### **Grant Under Review**

#### **Peer-Reviewed Publications**

### \* = student mentored project

**Brennan M,** Svec A, Farhadi A, Maxwell BN, Carney LH (Accepted pending minor revision). Inherent envelope fluctuations in forward masking: Effects of age and hearing loss. JASA. BioRxiv 2022.10.20.513056 [Preprint]. October 21, 2022 [cited 2022 Oct 24]. Available from: https://doi.org/10.1101/2022.10.20.513056.

**Brennan**, M., McCreery, R., Massey, J. (2022). Influence of audibility and distortion on recognition of reverberant speech for children and adults with hearing aid amplification. *Journal of the American Academy of Audiology*, 33, 170-180.

- **Brennan**, M. A., McCreery, R. W. (2021). Audibility and spectral-ripple discrimination thresholds as predictors of word recognition with nonlinear frequency compression. *Journal of the American Academy of Audiology*, 32(9), 596-605.
- **Brennan, M. A.,** Browning, J., Spratford, M., Kirby, B. J., & McCreery, R. (2021). Influence of aided audibility on speech recognition performance with frequency composition for children and adults. *International Journal of Audiology*, 60(11), 849-857.
- \*Jorgensen, E. J., McCreery, R., Kirby, B., **Brennan, M.** (2020). Effect of level on spectral-ripple detection threshold for listeners with normal hearing and hearing loss. *The Journal of the Acoustical Society of America*, 148(2), 908-917.
- McCreery, R. W., Walker, E. A., Spratford, M., Lewis, D., **Brennan, M.** (2019). Auditory, cognitive, and linguistic factors predict speech recognition in adverse listening conditions for children with hearing loss. *Frontiers in Neuroscience*, 13, 1-11.
- \*Thrailkill, K., Jesteadt, W., **Brennan, M. A.** (2019). Effects of amplification and hearing-aid experience on the contribution of specific frequency regions to loudness. *Ear and Hearing*, 40(1), 143-155.
- **Brennan**, M. A., McCreery, R. W., Buss, E., Jesteadt, W. (2018). The influence of hearing-aid gain on gap-detection thresholds for children and adults with hearing loss. *Ear and Hearing*, 39(5), 969-979.
- Kirby, B., Kopun, J., Spratford, M., Mollak, C., **Brennan, M.**, McCreery, R. (2017). Listener performance with a novel hearing aid frequency lowering technique. *Journal of the American Academy of Audiology*, 28(9), 810-822.
- McCreery, R. W., **Brennan**, M., Walker, E. A., Spratford, M. (2017). Perceptual implications of level- and frequency-specific deviations from hearing aid prescription in children. *Journal of the American Academy of Audiology*, 28(9), 861-875.
- Adler, H. J., Anbuhl, K. L., Atcherson, S. R., Barlow, N., **Brennan, M. A.,** Brigande, J. V., Buran, B. N., Fraenzer, J.-T., Gale, J. E., Gallun, F. J., Gluck, S. D., Goldsworthy, R. L., Heng, J., Hight, A. E., Huyck, J. J., Jacobson, B. D., Karasawa, T., Kovačić, D., Lim, S. R., Malone, A. K., Nolan, L. S., Pisano, D. V., Rao, V. R. M., Raphael, R. M., Ratnanather, J. T., Reiss, L. A. J., Ruffin, C. V., Schwalje, A. T., Sinan, M., Stahn, P., Steyger, P. S., Tang, S. J., Tejani, V. D., Wong, V. (2017). Community network for deaf scientists (Letter to the Editor). *Science 356*, 386-387. [I contributed to manuscript preparation]
- **Brennan, M. A.**, Lewis, D., McCreery, R., Kopun, J., Alexander, J. (2017). Listening effort and speech recognition with frequency compression amplification for children and adults with hearing loss. *Journal of the American Academy of Audiology*, 28(9), 823-837.
- Lewis, D., Kopun, J., McCreery, R., **Brennan, M.,** Nishi, K., Cordrey, E., Stelmachowicz, P., Moeller, M. P. (2017). Effect of context and hearing loss on time-gated word recognition in children. *Ear and Hearing*, 38(3), e180-192.
- McCreery, R., Spratford, M., Kirby, B., **Brennan, M.** (2016). Individual differences in language and working memory affect children's speech recognition in noise. *Internal Journal of Audiology*, 56(5), 306-315.

