CHRISTOPHER ALBERT BROWN

CONTACT INFORMATION

Department of Communication Science and Disorders
University of Pittsburgh
4033 Forbes Tower
3600 Forbes Ave
Pittsburgh, PA 15260 USA
Phone: 412-383-6546
Email: cbrown1@pitt.edu

BIOGRAPHY

Marital Status: Married, 03 May 2003, to Ms. Monika Grela
Children: Maria Grela Brown, born 05 October 2005

EDUCATION

Doctor of Philosophy, 2004
Loyola University Chicago, Chicago, Illinois.
Major: Perception.
Dissertation: "Room acoustics and distance perception."
Mentor: William A. Yost

Master of Science, 1998
University of Wisconsin-Milwaukee, Milwaukee, Wisconsin.
Major: Cognition and Perception. Minors: Statistics, Linguistics.
Thesis: "A Study of Single Echo Interference with Intelligibility Using Monosyllables."

Bachelor of Arts, 1993
University of Rhode Island, Kingston, Rhode Island.
Major: Psychology.

PROFESSIONAL EXPERIENCE

Assistant Professor, July 2012 – Present
Department of Communication Science and Disorders, University of Pittsburgh

Graduate Faculty Member, January 2013 – Present
Department of Communication Science and Disorders, University of Pittsburgh

Associate Research Professor, December 2009 – June 2012
Department of Speech and Hearing Science, Arizona State University

Laboratory Coordinator, February 2004 – June 2012
Psychoacoustics Lab, Department of Speech and Hearing Science, Arizona State University

Faculty Research Associate, February 2004 – December 2009
Department of Speech and Hearing Science, Arizona State University

Research Assistant, May 1999 – December 2003
Parmly Hearing Institute, Loyola University Chicago.
Principle Investigator: William A. Yost, Ph.D. (Grant P01-DC000293)

Research Assistant, August 1993 – September 1995; May 1998 – April 1999
Psychoacoustics Laboratory, University of Wisconsin-Milwaukee

Teaching Assistant, Laboratory Coordinator, Research Methods. August 1997 – May 1998
Department of Psychology, University of Wisconsin-Milwaukee

Teaching Assistant, Psychological Statistics, August 1995 – May 1997
Department of Psychology, University of Wisconsin-Milwaukee

RESEARCH GRANTS

Active

"Understanding the benefits of electric-acoustic stimulation," (C.A. Brown, Co-PI; S.P. Bacon, Co-PI), NIDCD Multiple-PI R01 Research Grant, 7/11-6/16. Total direct costs: $1,062,500.

In Preparation

"Binaural processing and bilateral cochlear implants," (C.A. Brown, PI), NIDCD R01 Research Grant.

Past

"Sound source localization: An interaction of auditory and vestibular function," (C.A. Brown, Investigator), Arizona State University Facilities Grant, 7/12-6/13. Total direct costs: $120,000.

"Understanding the benefits of electric-acoustic stimulation," (C.A. Brown, Investigator; S.P. Bacon, PI), NIDCD R01 Research Grant, Administrative Supplement, 9/09-12/10. Total direct costs: $121,028.

"Understanding the benefits of electric-acoustic stimulation," (C.A. Brown, Investigator; S.P. Bacon, PI), NIDCD R01 Research Grant, 1/08-7/11. Total direct costs: $711,711.

"The effect of inter-aural differences of time on speech intelligibility in simulated cochlear implant listening," (C.A. Brown, Principal Investigator), National Organization for Hearing Research Foundation Annual Research Grant, 1/06-12/07, Total direct costs: $20,000.

PATENTS

Brown, C.A. (Patent pending). A method to enhance the binaural representation for hearing-impaired users.

Bacon, S.P., Brown, C.A., & Apoux, F. (US 8280087). Delivering fundamental frequency and amplitude envelope cues to enhance speech understanding.

