

EDUCATION

- Massachusetts Institute of Technology**, Cambridge, MA 2005–2010
Ph.D., Harvard-MIT Division of Health Sciences and Technology
Speech and Hearing Bioscience and Technology Program
Thesis: The role of linguistic contrasts in the auditory feedback control of speech
- Massachusetts Institute of Technology**, Cambridge, MA 2001–2005
B.S., Brain and Cognitive Sciences

RESEARCH EXPERIENCE

- University of Wisconsin–Madison**, Madison, WI 2017–present
Assistant Professor, Department of Communication Sciences and Disorders
Director, Brain Language & Acoustic Behavior Lab, Waisman Center
Faculty Trainer, Neuroscience Training Program 2018–present
Faculty, Language Sciences Program 2021–present
- Boston University Aphasia Research Laboratory**, Boston, MA 2015–2017
Senior Postdoctoral Associate *PI: Swathi Kiran*
- UCSF Biomagnetic Imaging Laboratory**, San Francisco, CA 2010–2015
Postdoctoral Scholar *PIs: John Houde & Srikantan Nagarajan*
- MIT Speech Communication Group / BU Speech Lab**, Cambridge, MA 2005–2010
Graduate Research Assistant *PI: Frank Guenther*
- MIT Computational Cognitive Science Lab**, Cambridge, MA 2003–2005
Undergraduate Research Assistant *PI: Joshua Tenenbaum*
- CNRS Laboratoire de Neurosciences Cognitives**, Marseille, France 2004
Research Assistant *PI: Mireille Besson*

AWARDS AND HONORS

- Emerald Literati Awards for Excellence: Outstanding Paper 2019
Forward in Access Award, McBurney Disability Resource Center 2019
Best Poster Award, 7th International Conference on Speech Motor Control 2017

ASHA “Lessons for Success” Conference Fellow	2017
Saffran Student Scholar Award	2016
BU Clinical & Translational Science Institute Funding Opportunity Award	2016
BU Professional Development & Postdoctoral Affairs Travel Award	2016
UCSF Scientific Leadership and Management Scholarship	2014
Martha Gray Prize for Excellence in Research	2008
MIT Kelly-Douglas Traveling Fellowship	2004

GRANTS AND FELLOWSHIPS

NSF BCS 2242080 (PI: Greg Hickok; Role: Consultant)	2023–2026
National Science Foundation: Cognitive Neuroscience; Linguistics <i>Dual speech coordination: fMRI investigations of a new neuroarchitectural model of speech production</i>	
NIH F32 DC021094 (PI: Heather Kabakoff; Role: Co-Sponsor)	2023–2026
National Institutes of Health: Postdoctoral Individual National Research Service Award <i>Cortical and subcortical underpinnings of typical and dysarthric speech</i>	
NIH R01 DC019134 (MPI)	2021–2026
National Institutes of Health: National Institute on Deafness and Other Communication Disorders <i>Establishing the clinical utility of sensorimotor adaptation for speech rehabilitation</i>	
NSF BCS 2120506 (MPI)	2021–2024
National Science Foundation: Perception, Action & Cognition <i>Sensorimotor adaptation as a window to speech movement planning</i>	
Fall Research Competition (MPI)	2020–2021
UW–Madison Office of the Vice Chancellor for Research and Graduate Education <i>Modulating speech behavior to predict the effectiveness of sensorimotor training</i>	
NIH F32 DC019134 (PI: Sarah Bakst; Role: Sponsor)	2019–2020
National Institutes of Health: Postdoctoral Individual National Research Service Award <i>Speech error detection with degraded auditory representations</i>	
NIH R00 DC014520 (PI)	2017–2022
NIH K99 DC014520 (PI)	2015–2017
National Institutes of Health: Pathway to Independence Award (K99/R00) <i>Neural markers of speech error detection and correction abilities in aphasia</i>	
Dudley Allen Sargent Research Fund Faculty/Post-doctoral Competition (PI)	2016
Boston University Sargent College Alumni Association <i>The effect of cognitive inhibition on speech production</i>	

NSF BCS 1262297 (PI: Srikantan Nagarajan; Role: Personnel)

National Science Foundation: Cognitive Neuroscience

2013–2016

Function of auditory feedback processing during speech

NIH F32 DC011249 (PI)

2011–2014

National Institutes of Health: Postdoctoral Individual National Research Service Award

Phonetic influences on auditory feedback control

MANUSCRIPTS UNDER REVIEW

***equal contribution**

1. Tang, D., Parrell, B., Beach, S.D., and **Niziolek, C.A.** (under review). The brain's sensitivity to sensory error can be modulated by altering perceived variability.
2. **Niziolek, C.A.** (under review). Voystick: a vocal joystick for vowel production training.
3. Krakauer, J., Naber, C., **Niziolek, C.A.***, and Parrell, B.* (under review). Attention plays a highly limited role in speech sensorimotor control.
4. Zeng, Y., **Niziolek, C.A.***, and Parrell, B.* (under review). Simultaneous acquisition of multiple auditory-motor transformations reveals supra-syllabic motor planning in speech production.

JOURNAL ARTICLES

***equal contribution**

1. Beach, S.D., Tang, D., Kiran, S. and **Niziolek, C. A.** (accepted). Pars opercularis underlies efferent predictions and successful auditory feedback processing in speech: Evidence from left-hemisphere stroke. *Neurobiology of Language*.
2. Beach, S.D. and **Niziolek, C.A.** (accepted). Inhibitory modulation of speech trajectories in a vowel-modified Stroop task. *Cognitive Neuropsychology*.
3. Borjigin, A., Bakst, S., Anderson, K., Litovsky, R.Y., and **Niziolek, C.A.** (2024). Discrimination and sensorimotor adaptation of self-produced vowels in cochlear implant users. *Journal of the Acoustical Society of America* **155**(3): 1895–1908.
4. Miller, H., Kearney, E., Nieto-Castañón, A., Falsini, R., Abur, D., Acosta, A., Chao, S-C., Dahl, K., Franken, M., Heller Murray, E., Mollaei, F., **Niziolek, C.A.**, Parrell, B., Perrachione, T., Smith, D., Stepp, C. Tomassi, N. & Guenther, F.H. (2023). Do Not Cut Off Your Tail: A Mega-Analysis of Responses to Auditory Perturbation Experiments. *Journal of Speech, Language, and Hearing Research* **66**(11): 4315–4331.
5. Tang, D., **Niziolek, C.A.***, and Parrell, B.* (2023). Modulation of somatosensation by transcranial magnetic stimulation over somatosensory cortex: A systematic review. *Experimental Brain Research* **241**:951–977.

