

Jacie R. McHaney
j.mchaney@pitt.edu

EDUCATION

- 2019- Communication Science and Disorders (PhD Student)
University of Pittsburgh, Pittsburgh, PA
- 2015 **B.S.**, Psychology, *Psychology Honors*
The University of Texas at Austin, Austin, TX

RESEARCH EXPERIENCE

- Sep 2019-Present **Predoctoral Trainee**
Department of Communication Science and Disorders
University of Pittsburgh
Principal Investigator: Dr. Bharath Chandrasekaran
- Sep 2018-Aug 2019 **Project Coordinator**
Department of Communication Science and Disorders
University of Pittsburgh
Principal Investigator: Dr. Bharath Chandrasekaran
- Jan 2016-Aug 2018 **Project Coordinator**
Department of Communication Sciences and Disorders
The University of Texas at Austin
Principal Investigator: Dr. Bharath Chandrasekaran
- Aug 2014-Dec 2015 **Research Assistant**
Department of Psychology
The University of Texas at Austin
Principal Investigator: Dr. Jennifer S. Beer

GRANT SUPPORT

- 08/2015 – 12/2015 **Undergraduate Research Fellowship** \$1,000
The University of Texas at Austin
This fellowship provides research support for undergraduates pursuing independent research projects.
- 09/01/2019 – 08/31/2021 **T32-DC011499 (PIs: Kandler and Yates)** \$85,252
Role: Predoctoral Trainee
National Institute for Deafness and Communication Disorders
Training in Auditory and Vestibular Neuroscience
This training program aims to generate auditory and vestibular scientists who can address problems related to the biological bases of centrally-generated hearing and balance disorders through neuroscience and the clinical aspects of hearing and balance disorders.
- 09/01/2021 – 08/31/2024 **NRSA F31-Diversity (Pending)** \$145,608
Role: Principal Investigator
National Institute for Deafness and Communication Disorders
Neural Mechanisms of Speech Perception in Noise in Middle-Age

PUBLICATIONS

1. Koski, J. E., **McHaney, J. R.**, Rigney, A. E., & Beer, J. S. (2020). Reconsidering Longstanding Assumptions About the Role of Medial Prefrontal Cortex (MPFC) in Social Evaluation. *NeuroImage*, 116752.

2. Llanos, F., **McHaney, J. R.**, Schuerman, W. L., Yi, H. G., Leonard, M. K., & Chandrasekaran, B. (2020). Non-invasive peripheral nerve stimulation selectively enhances speech category learning in adults. *npj Science of Learning*, 5(1), 1-11.
3. **McHaney, J. R.***, Gnanateja, G. N.*, Smayda, K. E., Zinszer, B. D., & Chandrasekaran, B. (2021). Cortical Tracking of Speech in Delta Band Relates to Individual Differences in Speech in Noise Comprehension in Older Adults. *Ear and Hearing*, 42(2), 343-354. (*contributed equally)
4. **McHaney, J. R.**, Tessmer, R., Roark, C. L., & Chandrasekaran, B. (in revision). Working memory relates to individual differences in speech category learning: Insights from computational modeling and pupillometry.
5. **McHaney, J. R.**, Schuerman, W. L., Leonard, M. K., & Chandrasekaran, B. (in preparation). Transcutaneous vagus nerve stimulation modulates pupillary responses during non-native speech category learning.
6. **McHaney, J. R.**, Chandrasekaran, B., & Parthasarathy, A. (in preparation). Top-down and Bottom-up Markers of Speech Perception in Noise.