PUBLICATIONS (student names are italicized)

PEER-REVIEWED PAPERS

Spencer, N.J., *Helms Tillery, K.*, and **Brown, C.A.** (in press). Effects of dynamic-range compression on sentence intelligibility with a speech masker in simulated cochlear implant listening. Ear & Hearing.

Brown C.A., *Helms Tillery, K.*, Apoux, F., Doyle, N.M., Bacon, S.P. (2015). Shifting fundamental frequency in simulated electric-acoustic listening: Effects of F0 variation. Ear & Hearing, 37, 18-25. http://dx.doi.org/10.1097/AUD.0000000000000227.

Brown, C.A. and Yost, W.A. (2015). Spectral overlap and interaural time difference sensitivity: Possible role of binaural interference. Journal of the Acoustical Society of America, 137, 374-380. http://dx.doi.org/10.1121/1.4916798.

Brown, C.A. (2014). Binaural enhancement for bilateral cochlear implant users. Ear & Hearing, 35, 580-584. http://dx.doi.org/10.1097/AUD.0000000000000044.

Dorman, M.F., *Loiselle, L.*, Stohl, J., Yost, W.A., Spahr, A., **Brown, C.A.**, and *Cook, S.* (2014). Interaural level differences and sound source localization for bilateral cochlear implant patients. Ear & Hearing. http://dx.doi.org/10.1097/AUD.0000000000000057.

Brown, C.A. and Yost, W.A. (2013). Interaural time processing when stimulus bandwidth differs at the two ears. In Basic Aspects of Hearing: Physiology and Perception (eds. Moore, B.C.J., Patterson, R.D., Winter, I., Carlyon, R.P., and Gockel, H.E.), Springer, New York. Peer-reviewed chapter. PMID: 23716230. http://dx.doi.org/10.1007/978-1-4614-1590-9_28.

Dorman, M.F., Spahr, A., *Loiselle, L.*, Zhang, T., *Cook, S.*, **Brown, C.A.**, and Yost, W.A. (2013). Localization and speech understanding by a patient with bilateral cochlear implants and bilateral hearing preservation. Ear & Hearing, 34, 245-248. PMID: 23183045. http://dx.doi.org/10.1097/AUD.0b013e318269ce70.

Yost, W.A., *Loiselle, L.*, Dorman, M.F., Burns, J. and **Brown, C.A.**, and (2013). Sound source localization of filtered noises by listeners with normal hearing: A statistical analysis. Journal of the Acoustical Society of America, 133, 2876-2882. PMID: 23654393. http://dx.doi.org/10.1121/1.4799803.

Yost, W.A., and **Brown, C.A.** (2013). Localizing the Sources of Two Independent Noises: Role of Time Varying Amplitude Differences. Journal of the Acoustical Society of America, 133, 2301-2313. PMID: 23556597. http://dx.doi.org/10.1121/1.4792155.

Gifford, R.H., Dorman, M.F., **Brown, C.A.**, & Spahr, A.J. (2012). Hearing and psychophysics: implications for individuals with presbycusis considering cochlear implantation. Journal of Hearing Science, 2, 9-17.

Helms-Tillery, K., **Brown, C.A.**, and Bacon, S.P. (2012). Comparing the effects of reverberation and of noise on speech recognition in simulated electric-acoustic listening. Journal of the Acoustical Society of America, 131, 416-423. PMID: 22280603. http://dx.doi.org/10.1121/1.3664101.

Brown, C.A., and Yost, W.A. (2011). Interaural spectral asymmetry and sensitivity to interaural time differences. Journal of the Acoustical Society of America, 130, EL358-EL364. PMID: 22088041. http://dx.doi.org/10.1121/1.3647263.

Apoux, F., Millman, R.E., Viemeister, N.F., **Brown, C.A.**, and Bacon, S.P. (2011). On the mechanisms involved in the recovery of envelope information from temporal fine structure. Journal of the Acoustical Society of America, 130, 273-282. PMID: 21786897. http://dx.doi.org/10.1121/1.3596463.