6. Tang, D., Parrell, B.* , and **Niziolek, C.A.*** (2022). Movement variability can be modulated in speech production. *Journal of Neurophysiology* **128**(6):1469–1482.
7. Hantzsch, L., Parrell, B.* , and **Niziolek, C.A.*** (2022). A single exposure to altered auditory feedback causes observable sensorimotor adaptation in speech. *eLife* **11**:e73694.
8. **Niziolek, C.A.*** and Parrell, B.* (2021). Responses to auditory feedback manipulations in speech may be affected by previous exposure to auditory errors. *Journal of Speech, Language, and Hearing Research* **64**(6S): 2169–2181.
9. Cheng, H.-S., **Niziolek, C.A.**, Buchwald, A., and McAllister, T. (2021). Examining the relationship between speech perception, production distinctness, and production variability. *Frontiers in Human Neuroscience* **15**:660948.
10. Parrell, B.* and **Niziolek, C.A.*** (2021). Increased speech contrast induced by sensorimotor adaptation to a nonuniform auditory perturbation. *Journal of Neurophysiology* **125**(2):638–647.
11. Bakst, S. and **Niziolek, C.A.** (2021). Effects of syllable stress in adaptation to altered auditory feedback in vowels. *Journal of the Acoustical Society of America* **149**(1):708–719.
12. McDowell, G.S., **Niziolek, C.A.** and Lijek, R.S. (2021). How to bring peer review ghostwriters out of the dark. *Molecular Biology of the Cell* **32**(6):461–466.
13. Bankston, A., Davis, S.M., Moore, E., **Niziolek, C.A.** and Boudreau, V. (2020). Why scientific societies should involve more early-career researchers. *eLife* **9**:e60829.
14. **Niziolek, C.A.** and Kiran, S. (2018). Assessing speech correction abilities with acoustic analyses: evidence of preserved online correction in persons with aphasia. *International Journal of Speech-Language Pathology* **20**(6):659–668.
15. McDowell, G.S., Athanasiadou, R., Bankston, A., Carlisle, M., & **Niziolek, C.A.** (2018). Assessing the landscape of US postdoctoral salaries. *Studies in Graduate and Postdoctoral Education* **9**(2):213–242.
16. Martin, C.D., **Niziolek, C.A.**, Duñabeitia, J.A., Perez, A., Hernandez, D., Carreiras, M., and Houde, J.F. (2018). Online adaptation to altered auditory feedback is predicted by auditory acuity and not by domain-general executive control resources. *Frontiers in Human Neuroscience* **12**:91.
17. Sitek, K., Mathalon, D.H., Roach, B.J., Houde, J.F., **Niziolek, C.A.**, and Ford, J.M. (2013). Auditory cortex processes variation in our own speech. *PLOS ONE* **8**(12):e82925
18. **Niziolek, C.A.**, Nagarajan, S.S., and Houde, J.F. (2013). What does motor efference copy represent? Evidence from speech production. *The Journal of Neuroscience* **33**(41):16110–16116.
19. **Niziolek, C.A.** and Guenther, F.H. (2013). Vowel category boundaries enhance cortical and behavioral responses to speech feedback alterations. *The Journal of Neuroscience* **33**(29):12090–12098.

20. Chang, E.F*, **Niziolek, C.A.***, Knight, R., Nagarajan, S.S., and Houde, J.F. (2013). Human cortical sensorimotor network underlying feedback control of vocal pitch. *Proceedings of the National Academy of Sciences* **110**(7):2653–2658.
21. Houde, J.F., Kort, N.S., **Niziolek, C.A.**, Chang, E.F. & Nagarajan, S.S. (2013). Neural evidence for state feedback control of speaking. In *Proceedings of Meetings on Acoustics* (ICA 2013 Montreal) **19**:060178.
22. Patel, R., **Niziolek, C.**, Reilly, K.J., and Guenther, F.H. (2011). Prosodic adaptations to pitch perturbation in running speech. *Journal of Speech, Language, and Hearing Research* **54**(4):1051–1059.

REFEREED CONFERENCE PAPERS

1. Bakst, S. and **Niziolek, C.A.** (2019). Self-correction in L1 and L2 vowel production. In Sasha Calhoun, Paola Escudero, Marija Tabain & Paul Warren (eds.) *Proceedings of the 19th International Congress of Phonetic Sciences, Melbourne, Australia, 2019* (pp. 3185-3189). Canberra, Australia: Australasian Speech Science and Technology Association Inc.
2. Bakst, S. and **Niziolek, C.A.** (2019). Does schwa have an auditory target? An altered auditory feedback study. In Sasha Calhoun, Paola Escudero, Marija Tabain & Paul Warren (eds.) *Proceedings of the 19th International Congress of Phonetic Sciences, Melbourne, Australia, 2019* (pp. 1149-1153). Canberra, Australia: Australasian Speech Science and Technology Association Inc.
3. **Niziolek, C.A.**, Nagarajan, S.S., and Houde, J.F. (2015). The contribution of auditory feedback to corrective movements in vowel formant trajectories. In The Scottish Consortium for ICPHS 2015 (Ed.), *Proceedings of the 18th International Congress of Phonetic Sciences*. Glasgow, UK: the University of Glasgow. ISBN 978-0-85261-941-4. Paper number 1004 retrieved from <http://www.internationalphoneticassociation.org/icphs-proceedings/ICPhS2015/Papers/ICPHS1004.pdf>
4. Houde, J.F., **Niziolek, C.A.**, Kort, N.S., Agnew, Z.K., and Nagarajan, S.S. (2014). Simulating a model of state feedback control of speaking. *Proceedings of the 10th Intl. Seminar on Speech Production*, Cologne, Germany, 2014.

PREPRINTS

***equal contribution**

1. Krakauer, J., Naber, C., **Niziolek, C.A.***, and Parrell, B.* (2024). Attention plays a highly limited role in speech sensorimotor control. *PsyArXiv*, February 2, 2024. doi:10.31234/osf.io/83j4q
manuscript under review
2. Zeng, Y., **Niziolek, C.A.***, and Parrell, B.* (2023). Simultaneous acquisition of multiple auditory-motor transformations reveals supra-syllabic motor planning in speech production. *PsyArXiv*, November 29, 2023. doi:10.31234/osf.io/ceqan
manuscript under review

3. Beach, S.D., Tang, D., Kiran, S. and **Niziolek, C.A.** (2023). Pars opercularis underlies efferent predictions and successful auditory feedback processing in speech: Evidence from left-hemisphere stroke. *BioRxiv*, 2023.10.14.562347. doi:10.1101/2023.10.14.562347
manuscript accepted: Beach et al. 2024, Neurobiology of Language
4. Borjigin, A., Bakst, S., Anderson, K., Litovsky, R., and **Niziolek, C.A.** (2023). Discrimination and sensorimotor adaptation of self-produced vowels in cochlear implant users. *OSF Preprints*, September 6, 2023. doi:10.31219/osf.io/fkveq
manuscript published: Borjigin et al. 2024, Journal of the Acoustical Society of America
5. Beach, S. D., and **Niziolek, C. A.** (2022). Inhibitory modulation of speech trajectories in a vowel-modified Stroop task. *PsyArXiv*, September 6, 2022. doi:10.31234/osf.io/sv4n9
manuscript accepted: Beach and Niziolek 2024, Cognitive Neuropsychology
6. Tang, D., Parrell, B.*, and **Niziolek, C.A.*** (2021). Variability is actively regulated in speech. *BioRxiv*, 2021.10.08.462639. doi:10.1101/2021.10.08.462639
manuscript published: Tang et al. 2022, Journal of Neurophysiology
7. Hantzsch, L., Parrell, B.*, and **Niziolek, C.A.*** (2021). A single exposure to altered auditory feedback causes observable sensorimotor adaptation in speech. *BioRxiv*, 2021.07.26.453857. doi:10.1101/2021.07.26.453857
manuscript published: Hantzsch et al. 2022, eLife
8. Parrell, B.* and **Niziolek, C.A.*** (2020). Increased speech contrast induced by sensorimotor adaptation to a non-uniform auditory perturbation. *PsyArXiv*, February 24, 2020. doi:10.31234/osf.io/abq65
manuscript published: Parrell and Niziolek 2021, Journal of Neurophysiology
9. Bankston, A., Davis, S.M., Moore, E., **Niziolek, C.A.** and Boudreau, V. (2020). Who's on Board: Early Career Researchers Hold Scarce, yet Valuable Roles Within Scientific Societies. *OSF Preprints*, June 24, 2020. doi:10.31219/osf.io/9k6rz
manuscript published: Bankston et al. 2020, eLife
10. McDowell, G.S., **Niziolek, C.A.** and Lijek, R.S. (2020). Practical changes to reduce ghostwriting in peer review. *MetaArXiv*, January 10, 2020. doi:10.31222/osf.io/ravn2
manuscript published: McDowell et al. 2021, Molecular Biology of the Cell