- Miller C.W., Bates E., **Brennan M.** (2016). The effects of frequency lowering on speech perception in noise with adult hearing-aid users. *International Journal of Audiology*, 55(5), 305-312.
- **Brennan, M. A.,** McCreery, R. M., Kopun, J. K., Lewis, D. L., Alexander, J. A., Stelmachowicz, P. S. (2016). Masking release in children and adults with hearing loss when using amplification. *Journal of Speech, Language, and Hearing Research*, 59(1), 110-121.
- McCreery, W., Spratford, M., Kirby, B., Oleson, J. **Brennan, M.** (2016). Stability of audiometric thresholds for children with hearing aids applying the AAA pediatric amplification guidelines: Implications for safety. *Journal of the American Academy of Audiology*, 27(3), 252-263.
- Kirby, B. J., Browning, J. M., **Brennan**, **M. A.**, Spratford, M., McCreery, R. W. (2015). Spectrotemporal modulation detection in children. *Journal of the Acoustical Society of America*, *138*(5), EL465-EL468.
- **Brennan**, M. A., McCreery, R. W., Jesteadt, W. (2015). The influence of hearing-aid compression on forward-masked thresholds for adults with hearing loss. *Journal of the Acoustical Society of America*, 138(4), 2589-2597.
- **Brennan, M. A.,** McCreery, R.W., Kopun, J., Hoover, B., Alexander, J., Lewis, D., Stelmachowicz, P. G. (2014). Paired comparisons of nonlinear frequency compression, extended bandwidth, and restricted bandwidth processing for children and adults with hearing loss. *Journal of the American Academy of Audiology*, 25(10), 983-998.
- McCreery, R. W., Alexander, J., **Brennan M. A.**, Hoover, B., Kopun, J., Stelmachowicz, P. G. (2014). The influence of audibility on speech recognition with nonlinear frequency compression for children and adults with hearing loss. *Ear and Hearing*, *35*(4), 440-447.
- **Brennan**, M. A., Gallun, F. J., Souza, P. E., Stecker, C. (2013). Temporal resolution with a prescriptive fitting formula. *American Journal of Audiology*, 22(2), 216-225.
- McCreery, R., **Brennan**, M., Hoover, B., Kopun, J., Stelmachowicz, P. (2013). Maximizing audibility and speech recognition with nonlinear frequency compression by estimating audible bandwidth. *Ear and Hearing*, *34*(2), e24-27.
- **Brennan**, M., Souza, P. (2009). Effects of expansion on consonant recognition and consonant audibility. *Journal of the American Academy of Audiology*, 20(2), 119-127.
- Davies-Venn, E., Souza, P., **Brennan, M.**, Stecker, C. (2009). Effects of audibility and multichannel wide dynamic range compression on consonant recognition for listeners with severe hearing loss. *Ear and Hearing*, 30(5), 494-504.

#### **Non-Peer Reviewed Publications**

For non-first authored projects, I contributed to the study design, analyses, and manuscript preparation.

**Brennan, M. A.** (2016). [Review of the book Hearing assistance and access technology]. *International Journal of Audiology*, *55*(7), 429.

McCreery, R. M., **Brennan, M. A.** (2015). Using frequency lowering with children who wear hearing aids. *Audiology Today*, 27(3), 60-62.

**Brennan**, M., McCreery, R. (2014). SHARP Updates enable audibility estimates with nonlinear frequency compression. *Hearing Journal*, 67(3), 14-18.