Brown, C.A., Scherrer, N.M., & Bacon, S.P. (2010). Shifting fundamental frequency in simulated electric-acoustic listening: Effects of sensation level. Journal of the Acoustical Society of America, 128, 1272-1279. PMID: 20815462. http://dx.doi.org/10.1121/1.3463808.

Brown, C.A., & Bacon, S.P. (2010). Fundamental frequency and speech recognition in noise. Hearing Research, 266, 52-59. PMID: 19748564. http://dx.doi.org/10.1016/j.heares.2009.08.011.

Gifford, R., Dorman, M. and **Brown, C.A.** (2010). Psychophysical properties of low-frequency hearing: Implications for electric and acoustic stimulation (EAS). In Cochlear Implants and Hearing Preservation, van de Heyning (ed), Advances in ORL, 67, 51-60. PMID: 19955721.

Brown, C.A., & Bacon, S.P. (2009a). Low-frequency speech cues and simulated electric-acoustic hearing. Journal of the Acoustical Society of America, 125, 1658-1665. PMID: 19275323. http://dx.doi.org/10.1121/1.3068441.

Brown, C.A., & Bacon, S.P. (2009b). Achieving electric-acoustic benefit with a modulated tone. Ear and Hearing, 30, 489-4903. PMID: 19546806. http://dx.doi.org/10.1097/AUD.0b013e3181ab2b87.

Dye, R.H. Jr., **Brown, C.A.**, Gallegos, J.A., Yost, W.A., and Stellmack, M.A. (2006). The influence of later-arriving sounds on the ability of listeners to judge the lateral position of a source. Journal of the Acoustical Society of America, 120, 3946-3956. PMID: 17225421.

Brown, C.A. (2004). Acoustic Environmental Learning. Perspectives on Hearing and Hearing Disorders: Research and Diagnostics, 8, 2-4.

Bashford, J.A., Jr., Warren, R.M., & **Brown, C.A.** (1996). Use of Speech-Modulated Noise Adds Strong Bottom-up Cues for Phonemic Restoration. Perception and Psychophysics, 58(3), 342-350.

Brennan, J.F., **Brown, C.A.**, & Jastreboff, P.J. (1996). Salicylate-Induced Changes in Auditory Thresholds of Adolescent and Adult Rats. Developmental Psychobiology, 29(1), 69-86.

PAPERS UNDER REVIEW OR IN PREPARATION

Ardoint, M., Sheft, S., *Helms Tillery, K.*, **Brown, C.A.**, Shafiro, V., and Bacon, S.P., (under review). Discrimination of stochastic frequency modulation in relationship to speech perception with electro-acoustic stimulation. International Journal of Audiology.

Brown, C.A. (under review). Improving spatial release from masking in bilateral cochlear implant users. Ear & Hearing.

Spencer, N.J., *Helms Tillery, K.*, and **Brown, C.A.** (under review). Effects of front-end automatic gain control compression on masked lateralization in simulated bilateral cochlear implant listening. Journal of the Acoustical Society of America.

Brown, C.A. (in preparation). Localization by bilateral cochlear implant users. Nature.

Spencer, N.J., and **Brown, C.A.** (in preparation). The effects of overall level on sensitivity to interaural level differences by bilateral cochlear implant users. Ear and hearing.

INVITED TALKS

Brown, C.A. (January 2016). The benefits of two implants for speech understanding. Auditory Cognitive Neuroscience Meeting, Tucson, AZ.

Brown, C.A., (January 2016). Maximizing binaural benefit for bilateral cochlear implant users. The Mid-Atlantic Symposium on Hearing, College Park, MD.

Brown, C.A., (October 2015). ILD sensitivity and speech understanding in bilateral cochlear implant users. 2016 CRASH Conference, Madison WI.

Brown, C.A. (May 2015). The effect of manipulating interaural level differences on lateralization by bilateral cochlear implant users. Journal of the Acoustical Society of America, 137, 2321.