OUTREACH PUBLICATIONS

1. **Niziolek, C.A.** and Guenther, F.H. (2014). When BED goes BAD: how the brain can fix mistakes in speech while they happen. *Frontiers in Neuroscience for Young Minds* **2**:1.

OPEN-SOURCE RESEARCH PRODUCTS AND RESOURCES

1. McDowell, G.S., **Niziolek, C.A.** and Lijek, R.S. (2021). How to perform ethical co-review. *Zenodo*, January 14, 2021. doi:10.5281/zenodo.4441072
2. **Voystick**, a voice-controlled joystick: github.com/blab-lab/Voystick
3. **wave_viewer**, a waveform analysis GUI: github.com/blab-lab/wave_viewer
4. **Free Speech**, speech analysis and plotting code: github.com/carrien/free-speech
5. **Teach Speech**, acoustics visualizations for teaching: github.com/carrien/teach-speech
6. **FUSP lite**, a software library for the Feedback Utility for Speech Processing system developed by John Houde: github.com/carrien/fusp_lite

INVITED TALKS

1. **Niziolek, C.A.** (2024). *Disorders of language: The output system*. McKnight Conference on Neuroscience, Aspen, Colorado. June 7-10, 2024.
2. †**Niziolek, C.A.** (2024). *Sensorimotor learning as a window to speech planning*. 13th International Seminar on Speech Production, Autrans, France. May 13-17, 2024. † **Keynote**
3. **Niziolek, C.A.** (2023). *Speech variability is mediated by auditory error sensitivity*. Cognitive Neuroscience Society satellite symposium, “Neural Bases of Speech Production,” San Francisco, California. March 24, 2023.
4. **Niziolek, C.A.** (2022). *The sensory consequences of speaking: auditory cortical prediction of speech variability*. Auditory System Gordon Research Conference, Smithfield, Rhode Island. July 11, 2022.
5. **Niziolek, C.A.** (2022). *Sensorimotor learning as a window to speech planning*. The 12th International Workshop on Language Production (IWOLP), Pittsburgh, Pennsylvania. June 9, 2022.
6. **Niziolek, C.A.** (2021). *Speak your mind: cortical predictions of speech sensory feedback*. Université de Paris Institute of Neuroscience and Cognition INC Day 2021: The Brain in Action, Paris, France. October 21, 2021.
7. **Niziolek, C.A.** (2021). *The sensory consequences of speaking: predictions and productions of auditory phonetic targets*. University of California San Diego Cognitive Science Graduate Seminar (virtual). June 4, 2021.
8. **Niziolek, C.A.** (2020). *The sensory consequences of speaking: cortical prediction of auditory phonetic targets*. Neural Mechanisms of Acoustic Communication Gordon Research Conference, Newry, Maine. Planned for July 19–24, 2020; **rescheduled for 2022**.

9. **Niziolek, C.A.** (2020). *Speak your mind: how speech acoustics reflect communicative goals*. University of Southern California Otolaryngology and Hearing & Communication Neuroscience Seminar Series, Los Angeles, California. March 10, 2020.
10. †**Niziolek, C.A.** (2019). *A series of tubes: contextual modulation of voices*. UCL Institute of Cognitive Neuroscience Workshop, “Diversity of voices: Neuroscientific and experiential perspectives,” London, UK. November 29, 2019. † **Keynote**
11. **Niziolek, C.A.** (2019). *Speak your mind: neural control of speech production*. MIT Club of Wisconsin 110th Anniversary Celebration, Madison, Wisconsin. November 2, 2019.
12. **Niziolek, C.A.** (2019). *Feedback vs. feedforward mechanisms in typical and disordered speech production*. 2019 Boston Speech Motor Control Symposium, Boston, Massachusetts. June 22, 2019.
13. **Niziolek, C.A.** (2019). *Voystick: A voice-controlled joystick for visually-mediated speech motor learning*. Games for Engaging Learning, Carnegie Mellon University Entertainment Technology Center, Pittsburgh, Pennsylvania. June 4, 2019.
14. **Niziolek, C.A.** (2019). *Language made audible: how speech acoustics reflect cognition*. Cognitive Science Speaker Series '18-19, Northwestern, Illinois. April 2, 2019.
15. **Niziolek, C.A.** (2019). *Language made audible: how speech acoustics reflect communicative goals*. Workshop in General Linguistics (WIGL 16), Madison, Wisconsin. March 30, 2019.
16. Bakst, S. and **Niziolek, C.A.** (2019). *Self-monitoring in L1 and L2: a magnetoencephalography study*. Cognitive Neuroscience Society satellite symposium, “Neural Bases of Speech Production,” San Francisco, California. March 22, 2019.
17. Parrell, B. and **Niziolek, C.A.** (2019). *Previous exposure to sensory feedback noise causes a decrease in online compensation for sensory perturbations in speech*. Cognitive Neuroscience Society satellite symposium, “Neural Bases of Speech Production,” San Francisco, California. March 22, 2019.
18. Bakst, S. and **Niziolek, C.A.** (2019). *Does schwa have an auditory target? An altered auditory feedback study*. Language Sciences Colloquium, Madison, Wisconsin. February 28, 2019.
19. **Niziolek, C.A.** (2017). *How do categorical goals affect continuous speech dynamics?* Ludwig-Maximilians-Universität München Institute of Phonetics and Speech Processing, Workshop on Abstraction, Diversity, and Speech Dynamics, Herrsching am Ammersee, Germany. May 3-5, 2017.
20. **Niziolek, C.A.** (2016). *Correcting errors before they happen: cortical prediction of auditory targets during speech*. NYU Communicative Sciences and Disorders Colloquium series, New York, New York. February 9th, 2016.
21. **Niziolek, C.A.** (2016). *Assessing the neurophysiological causes of speech production errors in patients with aphasia*. Boston Speech Motor Control Working Group, Boston, Massachusetts. January 25th, 2016.