POSTER PRESENTATIONS

1. Koski, J. E., **Richardson, J. B.†**, Rigney, A. E., & Beer, J. S. (April 2016). Too much information or warm fuzzy feelings? Understanding the role of MPFC in processing the self versus others. Poster presented at the Social and Affective Neuroscience (SANS) Annual Meeting, New York, NY.
2. Smayda, K. E., **McHaney, J. R.**, & Chandrasekaran, B. (May 2017). Music Training for the Enhancement of Speech-In-Noise Processing in Older Adults. Poster presented at the Texas Leadership Luncheon, Austin, TX.
3. **McHaney, J. R.**, Zinszer, B. D., Smayda, K. E., & Chandrasekaran, B. (March 2018). Effect of listening environment on cortical entrainment to continuous speech in older adults. Poster presented at the Cognitive Neuroscience Society 25th Annual Meeting, Boston, MA.
4. Llanos, F., **McHaney, J. R.**, Leonard, M. K., Schuerman, W. L., Yi, H. G., & Chandrasekaran, B. (August 2018). Transcutaneous vagus nerve stimulation enhances non-native speech categorization. Poster presented at the 10th Annual Meeting of the Society for the Neurobiology of Language, Québec City, Québec, Canada.
5. **McHaney, J. R.**, Zinszer, B. D., Smayda, K. E., Xie, Z., & Chandrasekaran, B. (December 2018). Cortical entrainment to the speech envelope relates to speech comprehension in older adults under adverse listening conditions. Poster presented at the 12th Annual Aging Institute Research Day, Pittsburgh, PA.
6. **McHaney, J. R.**, Schuerman, W. L., Leonard, M. K., & Chandrasekaran, B. (October 2020). Non-invasive peripheral nerve stimulation paired with speech sounds modulates pupillary responses and selectively enhances learning. Poster presented at the Twelfth Annual Meeting of the Society for Neurobiology of Language, Virtual.
7. Roark, C. L., Reetzke, R., Llanos, F., **McHaney, J. R.**, & Chandrasekaran, B. (December 2020). Learning Mandarin tone categories with natural speech and a non-speech homologue. Poster to be presented at the 179th Meeting of the Acoustical Society of America, Chicago, IL. (Conference canceled)

† Last name changed to McHaney from Richardson in 2017

8. Lescht, E., Venker, C., **McHaney, J. R.**, & Hampton Wray, A. (January 2021). Novel word learning in children who stutter. Poster presented at the 12th Oxford Dysfluency Conference, Virtual.

PRESENTATIONS

- Aug 2017 *Effect of listening environment on continuous speech processing in older adults*, Sixth Annual Communication Sciences and Disorders Research Blitz, The University of Texas at Austin, Austin.
- Dec 2019 *Ageing, cognition, and speech processing*, Auditory and Vestibular Neuroscience T32 Seminar, University of Pittsburgh, Pittsburgh.
- Mar 2020 *Cortical Tracking of Speech in Older Adults*, Auditory and Vestibular Neuroscience T32 Retreat, University of Pittsburgh, Pittsburgh.
- Apr 2020 *Cortical Tracking of Speech in Older Adults*, Department of Communication Science and Disorders Research Round Table Seminar, University of Pittsburgh, Pittsburgh.
- Jan 2021 *Working Memory During Non-Native Speech Category Learning*, Auditory and Vestibular Neuroscience T32 Seminar, University of Pittsburgh, Pittsburgh.
- Feb 2021 *Influence of Working Memory on Non-Native Speech Category Learning*, Department of Communication Science and Disorders Research Round Table Seminar, University of Pittsburgh, Pittsburgh.
- Apr 2021 *Working Memory Influences Speech Category Learning: A Pupillometry Study*, Auditory and Vestibular Neuroscience T32 Annual Retreat, University of Pittsburgh, Pittsburgh.

TEACHING EXPERIENCE

- 2021 **Assistant Instructor**, Neuroscience of Communication (CSD 2110)
- 2021 **Guest Lecturer**, Introduction to Neuroscience of Communication (CSD 1237)

UNDERGRADUATE MENTORSHIP

- 2018-2020 **Megan McKenzie**, Undergraduate Honors Thesis

HONORS

- 2012 Phi Theta Kappa Honor Society
- 2015 University Honors, The University of Texas at Austin
- 2015 Psi Chi International Honor Society in Psychology

SERVICE

University of Pittsburgh

- 2019-Present **PhD Student Representative**, Communication Science and Disorders
- 2020-2021 **Organizer**, Communication Science and Disorders Research Round Table Seminar

PROFESSIONAL MEMBERSHIPS

- Cognitive Neuroscience Society
- Association for Psychological Science
- Society for Neurobiology of Language
- National Student Speech Language Hearing Association (NSSLHA)