Brown, C.A. (January 2015). Manipulating the perceptual space in the plane of azimuth for bilateral cochlear implant users. The Mid-Atlantic Symposium on Hearing, College Park, MD.

Brown, C.A. (January 2015). Doris in the sky with pretzels: Altering reality with signal processing. Auditory Cognitive Neuroscience Meeting, Tucson, AZ.

Brown, C.A. (May, 2014). Understanding the benefits of electric-acoustic stimulation. Meeting of the Acoustical Society of America.

Brown, C.A. (January 2014). Of square pegs and round holes: binaural hearing and bilateral CIs. Auditory Cognitive Neuroscience Meeting, Tucson, AZ.

Brown, C.A. (November 2013). Binaural hearing and bilateral cochlear implants. Hearing Science Session: Recent Advances and Technological Developments in the Design of Cochlear Implant Devices, ASHA Convention, Chicago IL.

Brown, C.A. (March 2013). A Devil's advocate case for bilateral cochlear implants. Otology Grand Rounds, Department of Otolaryngology, University of Pittsburgh Medical Center, Pittsburgh, PA.

Brown, C.A. (January 2013). A closed-set speech corpus for cochlear implant research. East Coast Cochlear-implant Conference, College Park, MD.

Brown, C.A. (January 2013). Improving speech reception for users of cochlear implants. University of Pittsburgh Audiology Clinical Seminar Series, Pittsburgh, PA.

Brown, C.A. (January 2012). Cochlear Implantation and Psychophysics. 2012 Presbicusis Research Meeting, Munich, Germany.

Brown, C.A. (January 2012). The binaural representation of bilateral cochlear implant users. Auditory Cognitive Neuroscience Meeting, Tucson, AZ.

Brown, C.A. (October 2011). Enhancing binaural cues for bilateral cochlear implant users . 2011 CRASH Conference, Madison WI.

Brown, C.A. (July 2011). Delivering fundamental frequency acoustically to cochlear implant patients. 2011 Conference on Implantable Auditory Prostheses, Asilomar CA.

Brown, C.A. (April 2011). Cochlear Implant Research Update. 2011 Arizona Speech-Language Hearing Association Convention, Tempe, AZ.

Brown, C.A. (February 2011). Strategies for augmenting cochlear implant processing. Department Colloquium, Department of Speech, Language, and Hearing Sciences, The University of Arizona, Tucson, AZ.

Brown, C.A. (February 2011). Combining acoustic and electric stimulation. 34th ARO MidWinter Meeting, Baltimore, Maryland.

Brown, C.A. (January 2011). Speech is Special-ly enhanced by low-frequency information. Auditory Cognitive Neuroscience Meeting, Tucson, AZ.

Brown, C.A. (October 2009). Overcoming the limitations of cochlear implants. Adult Loss Of Hearing Association (ALOHA) / Desert Cochlear Connections, Tucson, AZ.

Brown, C.A. (July 2009). The effects of manipulating F0 on the benefits of electric-acoustic stimulation. 2009 Conference on Implantable Auditory Prostheses, Lake Tahoe, California.

Brown, C.A. (April 2009). The role of fine structure cues in enhancing speech reception for cochlear implant users. Cochlear Corporation, Denver, Colorado.

Brown, C.A. (November 2006). The benefits of electric-acoustic stimulation. The Hearing Group, L'Université Paris Descartes, Paris, France.

PODIUM AND POSTER PRESENTATIONS

Spencer, N.J., and **Brown, C.A.** (January 2016). Dynamic range compression for bilateral CI users. The Mid-Atlantic Symposium on Hearing, College Park, MD.

Spencer, N.J., and **Brown, C.A.** (2015). Effects of compression channel number and linked compression on masked lateralization performance in simulated bilateral cochlear implant listening. Journal of the Acoustical Society of America, 137, 2227.

Apoux, F.A., *Yoho, S.*, Healy, E.W., **Brown, C.A.** (2014). Dual-Carrier Strategy: Preliminary Cochlear Implant Data. Conference of the American Auditory Society.