22. **Niziolek, C.A.** (2015). *Auditory cortical predictions of vocal feedback are task-dependent*. Cognitive Neuroscience Society satellite symposium, “Neural Bases of Speech Production,” San Francisco, California. March 27th, 2015.
23. **Niziolek, C.A.** (2014). *Correcting errors before they happen: cortical monitoring of auditory targets during speech*. Harvard Medical School / Massachusetts Eye and Ear Infirmary Eaton-Peabody Laboratories Seminar Series, Boston, Massachusetts. April 8th, 2014.
24. **Niziolek, C.A.** (2014). *Auditory self-monitoring catches speech errors before they happen*. VA Northern California Colloquium series, Martinez, California. February 11th, 2014.
25. **Niziolek, C.A.** (2013). *Speech error correction in correct speech*. Acoustical Society of America satellite symposium, “Neural Bases of Speech Production,” San Francisco, California. December 1st, 2013.
26. **Niziolek, C.A.** (2012). *Neural mechanisms of auditory feedback control in normal and perturbed speech*. Basque Center on Cognition, Brain and Language, San Sebastian, Spain. October 30th, 2012.
27. Houde, J.F. and **Niziolek, C.A.** (2012). *How is auditory feedback processed during speaking?* GIPSA-lab (Grenoble Images Parole Signal Automatique), Grenoble, France. October 24th, 2012.
28. **Niziolek, C.A.** (2011). *The role of linguistic contrasts in speech feedback control*. UC Berkeley Phonetics and Phonology Forum. February 7th, 2011.

ORAL PRESENTATIONS

^Udenotes undergraduate presenter

1. *Collar, S.^U, Zeng, Y., and **Niziolek, C.A.** (2024). Effects of speech motor learning on L2 production and perception categories. Presented at the *Workshop in General Linguistics (WiGL 18)*, Madison, Wisconsin. April 12-13, 2024.
* **Winner of WiGL 18 Best Abstract Award**
2. Parrell, B., Naber, C., Kim, O.A., **Niziolek, C.A.**, and McDougle, S.D. (2024). Sensory errors drive speech adaptation even in the absence of overt movement. Presented at the *Twenty-Second Biennial Conference on Motor Speech*, San Diego, California. February 21-24, 2024.
3. Tang, D., Parrell, B., and **Niziolek, C.A.** (2023). The brain’s sensitivity to sensory error can be modulated by altering perceived speech variability. Presented at the *2023 Boston Speech Motor Control Symposium*, Boston, Massachusetts. June 12, 2023.
4. **Niziolek, C.A.***, Parrell, B.* and Johnson, S.A. (2022). Increased vowel contrast in connected speech induced by sensorimotor adaptation. Presented at the *8th International Conference on Speech Motor Control*, Groningen, Netherlands. August 24-27, 2022.
5. **Niziolek, C.A.** (2022). Voystick: a vocal joystick for vowel production training. Presented at the *Twenty-First Biennial Conference on Motor Speech*, Charleston, South Carolina. February 16-20, 2022.

6. Parrell, B. and **Niziolek, C.A.** (2022). Speakers adapt to opposing auditory perturbations of phonemically-identical vowels within a single word. Presented at the *Twenty-First Biennial Conference on Motor Speech*, Charleston, South Carolina. February 16-20, 2022.
7. **Niziolek, C.A.** (2021). Voystick: a vocal joystick for vowel production training. Slide slam presented at the 13th Annual Meeting of the *Society for the Neurobiology of Language*, online. October 5-8, 2021.
8. Tang, D., **Niziolek, C.A.**, and Parrell, B. (2021). Movement variability is actively regulated in speech. Presented at the 2021 Annual Meeting of the *Society for the Neural Control of Movement*, online. April 20, 2021.
9. Parrell, B. and **Niziolek, C.A.** (2020). Movement variability is actively regulated in speech. 2020 Annual Meeting of the *Society for the Neural Control of Movement*, Dubrovnik, Croatia (canceled).
10. Bakst, S. and **Niziolek, C.A.** (2019). The role of auditory feedback in error-detection and correction in first and second language production. Presented at the 178th Meeting of the *Acoustical Society of America*, San Diego, California. December 2, 2019.
11. Li, J.J., Ayala, S., Harel, D., Shiller, D., **Niziolek, C.A.**, and McAllister, T. (2019). Changes in L2 production variability associated with visual biofeedback training. Presented at the 178th Meeting of the *Acoustical Society of America*, San Diego, California. December 2, 2019.
12. Bankston, A., Athanasiadou, R., Carlisle, M., **Niziolek, C.A.**, Pickett, C. and McDowell, G. (2019). Increasing transparency on postdoctoral salaries and numbers. Presented at the 8th *Atlanta Conference on Science and Innovation Policy*, Atlanta, Georgia. October 14, 2019.
13. Bakst, S., **Niziolek, C.A.**, and Litovsky, R.Y. (2019). Discrimination thresholds in self-produced speech in cochlear implant listeners and normal listeners. Presented at the 10th Annual *CI CRASH*, Madison, Wisconsin. October 18, 2019.
14. Bakst, S. and **Niziolek, C.A.** (2019). How many targets does [ə] have? An altered auditory feedback study. Presented at the 24th Annual *Mid-Continental Phonetics & Phonology Conference*, Milwaukee, Wisconsin. October 5, 2019.
15. Bakst, S. and **Niziolek, C.A.** (2019). Does schwa have an auditory target? An altered auditory feedback study. Presented at the *19th International Congress of Phonetic Sciences*, Melbourne, Australia. August 7, 2019.
16. Bakst, S. and **Niziolek, C.A.** (2018). Self-monitoring in L1 and L2 speech production: an MEG study. Program No. 720.01. 2018 Neuroscience Meeting Planner. San Diego, CA: *Society for Neuroscience*, 2018. Online.
17. **Niziolek, C.A.** (2018). Speaking your mind: Modulation of sensory systems during speech production. Presented at the *University of Wisconsin–Madison Neuroscience Research Symposium*, Fitchburg, Wisconsin. August 28, 2018.