Stelmachowicz, P.G., Hoover, B., Lewis, D.E., **Brennan, M.** (2002). Is Functional Gain Really Functional? *Hearing Journal*, *55*(11), 38-42.

#### **Conference Presentations**

\* = student mentored project

For non-first authored projects, I contributed to the study design, analyses, and manuscript preparation.

**Brennan**, M., Garvey, S., Feller, A. (2022). Influence of hearing aid compression channels on spatial release from masking. *Presented at the International Hearing Aid Research Conference* (Lake Tahoe, CA).

Audette, W., Yuan, E., McEnaney, K., Neely, S., McCreery, R., **Brennan, M.,** Murphy, J, Clavier, O. (2022). The Tympan open source audio processing platform. *Presented at the International Hearing Aid Research Conference* (Lake Tahoe, CA).

Audette, W., Yuan, E., Neely, S., McCreery, R., **Brennan, M.,** Murphy, J. (2022). Tympan: An open source platform for hearing aid algorithms. *Presented at the International Hearing Aid Research Conference* (Lake Tahoe, CA).

**Brennan, M.,** Maxwell, B., Farhadi, A., Carney, L., Svec, A. (2022). Influence of age and hearing loss on gaussian noise disruption. *Presented at the 45<sup>th</sup> Annual Association for Research in Otolaryngology* (Virtual).

**Brennan**, M., Garvey, S. (2021). Influence of hearing aid compression speed and channels on measures of psychophysical tuning curves. *Presented at the 181<sup>st</sup> Meeting of the Acoustical Society of America Meeting* (Seattle, WA).

**Brennan, M.,** Feller, A. (2021). Influence of number of hearing aid compression channels on spatial release from masking. *Presented at the 181<sup>st</sup> Meeting of the Acoustical Society of America* (Seattle, WA).

\*Parsons, J., Wilken, E., **Brennan, M.** (2021). Effect of compression and prescriptive procedure on localization for adults with sensorineural hearing loss. *Presented at the Nebraska Speech Language Hearing Association Convention* (Kearney, NE).

\*Garvey, S., **Brennan, M.** (2020). Effect of audibility on psychophysical tuning curves. *Presented at the American Auditory Society Annual Meeting* (Phoenix, AZ).

\*Brandt, E., **Brennan, M.** (2020). The Effect of compression in hearing aids on localization ability in listeners with hearing loss. *Presented at the American Auditory Society Annual Meeting* (Phoenix, AZ).