Brown, C.A. (2013). An algorithm to enhance the binaural cues available to bilateral cochlear implant users. 2013 Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.

Brown, C.A. and *Helms Tillery, K.* (2013). Influence of expanded voice pitch contours on the intelligibility of spectrally reduced speech. 2013 Conference on Implantable Auditory Prostheses, Lake Tahoe, CA.

Loiselle, L., Dorman, M., Yost, W.A., **Brown, C.A.**, and Spahr, T. (2012). Sound source localization in bilateral cochlear implant users. 12th International Conference on Cochlear Implants and Other Implantable Auditory Technologies, Baltimore, MD.

Loiselle, L., Dorman, M., Yost, W.A., **Brown, C.A.**, and Spahr, T. (2012). Localization Ability in bilateral cochlear implant users. American Auditory Society, Scottsdale, AZ.

Ardoint, M., **Brown, C.A.**, *Helms Tillery, K.*, & Bacon, S.P. (2011). Presenting Low-Frequency Cues Visually In Simulations Of Electric-Acoustic Stimulation. 2011 Conference on Implantable Auditory Prostheses, Asilomar CA.

Ardoint, M., Sheft, S., *Helms Tillery, K.*, **Brown, C.A.**, & Bacon, S.P. (2011). Discrimination of stochastic FM as a predictor of electro-acoustic stimulation (EAS) benefit. Journal of the Acoustical Society of America, 129, 2528.

Helms Tillery, K., **Brown, C.A.**, Yost, W.A. & Bacon, S.P. (2011). Low-frequency speech cues benefit electric-acoustic listening in reverberation. 2011 Conference on Implantable Auditory Prostheses, Asilomar CA.

Helms Tillery, K., **Brown, C.A.**, Yost, W.A. & Bacon, S.P. (2011). Influence of a Single Reflection on Speech Intelligibility in Simulated Electric-Acoustic Stimulation. Journal of the Acoustical Society of America, 129, 2528.

Yost, W.A., **Brown, C.A.** & *Walling, F.M.* (2011). Locating Two Sound Sources: The Role of Amplitude Modulation and Spectral Content. Journal of the Acoustical Society of America, 129, 2528.

Yost, W.A., **Brown, C.A.** & *Walling, F.M.* (2011). Localization of Two Simultaneous Sound Sources: Role of Amplitude Modulation. The 34th Midwinter Research Meeting of the Association for Research in Otolaryngology, Baltimore, MD.

Brown, C.A. & Bacon, S.P. (2010). Lowering mean fundamental frequency to improve speech intelligibility in noise under simulated electric-acoustic stimulation. Journal of the Acoustical Society of America, 127.

Yost, W.A., **Brown, C.A.** & *Walling, F.M.* (2010). F0 and Pitch-Shift Discrimination. Journal of the Acoustical Society of America, 127.

Helms Tillery, K., **Brown, C.A.** & Bacon, S.P. (2010). Low-frequency speech cues benefit simulated electric-acoustic listening in reverberation. American Auditory Society, Scottsdale, AZ.

Brown, C.A. & Bacon, S.P. (2009). Signal-processing strategies for electric-acoustic stimulation. Journal of the Acoustical Society of America, 125, 2528.

Brown, C.A. & Yost, W.A. (2009). The effect of flanking bands on sensitivity to interaural time differences. Journal of the Acoustical Society of America, 125, 2522.

Helms Tillery, K., **Brown, C.A.** & Bacon, S.P. (2009a). Effects of reverberation on speech understanding in simulated electric-acoustic hearing. The 2009 Conference on Implantable Auditory Prostheses, Lake Tahoe, Nevada.

Helms Tillery, K., **Brown, C.A.** & Bacon, S.P. (2009b). Spectral resolution and Intelligibility of reverberant speech in simulated electric-acoustic listening. American Auditory Society, Scottsdale, AZ.