18. **Niziolek, C.A.** and Kiran, S. (2017). Cortical sensitivity to spoken acoustic variability in persons with aphasia: an MEG study. Platform session presented at the *Academy of Aphasia 55th Annual Meeting*, Baltimore, Maryland. November 6, 2017.
19. **Niziolek, C.A.** (2017). Speech error detection and correction in persons with aphasia. Presented at the *Language Processing and Recovery in Aphasia Symposium*, Boston, Massachusetts. April 20, 2017.
20. **Niziolek, C.A.** (2016). Modulation of sensory systems before & during speech production: typical & disordered speech. Seminar presented at the annual convention of the *American Speech-Language-Hearing Association*, Philadelphia, Pennsylvania. November 19, 2016.
21. **Niziolek, C.A.** and Kiran, S. (2016). Behavioral and neural measures of error detection and correction in persons with aphasia. Platform session presented at the *Academy of Aphasia 54th Annual Meeting*, Llandudno, Wales, UK. October 17, 2016.
22. **Niziolek, C.A.** (2016). Speech error detection and correction in persons with aphasia. Presented at the *Sensorimotor Speech Processing Symposium*, London, UK. August 16, 2016.
23. **Niziolek, C.A.** (2016). Real-time processing of speech feedback and its effect on everyday speech. Boston University Postdoc Annual Retreat, Boston, Massachusetts. April 4th, 2016.
24. **Niziolek, C.A.**, Nagarajan, S.S., and Houde, J.F. (2015). Auditory predictions of self-produced speech are task-dependent. Program No. 16.10. 2015 Neuroscience Meeting Planner. Chicago, IL: *Society for Neuroscience*, 2015. Online.
25. **Niziolek, C.A.**, Nagarajan, S.S., and Houde, J.F. (2015). The contribution of auditory feedback to corrective movements in vowel formant trajectories. Presented at the *18th International Congress of Phonetic Sciences*, Glasgow, Scotland. August 10, 2015.
26. **Niziolek, C.A.** (2015). Auditory self-monitoring catches speech errors before they happen. UCSF Postdoctoral Neuroscience Seminar Series, San Francisco, California. February 9th, 2015.
27. ***Niziolek, C.A.**, Nagarajan, S.S., and Houde, J.F. (2013). Feedback-driven corrective movements in speech in the absence of altered feedback. Presented at the 166th Meeting of the *Acoustical Society of America*, San Francisco, California.
*** Lay-language paper invited for submission to the ASA World Wide Press Room**
28. **Niziolek, C.A.**, Nagarajan, S.S., and Houde, J.F. (2012). Speaking-induced suppression in auditory cortex is determined by deviance from speech production targets. Program No. 14.09. 2012 Neuroscience Meeting Planner. New Orleans, LA: *Society for Neuroscience*, 2012. Online.
29. Chang, E.F., **Niziolek, C.A.**, Knight, R.T., Nagarajan, S.S., and Houde, J.F. (2012). Auditory and premotor cortex modulation predicts compensatory responses to pitch perturbation. Program No. 14.14. 2012 Neuroscience Meeting Planner. New Orleans, LA: *Society for Neuroscience*, 2012. Online.
30. **Niziolek, C.A.**, Houde, J.F., and Guenther, F.H. (2011). Feedback alterations across vowel category space. Presented at the *6th International Conference on Speech Motor Control*, Groningen, Netherlands.

31. Patel, R., **Niziolek, C.A.**, Reilly, K.J., and Guenther, F.H. (2010). Prosodic compensations to pitch perturbations in running speech. Presented at the *Fifteenth Biennial Conference on Motor Speech*, Savannah, Georgia.

POSTERS

*equal contribution

^Udenotes undergraduate presenter

1. Zeng, Y., Parrell, B.* , and **Niziolek, C.A.*** (2024). Transfer of sensorimotor adaptation reveals close integration between segmental and prosodic structure in speech motor planning. *Twenty-Second Biennial Conference on Motor Speech*, San Diego, California.
2. Zeng, Y., **Niziolek, C.A.***, and Parrell, B.* (2024). Differential adaptation to altered auditory feedback shows planning at both word and syllable levels in speech production. *Twenty-Second Biennial Conference on Motor Speech*, San Diego, California.
3. Tang, D., **Niziolek, C.A.***, and Parrell, B.* (2024). Theta-burst rTMS over the articulatory representation of primary somatosensory cortex modulates tactile perception of the tongue. *Twenty-Second Biennial Conference on Motor Speech*, San Diego, California.
4. Naber, C., Karlin, R., Parrell, B., and **Niziolek, C.A.** (2024). Improving boundary detection and expanding perturbation capabilities in Audapter. *Twenty-Second Biennial Conference on Motor Speech (Signal Analytics for Motor Speech Workshop)*, San Diego, California.
5. Beach, S., Tang, D., Kiran, S. and **Niziolek, C.A.** (2023). Pars opercularis underlies speech motor efference copy and successful auditory feedback processing: Evidence from left-hemisphere stroke. *Society for the Neurobiology of Language*, Marseille, France.
6. **Niziolek, C.A.**, Tang, D., Beach, S., and Parrell, B. (2023). The brain's sensitivity to sensory error can be modulated by altering perceived speech variability. *Society for the Neurobiology of Language*, Marseille, France.
7. Beach, S., Kiran, S. and **Niziolek, C.A.** (2022). Neural bases of speech-error detection and correction: MEG and RSA evidence from typical speech and aphasia. *Society for the Neurobiology of Language*, Philadelphia, Pennsylvania.
8. Tang, D., Parrell, B.* and **Niziolek, C.A.*** (2022). Speech variability is mediated by auditory error sensitivity. *Society for the Neurobiology of Language*, Philadelphia, Pennsylvania.
9. Parrell, B.* and **Niziolek, C.A.*** (2022). Assessing the scope of speech motor planning with sensorimotor adaptation. *8th International Conference on Speech Motor Control*, Groningen, Netherlands.
10. Tesch, E.^U, Karlin, R., Tang, D., **Niziolek, C.A.*** and Parrell, B.* (2022). Lexical tone but not arbitrary f0 is co-planned with segmental gestures. *8th International Conference on Speech Motor Control*, Groningen, Netherlands.

11. Tang, D., Parrell, B.* and **Niziolek, C.A.*** (2022). Variability is actively regulated in speech. *Twenty-First Biennial Conference on Motor Speech*, Charleston, South Carolina.
12. Tang, D., Parrell, B.* and **Niziolek, C.A.*** (2022). Formant variability is related to vowel duration across speakers. *Twenty-First Biennial Conference on Motor Speech*, Charleston, South Carolina.
13. **Niziolek, C.A.** (2021). Voystick: a vocal joystick for vowel production training. 2021 Boston Speech Motor Control Symposium, online.
14. Tang, D., **Niziolek, C.A.*** and Parrell, B.* (2021). Formant variability is related to vowel duration across speakers. 2021 *Boston Speech Motor Control Symposium*, online.
15. Johnson, S.^U, Parrell, B.*, and **Niziolek, C.A.*** (2021). Effects of vowel centralization auditory feedback on sentence production. 2021 *Boston Speech Motor Control Symposium*, online.
16. Krakauer, J.^U, **Niziolek, C.A.*** and Parrell, B.* (2021). The role of attention in compensation for altered auditory feedback. 2021 *Boston Speech Motor Control Symposium*, online.
17. **Niziolek, C.A.** and Parrell, B. (2020). Increased vowel contrast induced by adaptation to a non-uniform auditory perturbation in speech. 179th Meeting of the *Acoustical Society of America*, online.
18. Parrell, B. and **Niziolek, C.A.** (2020). Formant variability is actively regulated in vowel production. 179th Meeting of the *Acoustical Society of America*, online.
19. Hantzsch, L., Parrell, B., and **Niziolek, C.A.** (2020). Adaptation occurs following a single exposure to altered auditory feedback in speech. 179th Meeting of the *Acoustical Society of America*, online.
20. Bakst, S. and **Niziolek, C.A.** (2020). Monitoring self-produced speech variability in native and learned languages. 179th Meeting of the *Acoustical Society of America*, online.
21. Bakst, S. and **Niziolek, C.A.** (2020). Subphonemic variation detection and correction in cochlear implant users. 179th Meeting of the *Acoustical Society of America*, online.
22. **Niziolek, C.A.** and Parrell, B. (2020). Increased vowel contrast induced by adaptation to a non-uniform auditory perturbation in speech. *Society for the Neurobiology of Language*, online.
23. Bakst, S. and **Niziolek, C.A.** (2020). Monitoring self-produced speech variability in native and learned languages. *Society for the Neurobiology of Language*, online.
24. Parrell, B. and **Niziolek, C.A.** (2020). Assessing the consistency of compensation for auditory errors across error sources, testing sessions, and changes in feedback reliability. *Twentieth Biennial Conference on Motor Speech*, Santa Barbara, California.
25. Cheng, H., **Niziolek, C.A.**, Buchwald, A., and McAllister, T. (2020). The relationship between production variability and auditory acuity in explicit sensorimotor learning for speech. *Twentieth Biennial Conference on Motor Speech*, Santa Barbara, California.
26. Bakst, S., **Niziolek, C.A.**, and Litovsky, R. (2020). Speech error-detection thresholds in cochlear implant and normal hearing listeners. *Association for Research in Otolaryngology*, San Jose, CA.