- **Brennan**, M. (2019). Research update. *Presented at the Nebraska Speech Language Hearing Association Convention* (Omaha, NE).
- **Brennan**, M. (2019). Experiment on the relationship between the dynamic range of hearing and psychophysical tuning curves. *Presented at the Meeting of the Acoustical Society of America* (Louisville, KY).
- Rasetshwane, D., Kopun, J. G., McCreery, R., Neely, S. T., **Brennan, M. A.**, Audette, W., Clavier, O. (2018). Electroacoustic and behavioral evaluation of an open source audio processing platform. *Presented at the International Hearing Aid Research Conference* (Lake Tahoe, NV).
- \*Grindle, A., Walker, E. A., Spratford, M., Chung, K., **Brennan, M.,** McCreery, R (2018). Improving pediatric real-ear-to-coupler difference (RECD) predictions and aided audibility using immittance. *Presented at the International Hearing Aid Research Conference* (Lake Tahoe, NV).
- Rasetshwane, D., Kopun, J. G., McCreery, R., Neely, S. T., **Brennan, M. A.**, Clavier, O., Audette, W. (2018) Electroacoustic and behavioral evaluation of an open source audio processing platform. *Presented at the Meeting of the Acoustical Society of America* (Minneapolis, MN).
- \*Massey, J., **Brennan, M.,** McCreery, R. (2018). The effect of wide dynamic range compression using DSL prescription on speech perception in the presence of reverberation. *Presented at the American Auditory Society Annual Meeting*.
- \*Thrailkill, K., **Brennan**, M., Jesteadt, W. (2017). Using perceptual weights to investigate loudness acclimatization in hearing-aid patients. Presented at the *American Auditory Society Annual Meeting* (Phoenix, AZ).
- Audette, W., Clavier, O., Rasetshwane, D., Neely, S., McCreery, R., **Brennan, M.,** Alexander, J. (2017). Development of an open source hearing aid platform. Presented at the *American Auditory Society Annual Meeting* (Phoenix, AZ).
- McCreery, R., Spratford, M., **Brennan, M.,** Walker, E. (2017). Improving predictions of real-ear-to-coupler differences in children using immittance. Presented at the *American Auditory Society Annual Meeting* (Phoenix, AZ).
- \*Jorgensen, E., Buss, E., Kirby, B., Gallun, F., Molis, M., McCreery, R., **Brennan, M.** (2017). Effect of level on spectral ripple detection thresholds in adults. Presented at the *American Auditory Society Annual Meeting* (Phoenix, AZ).
- **Brennan**, M., Svec, A., Nelson, P. (2017). Inherent envelope fluctuations in forward maskers: Effects of compression amplification. Presented at the *American Auditory Society Annual Meeting* (Phoenix, AZ).
- Kirby, B., **Brennan, M.,** Kopun, J., McCreery, R., Mollak, C., Spratford, M. (2016). Listener performance with a novel hearing aid frequency lowering technique. Presented at *AudiologyNOW!* (Indianapolis, IN).
- **Brennan**, M. (2016). Effect of increased audibility with frequency lowering hearing aids on speech recognition and listener preference. Invited presentation at the *Nebraska Speech Language Hearing Association Convention* (Lincoln, NE).

- **Brennan**, M., Buss, E., McCreery, R., Jesteadt, W. (2016). Gap detection with a prescriptive procedure in children and adults with hearing loss. Presented at the *International Hearing Aid Conference* (Lake Tahoe, NV).
- Rasetshwane, D. M., Raybine, D. A., Kopun, J. G., **Brennan, M. A.,** McCreery, R. W. (2016). The influence of the stimulus level used to prescribe nonlinear frequency-compression on speech perception. Presented at the *International Hearing Aid Conference* (Lake Tahoe, NV).
- \*Thrailkill, K., **Brennan, M.,** Jesteadt, W. (2016). Effect of amplification on the contribution of specific frequency bands to loudness. Presented at the *American Auditory Society Annual Meeting* (Phoenix, AZ).
- McCreery, R., Walker, E., Kirby, B., Spratford, M., **Brennan, M.** (2016). Sentence recognition in noise and reverberation for children with hearing aids. Presented at the *American Auditory Society Annual Meeting* (Phoenix, AZ).
- **Brennan, M.**, McCreery, R., Kopun, J., Lewis, D. (2015). Speech recognition and listening effort with frequency compression amplification. Presented at the *American Speech, Language, Hearing Association Convention* (Denver, CO).
- **Brennan, M.,** Jesteadt, W. McCreery, R. (2015). Forward masking in children and adults with normal hearing and hearing loss. Presented at the *Annual Meeting of the Acoustical Society of America* (Pittsburgh, PA).
- \*Bates, E., Miller, C. **Brennan, M.** (2015). Comparison of frequency lowering techniques on speech perception in noise. Presented at the *American Auditory Society Annual Meeting* (Scottsdale, AZ).
- \*Browning, J., **Brennan, M.**, Spratford, M. McCreery, R. (2015). Audibility and spectral resolution influence performance and preference for frequency composition. Presented at the *American Auditory Society Annual Meeting* (Scottsdale, AZ).
- **Brennan**, M., Jesteadt, W., McCreery, R. (2014). Optimizing forward-masked thresholds with amplification. Presented at the *International Hearing Aid Conference* (Lake Tahoe, NV).
- McCreery, R. W., **Brennan, M.,** Won, J. H., Lewis, D., Kopun, J. (2014). Audibility and spectral resolution as predictors of speech recognition with nonlinear frequency compression. Presented at the *International Hearing Aid Conference* (Lake Tahoe, NV).
- Rasetshwane, D. M., **Brennan, M.,** Kopun, J. G., Neely, S. T., Gorga, M. P. (2014). Evaluation of a hearing aid signal-processing strategy for restoration of cross-channel suppression. Presented at the *International Hearing Aid Conference* (Lake Tahoe, NV).
- \*Rock, J., Miller, C., **Brennan, M.**, Zakis, J. (2014). The effects of noise reduction on forward masked thresholds. Presented at the *International Hearing Aid Conference* (Lake Tahoe, NV).
- **Brennan, M.,** McCreery, R., Lewis, D., Hoover, B., Stelmachowicz, P. (2014). Masking release for children with hearing loss using amplification. Presented at *American Auditory Society Annual Meeting* (Phoenix, AZ)