Brown, C.A. & Bacon, S.P. (2008a). Learning effects in simulated electric-acoustic hearing. Midwinter meeting of the Association for Research in Otolaryngology, Phoenix, AZ.

Brown, C.A. & Bacon, S.P. (2008b). A new approach to electric-acoustic stimulation. Journal of the Acoustical Society of America, 123, 3054.

Brown, C.A. & Yost, W.A. (2008). The effect of spectral overlap on sensitivity to interaural time differences. Journal of the Acoustical Society of America, 121, 3093.

Helms Tillery, K., **Brown, C.A.** & Bacon, S.P. (2008). Relationship Between Loudness Balancing And Speech Intelligibility In Simulated EAS. American Auditory Society, Scottsdale, AZ.

Scherrer, N.M., **Brown, C.A.** & Bacon, S.P. (2008). Effect Of Flattening f0 On Intelligibility In Simulated EAS. American Auditory Society, Scottsdale, AZ.

Walling, F.M., **Brown, C.A.** & Bacon, S.P. (2008). Effects Of Simulated Low-Frequency Loss On Simulated EAS. American Auditory Society, Scottsdale, AZ.

Brown, C.A. & Bacon, S.P. (2007a). The effect of fundamental frequency in simulated electric-acoustic hearing. Journal of the Acoustical Society of America, 121, 3093.

Brown, C.A. & Bacon, S.P. (2007b). The effect of interaural differences of time on speech intelligibility in simulated electric-acoustic hearing. Journal of the Acoustical Society of America, 121, 3093.

Scherrer, N.M., **Brown, C.A.** & Bacon, S.P. (2007). Effect of Fundamental Frequency on Intelligibility in Simulated Electric-Acoustic Listening. American Auditory Society, Scottsdale, AZ.

Apoux, F., Millman, R.E., **Brown, C.A.**, Bacon, S.P. & Viemeister, N.F. (2004). Psychophysical evidence for the existence of envelope information in the internal auditory representation of signal fine structure. Journal of the Acoustical Society of America, 113(4), 2270.

Brown, C.A., Jeung, C. & Bacon, S.P. (2004). A psychophysical measure of level-dependent shifts in the peak of the traveling wave. Journal of the Acoustical Society of America, 113(4), 2270.

Brown, C.A., Whitmer, W.M. & Yost, W.A. (2003). The effect of background noise on the perception of auditory distance. Journal of the Acoustical Society of America, 113(4), 2270.

Whitmer, W.M., **Brown, C.A.**, Dye, R.H. Jr. & Jurcin, N.F. (2003). Cocktails for Franssen: Asynchronous transient bias and other attentional factors in auditory localization. Journal of the Acoustical Society of America, 113(4), 2285.

Yost, W.A., **Brown, C.A.** & Whitmer, W.M. (2003). Processing sounds in rooms. International Workshop on Spatial and Binaural Hearing.

Yost, W.A., **Brown, C.A.** & Whitmer, W.M. (2003). The effects of precedence and distance localization. University of Leipzig & the Max Planck Institute.

Brown, C.A. & Yost, W.A. (2002a). Distance judgments in a reverberant room. Association for Research in Otolaryngology Abstracts, 25, 181.

Brown, C.A. & Yost, W.A. (2002b) Distance Judgments improve with exposure to the acoustic environment, Auditory Perception, Cognition, and Action Meeting, Kansas City, 2002.

Whitmer, W.M., Sheft, S.E. & **Brown, C.A.** (2002). Stochastic signals and the Frannsen effect. Association for Research in Otolaryngology Abstracts, 25, 17.

Brown, C.A., Sheft, S.E., Yost, W.A. & Dye, R.H. Jr. (2001). Localization of noise bursts in echoic space. Association for Research in Otolaryngology Abstracts, 24, 310.

Dye, R.H. Jr., Gallegos, J., Jr. & **Brown, C.A.** (2001). Observer weighting of interaural delays in echo clicks preceded by source clicks that have been attenuated. Journal of the Acoustical Society of America, 109(5), 2486.