27. **Niziolek, C.A.** and Bakst, S. (2019). Sensitivity to natural and altered auditory feedback in L1 and L2. Program No. 758.13. 2019 Neuroscience Meeting Planner. Chicago, IL: *Society for Neuroscience*, 2019. Online.
28. Parrell, B. and **Niziolek, C.A.** (2019). Previous exposure to sensory feedback noise causes a decrease in online compensation for sensory perturbations. Program No. 758.02. 2019 Neuroscience Meeting Planner. Chicago, IL: *Society for Neuroscience*, 2019. Online.
29. **Niziolek, C.A.** and Bakst, S. (2019). Self-correction in L1 and L2 vowel production. *19th International Congress of Phonetic Sciences*, Melbourne, Australia.
30. Bakst, S., **Niziolek, C.A.**, and Litovsky, R.Y. (2019). Discrimination thresholds in self-produced speech in cochlear implant listeners and normal listeners. *2019 Conference on Implantable Auditory Prostheses*, Lake Tahoe, California.
31. Li, J.J., Ayala, S., Harel, D., Shiller, D.M., **Niziolek, C.A.**, McAllister, T. (2019). Effect of biofeedback training on online correction in L2 vowel production. *2019 Boston Speech Motor Control Symposium*, Boston, Massachusetts.
32. **Niziolek, C.A.** (2019). Effects of cognitive interference and priming on speech acoustics. 26th Annual Meeting of the *Cognitive Neuroscience Society*, San Francisco, California.
33. Bakst, S. and **Niziolek, C.A.** (2018). Self-monitoring in L1 and L2 speech production: an MEG study. *Society for the Neurobiology of Language*, Québec City, Canada.
34. **Niziolek, C.A.**, Beach, S.D., and Kiran, S. (2018). Cognitive interference modulates speech acoustics in a vowel-modified Stroop task. 40th Annual Meeting of the *Cognitive Science Society*, Madison, Wisconsin.
35. **Niziolek, C.A.** and Kiran, S. (2018). Vowel dynamics in persons with aphasia. 175th Meeting of the *Acoustical Society of America*, Minneapolis, Minnesota.
36. **Niziolek, C.A.**, Beach, S.D., and Kiran, S. (2018). Detection and correction of acoustically deviant speech in persons with aphasia. *Nineteenth Biennial Conference on Motor Speech*, Savannah, Georgia.
37. **Niziolek, C.A.**, Beach, S.D., and Kiran, S. (2017). Decoding the cortical sensitivity of spoken acoustic variability in persons with aphasia. *Society for the Neurobiology of Language*, Baltimore, Maryland.
38. Beach, S.D., **Niziolek, C.A.**, and Kiran, S. (2017). Neural decoding of word identity and acoustic prototypicality during speech perception in listeners with and without aphasia. *Sixth International Conference on Auditory Cortex*, Banff, Canada.
39. **Niziolek, C.A.**, Beach, S.D., and Kiran, S. (2017). Acoustic and neural measures of speech error detection and correction in persons with aphasia. *7th International Conference on Speech Motor Control*, Groningen, Netherlands.

40. **Niziolek, C.A.**, Lin, K.R., Beach, S.D., Quillen, I.A., and Kiran, S. (2017). Speech acoustics are modulated by cognitive interference in a vowel-modified Stroop task. 173rd Meeting of the *Acoustical Society of America*, Boston, Massachusetts.
41. **Niziolek, C.A.**, Quillen, I.A., Lin, K.R., Beach, S.D., and Kiran, S. (2017). Cognitive interference modulates speech acoustics in a vowel-modified Stroop task. 24th Annual Meeting of the *Cognitive Neuroscience Society*, San Francisco, California.
42. **Niziolek, C.A.** and Kiran, S. (2016). Assessing speech error detection and correction abilities in patients with aphasia: MEG and behavioral evidence. *11th Annual Eleanor M. Saffran Cognitive Neuroscience Conference*, Philadelphia, Pennsylvania.
43. **Niziolek, C.A.** and Kiran, S. (2016). Assessing error detection and correction abilities in patients with aphasia. *Society for the Neurobiology of Language*, London, UK.
44. **Niziolek, C.A.**, Nagarajan, S.S., and Houde, J.F. (2016). Auditory feedback guides online corrections to vowel acoustics. *Eighteenth Biennial Conference on Motor Speech*, Newport Beach, California.
45. **Niziolek, C.A.**, Nagarajan, S.S., and Houde, J.F. (2015). Auditory predictions of self-produced speech are task-dependent. *Society for the Neurobiology of Language*, Chicago, Illinois.
46. **Niziolek, C.A.**, Nagarajan, S.S., and Houde, J.F. (2015). Neural encoding of auditory speech targets is task-dependent. *21st Meeting of the Organization for Human Brain Mapping*, Honolulu, Hawaii.
47. Agnew, Z.K., **Niziolek, C.A.**, Nagarajan, S.S., and Houde, J.F. (2015). Evidence for shared mechanisms for compensation for and adaptation to speech errors. *21st Meeting of the Organization for Human Brain Mapping*, Honolulu, Hawaii.
48. **Niziolek, C.A.**, Nagarajan, S.S., and Houde, J.F. (2015). Real-time speech feedback technologies for understanding motor control and as a training tool. *Entertainment Software and Cognitive Neurotherapeutics Society (ESCoNS) Meeting*, San Francisco, California.
49. **Niziolek, C.A.**, Nagarajan, S.S., and Houde, J.F. (2015). Shared mechanisms for speech error correction and sensorimotor learning. 22nd Annual Meeting of the *Cognitive Neuroscience Society*, San Francisco, California.
50. Martin, C.D., **Niziolek, C.A.**, Duñabeitia, J.A., Carreiras, M., and Houde, J.F. (2015). How to explain individual variability in speech motor control. 22nd Annual Meeting of the *Cognitive Neuroscience Society*, San Francisco, California.
51. **Niziolek, C.A.**, Nagarajan, S.S., and Houde, J.F. (2014). Sensorimotor adaptation in speech and its effects on auditory monitoring. Program No. 631.14. 2014 Neuroscience Meeting Planner. Washington, DC: *Society for Neuroscience*, 2014. Online.
52. Martin, C.D., Duñabeitia, J.A., **Niziolek, C.A.**, Carreiras, M., and Houde, J.F. (2014). What affects auditory feedback in speech motor control? 21st Annual Meeting of the *Cognitive Neuroscience Society*, Boston, Massachusetts.