- \*Hodson, H., Spratford, M., **Brennan, M.,** Leibold, L., Hatala, E., McCreery, R. **(2014).** Effects of linguistic environment on detection of /s/ and /z/. Presented at *American Auditory Society Annual Meeting* (Phoenix, AZ).
- **Brennan**, M., McCreery, R., Lewis, D., Kopun, J., Stelmachowicz, P. (2013). Incorporating measures of nonlinear frequency compression into the situational hearing aid response profile (SHARP). Presented at the *Phonak Pediatric Conference* (Chicago, IL).
- **Brennan, M. A.,** McCreery, R.W., Lewis, D. E., Spalding, J., Creutz, T., Kopun, J. G., Stelmachowicz, P. G. (2013). The situational hearing aid response profile: An update. Presented at *American Auditory Society Annual Meeting* (Phoenix, AZ).
- **Brennan, M.**, McCreery, R., Kopun, J., Hoover, B., Stelmachowicz, P. G. (2012). Signal processing preference for music and speech in adults and children with hearing loss. Presented at *American Auditory Society Annual Meeting* (Phoenix, AZ).
- **Brennan**, M. (2012). Verification of hearing aids for pediatric patients. Invited presentation at *West Virginia Speech Language and Hearing Association Annual Meeting* (Clarksburg, WV).
- **Brennan**, M. (2012). From assessment to amplification selection for pediatric patients. Invited presentation at *Kansas Speech-Language-Hearing Association Conference* (Wichita, KS).
- **Brennan**, M. (2012). Hearing aid verification with infants and children. Invited presentation at *Kansas Speech-Language-Hearing Association Conference* (Wichita, KS).
- Grossman, B., **Brennan**, **M.** (2012). Pediatric Outcome Measures. Invited presentation at Boys Town Pediatric Amplification Workshop (Omaha, NE).
- Kopun, J., McCreery, R., Hoover, B., **Brennan, M.**, Stelmachowicz, P. (2012). Effects of exposure on speech recognition with nonlinear frequency compression. Presented at *American Auditory Society Annual Meeting* (Phoenix, AZ).
- Lee, J., Souza, P., Sabin, A., Kwon, B., **Brennan, M.**, Poling, G., Petersen, C. (2011). Dynamic range compression effects on modulation detection interference. Presented at the *Acoustical Society of America Meeting* (Seattle, WA).
- **Brennan**, M., Gallun, F., Souza, P. (2010). Using psychoacoustic thresholds to improve hearing aid fittings. Presented at the *International Hearing Aid Research Conference* (Lake Tahoe, CA).
- Souza, P., Hoover, E., Gallun, F., **Brennan, M.** (2010). Assessing envelope distortion in clinically-fit hearing aids. Presented at the *International Hearing Aid Research Conference* (Lake Tahoe, CA).
- **Brennan**, M., Souza, P., Atlas, L., Greenhill, A. (2010). Coherent versus incoherent modulation filtering. Presented at the *Acoustical Society of America Meeting* (Baltimore, MD).
- **Brennan**, M., Souza, P., Gallun, F. Do (2010). Aided psychoacoustic thresholds predict aided speech recognition? Presented at the *American Auditory Society Annual Meeting* (Scottsdale, AZ).
- **Brennan**, M., Jerger, J., Fausti, S. (2009). Invited discussion panel member on approaches to the study and treatment of hearing loss. Presented at the *National Center for Rehabilitative Audiology Research Conference* (Portland, OR).