Bashford, J.A., Jr., Warren, R.M. & **Brown, C.A.** (1994). Researchers beware: Use of speech-modulated noise adds strong bottom-up cues for phonemic restoration. Journal of the Acoustical Society of America, 95(5), 2975.

Brennan, J.F., **Brown, C.A.** & Jastreboff, P.J. (1992). Salicylate-Induced Shifts in Intensity Thresholds At Varying Frequencies in Young Rats. Society for Neuroscience Abstracts, 18(2), 1035.

COURSES TAUGHT

Undergraduate Courses

Hearing Science
Department of Communication Science and Disorders, University of Pittsburgh.

Cognitive Psychology
Department of Psychology, Loyola University Chicago.

Psychological Statistics
Department of Psychology, Loyola University Chicago.

Graduate Courses

Physiological and Psychological Acoustics
Department of Communication Science and Disorders, University of Pittsburgh.

Sound and Vibration: Measurement and Management
Department of Communication Science and Disorders, University of Pittsburgh.

Scientific Bases of Cochlear Implantation and Related Treatments
Department of Communication Science and Disorders, University of Pittsburgh.

Computational Methods in Research
Department of Speech and Hearing Science, Arizona State University.

RESEARCH SUPERVISION

Undergraduate

Kristen Nunn (2015-2016). The noisy channel model and sentence processing in individuals with simulated hearing loss. Bachelor of Philosophy project, University of Pittsburgh (Committee member).

Julia Dawson (2015-2016). Hearing loss and the phonetic context effect. Bachelor of Philosophy project, University of Pittsburgh (Committee member).

Katrina Killian (2014-2015). "The effect of azimuth on binaural cue weighting in a lateralization paradigm." Bachelor of Philosophy project, University of Pittsburgh (Committee chair).

Katrina Killian (2013-14). "Bilateral cochlear implant processing." Directed research, University of Pittsburgh.

Farris Walling (2007). "Speech recognition in electric-acoustic hearing: effects of restricting the low-frequency acoustic signal." Directed research, Arizona State University.

Nicole Scherrer, (2006). "Fundamental frequency and amplitude envelope cues with simulated implant listening: effects of shifting F0." Directed research, Arizona State University

Graduate Theses and Dissertations

Committee Member Gabrielle DeFazio (2016). Student and clinical perceptions of the role of the speech-language pathologist in feeding and/or swallowing disorders for children in the first 2 years of life. M.S. prospectus, University of Pittsburgh.

Kristie Kovacyk (2014). Ph.D. Dissertation, University of Pittsburgh.

Ye Yi (2014). Ph.D. Dissertation, University of Pittsburgh.

Kate Helms Tillery (2014). Effects of reverberation on electric and electric-acoustic hearing. Ph.D. dissertation, Arizona State University.

Chayadevie Nanjundeswaran (2013). Metabolic mechanisms of vocal fatigue. Ph.D. Dissertation, University of Pittsburgh.

Defense Meeting Moderator Allison Martin (2014). M.S., SLP.

Supervision of Other Graduate Research Lauren Dubyne (2015-16). Using eye-tracking to assess speech reception by hearing impaired users. Au.D. research project, University of Pittsburgh.

Mengchao Zhang (2015-16). Auditory profile analysis and its implication on identifying hidden hearing impairment. Au.D. research project, University of Pittsburgh.

Lauren Dubyne (2014-15). Bottom-up processing of speech by cochlear implant listeners. Au.D. research project, University of Pittsburgh.

Lauren Dubyne (2014). Processing and function of Cochlear Implants. Au.D. research project, University of Pittsburgh.

Nicole Devon (2014). Processing and Function of Cochlear Implants. Au.D. research project, University of Pittsburgh.

Pitchuli Uayporn (2013). Processing and Function of Cochlear Implants. Ph.D. research project, University of Pittsburgh.

Arifa Gir (2013). Processing and Function of Cochlear Implants. Au.D. research project, University of Pittsburgh.