53. **Niziolek, C.A.**, Nagarajan, S.S., and Houde, J.F. (2014). Auditory self-monitoring catches speech errors before they happen. *Bay Area Postdoctoral Research Symposium*, San Francisco, California.
54. **Niziolek, C.A.**, Nagarajan, S.S., and Houde, J.F. (2013). Internal vs. external deviations from auditory targets in speech. Program No. 751.09. 2013 Neuroscience Meeting Planner. San Diego, CA: *Society for Neuroscience*, 2013. Online.
55. **Niziolek, C.A.**, Nagarajan, S.S., and Houde, J.F. (2013). Internal vs. external deviations from auditory targets in speech. *Society for the Neurobiology of Language*, San Diego, California.
56. **Niziolek, C.A.**, Nagarajan, S.S., and Houde, J.F. (2013). Internal predictions and auditory goals for speech. *19th Meeting of the Organization for Human Brain Mapping*, Seattle, Washington.
57. **Niziolek, C.A.**, Nagarajan, S.S., and Houde, J.F. (2013). Goal-based auditory predictions of self-produced speech. 20th Annual Meeting of the *Cognitive Neuroscience Society*, San Francisco, California.
58. Sitek, K.R., Roach, B., Mathalon, D.H., Houde, J.F., **Niziolek, C.A.**, and Ford, J.M. (2013). Speakers process their own utterances relative to the preceding utterance. *40th Annual Scientific and Technology Conference of the American Auditory Society*, Scottsdale, Arizona.
59. **Niziolek, C.A.**, Nagarajan, S.S., and Houde, J.F. (2012). Neural predictions of auditory vocal feedback are task-specific. *Neurobiology of Language Conference*, San Sebastian, Spain.
60. **Niziolek, C.A.**, Nagarajan, S.S., and Houde, J.F. (2011). Feedforward vocal predictions characterized by speaking-induced suppression of auditory cortex. *Neurobiology of Language Conference*, Annapolis, Maryland.
61. **Niziolek, C.A.** and Guenther, F.H. (2010). Phonetic categories influence auditory feedback control of speech. Program No. 593.7. 2010 Neuroscience Meeting Planner. San Diego, CA: *Society for Neuroscience*, 2010. Online.
62. Chang, E.F., Nagarajan, S., **Niziolek, C.A.**, Knight, R., and Houde, J. (2010). Cortical mechanisms of auditory feedback underlying speech motor control. Program No. 275.25. 2010 Neuroscience Meeting Planner. San Diego, CA: *Society for Neuroscience*, 2010. Online.
63. **Niziolek, C.A.** and Guenther, F.H. (2009). The influence of perceptual categories on auditory feedback control during speech. *15th Meeting of the Organization for Human Brain Mapping*, San Francisco, California.
64. Patel, R., Campellone, P., Reilly, K.J., **Niziolek, C.A.**, and Guenther, F.H. (2008). Prosodic compensations to pitch perturbation during running speech. *Fourteenth Biennial Conference on Motor Speech*, Monterey, California.

TEACHING EXPERIENCE

Courses taught:

Term	Course no.	Course title	Enrollment
2017-2018 Fall			144
2018-2019 Fall	CSD 303	Speech Acoustics and Perception	85
2019-2020 Fall			71
2020-2021 Fall			90
2020-2021 Spring			CSD 202
2021-2022 Fall	CSD 303	Speech Acoustics and Perception	85
2021-2022 Spring	CSD 202	Normal Aspects of Hearing	90
2022-2023 Fall	CSD 303	Speech Acoustics and Perception	90
2022-2023 Spring	CSD 202	Normal Aspects of Hearing	100
2023-2024 Fall	CSD 303	Speech Acoustics and Perception	90
2023-2024 Spring	CSD 202	Hearing Science	66

CSD 303: Speech Acoustics and Perception

Fall 2017–2023

Dept. of Communication Sci. & Disorders, UW–Madison

Detailed examination of the acoustic properties of the speech signal within the source–filter theory of speech production. New course development, creation of interactive acoustics and perception demos, incorporation of a game-based learning platform (Kahoot!) and supervision of 51 independent honors projects, including a sound art project exhibited at the Chazen Museum of Art in 2020.

CSD 202: Normal Aspects of Hearing (renamed: Hearing Science)

Spring 2021–2024

Dept. of Communication Sci. & Disorders, UW–Madison

Introductory course covering the physical acoustics of sound, the anatomy and physiology of the auditory system, and the psychology related to hearing, known as psychoacoustics.

CSD 202: Hearing Science (Honors)

in development (Spring 2025)

Dept. of Communication Sci. & Disorders, UW–Madison

New honors course covering the physical acoustics of sound, the anatomy and physiology of the auditory system, and the psychology related to hearing, known as psychoacoustics. Course development includes creation of in-class activities relating to sound waves, filters, neural pathways, and sound localization.

Independent study:

LINGUIS699: Independent Reading

2023

Language Sciences program, UW–Madison

CS&D999: Independent Studies

2020, 2024

Dept. of Communication Sci. & Disorders, UW–Madison

Mentored Ph.D. students in Linguistics, Communication Sciences & Disorders, and Electrical & Computer Engineering.

Guest lectures:

- ZOO 500: Undergraduate Neurobiology Seminar** Spring 2019,
Dept. of Zoology, UW–Madison Fall 2018
Course Director: Michael Koenigs
- CSD 900: Seminar–Speech Science** Spring 2019,
Dept. of Communication Sciences and Disorders, UW–Madison Spring 2018
Course Director: Susan Ellis–Weismer
- SAR SH 810: Academic Grant Preparation and Review** Spring 2017
Dept. of Speech, Language & Hearing Sciences, Boston University
Course Directors: Cara Stepp and Gerald Kidd
- SAR SH 522: Anatomy and Physiology of the Speech Mechanism** Summer 2016
Dept. of Speech, Language & Hearing Sciences, Boston University
Course Director: Prof. Adele Raade
“Nervous System and Cranial Nerves”
- Sargent College Committee to Enhance Research Collaboration** Spring 2016
SCERCH Spring Cross–Program Event, Boston University
- SAR HS 361/CAS NE 360: Introduction to Computational Neuroscience** Fall 2015
Dept. of Health Sciences, Boston University
Course Director: Prof. Jason Bohland
“The role of feedback in speech: delayed and altered feedback studies”
- SHBT Tutorial Series: Cognitive Neuroscience and Psychology** 2006–2008
Harvard–MIT Program in Health Sciences and Technology
Lectured and gave lab demonstrations as part of a tutorial series for first-year Ph.D. students.

Teaching assistantships:

- NS219: Neuroscience of Speech Perception and Production** Spring 2011, 2015
Dept. of Neuroscience, UCSF
Course Directors: Profs. Christoph Schreiner & John Houde
Assisted with selection of course readings; led discussion of scientific articles.
- NB101: Auditory Neurobiology of Language and Music** Fall 2007
Dept. of Neurobiology, Harvard University
Course Directors: Profs. Mark Tramo & Jonathan Matsui
Taught weekly 1.5-hour sections, lectured, wrote problem sets and final exam, gave final grades.

Teaching training and development:

Science Teaching Effectiveness Program for Upcoming Professors 2015
Enrolled in four-day course at UCSF Office of Career and Professional Development, covering teaching effectiveness, course design and classroom management theory, and curriculum design.