**Brennan**, M., Gallun, F., Souza, P. (2009). Do aided amplitude modulation detection thresholds predict aided speech recognition? Presented at the *National Center for Rehabilitative Audiology Research Conference* (Portland, OR).

**Brennan**, M., Souza, P. (2008). Effects of expansion on consonant recognition. Presented at the *Annual Meeting of the American Academy of Audiology* (Charlotte, NC).

**Brennan**, M., Souza, P. (2007). Effects of expansion on consonant audibility. Invited presentation at the *National Center for Rehabilitative Auditory Research* (Portland, OR).

**Brennan**, M., Souza, P. (2007). Effects of expansion on consonant audibility. Presented at the *American Auditory Society Annual Meeting* (Scottsdale, AZ).

Souza, P., **Brennan**, M., and Davies-Venn, E. (2007). Using short vs. long time constants in severe loss. Presented at the *American Auditory Society Annual Meeting* (Scottsdale, AZ).

**Brennan**, M. (2002). Minimal sensorineural hearing loss: A case study. Invited presentation at the *Boys Town Pediatric Amplification Workshop* (Omaha, NE).

### **Courses Taught**

2022	Pediatrics & Electrophysiology, SLPA 907, UNL (8 semester units), Graduate Students, Co-instructor. This course covers anatomy and pathophysiology of the pediatric auditory system and tools for pediatric assessment and treatment.
2022	Auditory Perception & Amplification, SLPA 903, UNL (9 semester units), Graduate Students, Co-instructor. This course covers auditory perception, adult amplification, and research in audiology.
2021 - present	Auditory Physiology & Assessment, SLPA 901, UNL (9 semester units), Graduate Students, Co-instructor. This course covers normal anatomy and pathophysiology of the human adult auditory system and tools for its assessment and treatment.
2020 – 2022	Amplification II, SLPA 926, UNL (3 semester units), Graduate students, Instructor. This course covered advance topics in hearing aid amplification.
2019 – 2021	Seminar in Audiology, SLPA 942, UNL (3 semester units), Graduate students, Co-instructor. This course covered the research process, including reviewing the literature, data collection procedures, methods of analysis, and the writing process.
2018 – 2021	Psychoacoustics, SLPA 912, UNL (4 semester units), Graduate students, Instructor. This course covered the perception of sound, including threshold of hearing, temporal resolution, spectral resolution, loudness, localization, and speech perception.
2017 – 2019	Amplification I, SLPA 924, UNL (4 semester units), Graduate students, Instructor. This course covered basic digital amplification systems, signal processing strategies used in current hearing aids, and instruction and