Stephanie Sanders (2013). Processing and Function of Cochlear Implants. Au.D. research project, University of Pittsburgh.

Nichole Reed (2012). Processing and Function of Cochlear Implants. Au.D. research project, University of Pittsburgh.

Kate Helms-Tillery (2011-2012). A closed-set speech corpus for cochlear implant research. Ph.D. research project, Arizona State University.

Kate Helms-Tillery (2009-2010). The effect of reverberation and noise on speech understanding in simulated cochlear implant listening. Ph.D. research project, Arizona State University.

Farris Walling (2007-2008). Binaural Release from Masking in Simulated Electric-Acoustic Stimulation. Ph.D. research project, Arizona State University.

Kate Helms-Tillery (2007-2008). The Relationship between Loudness Balancing and Speech Intelligibility in Simulated Electric-Acoustic Listening. Ph.D. research project, Arizona State University.

Nicole Scherrer (2006-2007). Combining vocoder stimulation with F0 and envelope cues in the low-frequency region: effects of frequency shift and sensation level. Ph.D. research project, Arizona State University.

Erica J. Williams (2005-2006). On the relation between compression and overshoot. Ph.D. research project, Arizona State University.

Erica J. Williams (2004-2005). Psychophysical estimates of the frequency extent of compression. Ph.D. research project, Arizona State University.

Changmo Jeung (2003-2004). A behavioral study of the shift in the peak of the basilar membrane traveling wave. Ph.D. research project, Arizona State University.

Supervision of postdoctoral fellows Nathaniel Spencer (2014-). University of Pittsburgh.

Marine Ardoint (2010-2011). Arizona State University.

Kang Li (2007-2010). Arizona State University.

AWARDS AND HONORS

Interdisciplinary Research Award, $7,500 July 2003, The Office of Research and The Graduate School, Loyola University Chicago

Outstanding Research Award, $250 September 2001, Psychology Department, Loyola University Chicago

Sigma Xi Outstanding Research Award May 2001, Sigma Xi, Loyola University Chicago Chapter

PROFESSIONAL ACTIVITIES

Technical Program Organizer, Psychological and Physiological Acoustics. The Acoustical Society of America, 2014-2016.

Section Editor, Cochlear Implants. Ear & Hearing, May 2012-present.

Member, Convention Program Committee (Hearing Science), 2014 ASHA Convention.

Member, Technical Committee, Psychological and Physiological Acoustics Committee, The Acoustical Society of America. May 2012-April 2015.

Member, Steering Committee, 2011 Conference On Implantable Auditory Prostheses, Asilomar, California.

Session Chair, Combined Hearing, Pitch and Music, 2011 Conference On Implantable Auditory Prostheses, Asilomar, California.

Ad Hoc Reviewer, Ear And Hearing, 2008-present

Ad Hoc Reviewer, Hearing Research, 2009-present

Ad Hoc Reviewer, Journal of the Acoustical Society of America, 2005-present

Ad Hoc Reviewer, Journal of the Association for Research in Otolaryngology, 2008-present

Ad Hoc Reviewer, Journal of Speech, Language, and Hearing Research, 2009-present

Session Chair, Pitch, Binaural and Spatial Hearing Suppression, 153 Meeting of the Acoustical Society of America, June 2007, Salt Lake City, Utah.

DEPARTMENTAL & UNIVERSITY SERVICE

Member, Admissions Committee
Department of Communication Science and Disorders, University of Pittsburgh

Faculty Representative, Academic Integrity Committee
School of Rehabilitative and Health Sciences, University of Pittsburgh

Department Technology Liaison
Department of Communication Science and Disorders, University of Pittsburgh

Chair, Technology Committee Department of Speech and Hearing Science, Arizona State University

AFFILIATIONS

Member, Association for Research in Otolaryngology, 2001-present

Member, The Acoustical Society of America, 1995-present

Member, The American Auditory Society, 2008-present