	practice in the electroacoustic analysis and real-ear probe microphone measurements of hearing aid systems.
2013 – 2015	Basic Audiology, SPED 4370, UNO (3 semester units), Undergraduate students, Instructor. This course was an introduction to the study of audiology and focused on acoustics, anatomy, physiology, audiometry, immittance, auditory disorders, physiological assessment, and pediatric assessment.
2013 – 2014	Aural Rehabilitation. SPED 4330, UNO (3 semester units), Undergraduate students, Co-instructor. This course examined auditory (re)habilitation for children and adults with hearing loss and focused on amplification, outcomes, assistive listening devices, evidence-based practice, implantable devices, and deaf culture.
2009	Introduction to MATLAB. SPHSC 525, UW (3 quarter units), Graduate students, Instructor. This course was a general introduction to MATLAB and included data storage, scripting, plotting, loops, functions, importing and exporting data, signal processing, and graphical interfaces.
2008	Advanced Hearing Science, SPHSC 509, UW (3 quarter units), AuD students, Co-instructor. This course examined auditory physiology, psychoacoustics, and speech perception.
<b>Guest Lectures</b>	
2018 – present	Biological Systems Engineering, BSEN 412/812, UNL, Undergraduate and graduate students. Current challenges for treating hearing loss with hearing aids.
2019 – 2020	Disorders of the Auditory System, SLPA 897A, UNL, Graduate students. Central auditory processing disorder.
2011 – 2012	Psychological Acoustics, SLPA 912, UNL, AuD students. Temporal resolution, frequency discrimination and pitch perception.
2006	Instrumentation for Audiology, SPHSC 521, UW, Graduate students. Instrumentation for hearing aids.
2003	Basic Audiology, SPED 4370, UNO, Undergraduate students, Guest lecture on psychoacoustics.
Student Research Advising and Awards	
2022 – present	Mendoz Raquel (AuD Student, SJSU), Capstone Committee Member.
	Lauren Secilmis (AuD Student, UNL), Capstone Committee Chair.
	Katy Beth Ezell, Alexis Jones, and Austin Spoor (AuD Students, UNL), Capstone Committee Member.
2021 – 2021	Angela Huebert (Undergraduate student, UNL), Summer UCARE award for "Effects of hearing aid amplification on the ability of individuals with hearing loss to perceive spectral information" (Total Award: \$2,400).

Sarah Garvey (AuD/PhD Student, UNL), PhD Committee Chair.

2021 - *present* 

	Brittney Biere, Courtney Kment, and Ava Feller (AuD Students, UNL), Capstone Committee Chair.
	Kylie Bond, Molly Donnell, Josephine Marino, Megan Peterson, and Nicole Weyers (AuD Students, UNL), Capstone Committee Member.
2021 – 2022	Monica Folkerts (Hearing and Speech Sciences, Vanderbilt), Dissertation Committee Member.
2021 – 2021	Jared Paine (Architectural Engineering, UNL), Thesis Committee Member, Studying acoustical characteristics of occupied restaurants.
2019 – 2020	William Jesse Spallino (Architectural Engineering Student, UNL), Thesis Committee Member, Understanding the impact of room acoustic conditions on Kurtosis Levels of Various Noise Signals.
2020	Emma Brandt (AuD Student, UNL), University of Nebraska College of Education and Human Sciences Student Travel Award to present at the American Auditory Society Annual Conference (Total Award: \$350).
2020 – 2022	Joslyn Parsons, Ashly Clancy (AuD Student, UNL), Capstone Committee Chair.
	Alexis Sherrick, Ashley Clancy, Elizabeth Hanzlicek, Emily Graves, Emily Walczak, Jamie Petersen, Josie Zimmel, Kaitlyn Waszak, Manuel Vicente, and Summer Brown (AuD Students, UNL), Capstone Committee Member.
2020 - 2021	Mary Maraist (AuD Student, UNL), Capstone Committee Chair.
2019 – 2021	Sarah Garvey and Hannah Smith (AuD Students, UNL), Capstone Committee Chair.
	Amelia Baumgardner, Elysa Binger, Ceceli Bonitto, Bailey Heaton, Jamie Koch, Emily Sanders, Gretchen Spencer, and Walters Theodore (AuD Students, UNL), Capstone Committee Member.
2018 - 2020	Emma Brandt (AuD Student, UNL), Capstone Committee Chair.
2018 - 2019	Austin Poulsen (AuD Student, UNL), Capstone Committee Member.
2016 – 2016	Erik Jorgensen (AuD Student, Speech and Hearing Sciences, University of Iowa), T35 Research Project Mentor, Effect of level on spectral ripple detection threshold.
2015 – 2017	Katie Thrailkill (AuD Student, Department of Special Education and Communication Disorders, University of Nebraska), Capstone Committee Member.
2014 – 2015	Jordan Rock (AuD Student, Speech and Hearing Sciences, University of Washington), Capstone Committee Member.
2014 – 2015	Emily Bates (AuD Student, Speech and Hearing Sciences, University of Washington), Capstone Committee Member.
2009	Sarah Shepherd (BS Student, Speech and Hearing Sciences, University of Washington), Thesis Mentor, Improving Accuracy of AI Calculations.

# **Professional Service**

2023 – 2024	Editor, American Journal of Audiology. Previously, member of editorial board from 2017 to 2022
2007 – present	Ad-Hoc Reviewer, Ear and Hearing, Journal of the Acoustical Society America, Journal of the American Academy of Audiology, Journal of Speech Language and Hearing Research, International Journal of Audiology, Trends in Hearing.
2017 - 2020	Member, Nebraska Commission for the Deaf and Hard of Hearing Board.
2012 – 2019	Member, American Speech Language and Hearing Association SIG 6 Perspectives Editorial Review Board.
2018 – 2019	Past-President, Nebraska Speech Language Hearing Association Board. Various roles since 2013.
2014 – 2018	Chair, Nebraska Hearing Aid Licensing Board. Member since 2013.
2013 – 2016	Member, Nebraska Hands and Voices Board.
2013 – 2015	Member, Audiology Advisory Council for the American Speech Language and Hearing Association.
2009	Member, American Academy of Audiology Student Research Award Committee.
2000 – 2001	Vice President, University of Wisconsin chapter of the National Student Speech-Language-Hearing Association.

# Administration and Department Service

2021 - 2022	Chair, Search Committee for Professor of Practice - Audiology
2018 – present	Program Director, Audiology
2018 – present	Member, Curriculum Committee
2017 – present	Member, Audiology Graduate Governance Committee
2017 – present	Member, Graduate Faculty Committee
2017 – 2020	Member, Research Committee
2017 – 2019	Member, Audiology, Speech Pathology, and Special Education Faculty Search Committees
2017 – 2017	Member, Teaching Peer Review Ad-Hoc Committee

#### **Honors and Awards**

- Honors of the Association recognizing my service to the association and to the state of Nebraska,
  Nebraska Speech Language Hearing Association, September 2018.
- Boss of the Month recognizing my leadership, education, and volunteerism for the deaf and hard of hearing community, Nebraska Commission for the Deaf and Hard of Hearing, February 2017.
- HearStrong Award honoring my service as a role model for others with hearing loss, for motivating them to take control of their hearing health, and inspiring them to reach their goals, HearStrong Foundation, 2013.
- Student Research Travel Award for signal processing preference for music and speech in adults and children with hearing loss, Annual Meeting of the American Auditory Society, 2012.
- Fellowship Travel Award for Lessons for Success Research Conference, American Speech-Language-Hearing Association, 2011.
- Student Research Travel Award for using psychoacoustic thresholds to improve hearing aid fittings, International Hearing Aid Research Conference, 2010.
- Student Research Travel Award for coherent versus incoherent modulation filtering, Acoustical Society of America, 2010.
- Student Research Award for effects of expansion on consonant audibility, American Academy of Audiology, 2008.
- Best Quick Read for effect of expansion on consonant recognition and audibility, The Hearing Journal, 2009.
- Customer Service Award, William S. Middleton VA Medical Center, Madison, WI, 2004.
- Best of Audiology Literature Award for is functional gain really functional?, The Hearing Journal, 2003.

#### **Certifications and Licenses**

2011 – <i>present</i>	Nebraska State Licensure in Audiology
2011 – 2018	Nebraska State Licensure in Hearing Aid Dispenser.
2003 – present	Certificate of Clinical Competence in Audiology.
2007 – 2010	Washington State Licensure in Audiology.
2004 - 2007	Wisconsin State Licensure in Audiology.
2003 – 2004	Nebraska State Licensure in Audiology and Hearing Aid Dispenser.