Lecturer and Lesson Planner, Bio&Chem Teach Program 2012
UCSF Science & Health Education Partnership
Developed and taught a week of lessons and labs for high school biology students.

MENTORING EXPERIENCE

Postdoctoral fellows

Timothy Murphy, UW–Madison	2024–present
Hung-Shao Cheng, UW–Madison	2023–present
Yuyu Zeng, UW–Madison	2022–present
Sara Beach, UW–Madison	2021–present
Dinglan Tang, UW–Madison	2021–2023
Sarah Bakst, UW–Madison	2017–2020

Ph.D. mentorship

Lucas Annear, Language Sciences Program, UW–Madison (dissertation committee)	2023–present
Nick Milicic, Dept. of Integrative Biology, UW–Madison (dissertation committee)	2023–present
Michelle Bretl, Dept. of CS&D, UW–Madison (preliminary exam committee)	2023–present
Anne Neveu, Dept. of CS&D, UW–Madison (dissertation committee)	2021–2022
Courtney Broadfoot, Dept. of CS&D, UW–Madison (dissertation committee)	2018–2022
Jasenia Hartman, Neuroscience Training Program, UW–Madison (dissertation com.)	2019–2022
Jonathan Jibson, Dept. of Linguistics, UW–Madison (dissertation committee)	2020–2022
Tanvi Thakkar, Neuroscience Training Program, UW–Madison (dissertation com.)	2018–2019
Anne Neveu, Dept. of CS&D, UW–Madison (preliminary exam committee)	2020–2021
Hung-Shao Cheng, Dept. of CS&D, New York University (qualifying paper com.)	2019–2021
Henry Stephenson, Neuroscience Training Program, UW–Madison (lab rotation)	2020
Danielle Carrol, Neuroscience Training Program, UW–Madison (lab rotation)	2020
Alexander Foote, Dept. of CS&D, UW–Madison (preliminary exam committee)	2019
Renee King, Dept. of CS&D, UW–Madison (preliminary exam committee)	2018

Ph.D. students supervised as a postdoctoral fellow

Sara Beach, Harvard Speech and Hearing Bioscience and Technology Program	2016–2017
Megan Thompson, UCSF/Berkeley Graduate Program in Bioengineering	2014–2015
Will Schuerman, visiting student, Max Planck Institute for Psycholinguistics	2013–2014
Ben Dichter, UCSF/Berkeley Graduate Program in Bioengineering	2013
Kesshi Jordan, UCSF/Berkeley Graduate Program in Bioengineering	2012–2013

Masters thesis committees

Elena Groves, Dept. of CS&D, UW–Madison (thesis director)	2021–2023
Emily Hansen, Dept. of CS&D, UW–Madison (committee member)	2021–2022
Helen Vradelis, Dept. of CS&D, UW–Madison (committee member)	2018–2019

Full-time research assistants

Chris Naber, lab manager and research assistant, UW–Madison	2021–present
Nickolas Comeau, research specialist, UW–Madison	2019–2022
Lana Hantzsch, lab manager and research assistant, UW–Madison	2020–2021
Alexa Bushinski, lab manager and research assistant, UW–Madison	2018–2020
Hardik Kothare, graduate research assistant, UCSF	2014–2015
Noriko Tonigawa, graduate research assistant, UCSF	2012–2015
Jeevit Gill, undergraduate research assistant, UCSF	2011–2014

Part-time or summer research assistants

- 7 speech-language pathology masters students
- 2 electrical and computer engineering masters students
- 50 undergraduate RAs (primary supervisor for 3 senior theses)

Mentoring training and development:

UW–Madison WISCIENCE Research Mentor Training 2019

Four-session seminar to cultivate effective, culturally responsive mentoring.

Future of Research Chicago 2019: Mentoring Future Scientists 2019

Day-long meeting to develop mentoring climate guidelines for departments and institutions.

UCSF Course in Scientific Leadership and Management Skills 2014

Two-day seminar at UCSF J. David Gladstone Institutes.

SCIENCE OUTREACH

Executive Council, Future of Research, Inc. 2021–2023

Board of Directors, Future of Research, Inc. 2015–present

Science advocacy group addressing critical challenges affecting the biomedical research enterprise.

Associate Editor, Frontiers for Young Minds 2019–present

Role: coordinate science mentors' review of kid-focused scientific manuscripts.

Exploration Station Organizer, UW–Madison Science Expeditions 2018–19, 2022–24

UW Science Outreach Volunteer, Juneteenth Community Science Celebration and “Parks Alive”

Developed hands-on activities with physical models of vowel acoustics and prism goggles.

Science Mentor, Frontiers for Young Minds 2013–2019

Role: coordinate and guide classrooms in reviewing kid-focused scientific manuscripts.

Speaker, NatureJobs Career Expo Boston 2016

Ran workshop, *Improving Career Development Resources for Graduate Students & Postdocs*, with fellow Future of Research members Patricia Goodwin, Kearney Gunsalus, and Cara Weismann.

REVIEW

Grants

National Science Foundation Review Panelist, Cognitive Neuroscience	2021
National Science Foundation Ad Hoc Reviewer	2016, '20, '22, '24
Reviewer, Stroke Association in the UK	2018

Conferences

Scientific Review Committee, Conference on Motor Speech	2020–present
Reviewer, Society for the Neurobiology of Language	2011–present
Reviewer, International Seminar on Speech Production	2020, 2023
Reviewer, International Congress of Phonetic Sciences	2018
Judge, Acoustical Society of America Student Poster Competition	2013, 2017–2021
Reviewer, Organization for Human Brain Mapping	2012–2015

Journals:

[Handling Editor] American Journal of Speech-Language Pathology	Annals of Neurology
[Handling Editor] Journal of Speech, Language, and Hearing Research	Cerebral Cortex
Biological Psychiatry: Cognitive Neuroscience and Neuroimaging	Frontiers in Neuroscience
Canadian Journal of Speech-Language Pathology and Audiology	Frontiers in Psychology
Frontiers in Auditory Cognitive Neuroscience	Human Brain Mapping
Frontiers in Human Neuroscience	Journal of Neurophysiology
Journal of the Acoustical Society of America	Journal of Neuroscience
Journal of Experimental Psychology: General	Nature Communications
PNAS (Proceedings of the National Academy of Sciences)	Neurobiology of Language
Proceedings of the Royal Society B	NeuroImage
Second Language Research	PLOS ONE
	Psychological Science

OTHER PROJECTS, ACTIVITIES, & INTERESTS

Puzzled Pint Game Coordinator, Madison, WI	2018–present
Future of Research, Inc., Board of Directors (<i>futureofresearch.org</i>)	2015–present
Topiary Press, typographic design and letterpress printing shop owner/artist	2011–present
Chazen Museum of Art Faculty Exhibition: <i>I Am Standing in a Museum</i>	2020
Green Apple Books, design competition winner	2014
Society for Neuroscience, Hearing and Balance Social musical entertainment	2010, 2012
Singer, The Gamma Band	
Society for the Neurobiology of Language, logo design competition winner	2011
The Linux Foundation, “We’re Linux” contest finalist	2009
Composer, “Challenges at the Office” musical score	
Harvard-MIT Health Sciences and Technology, shirt design competition winner	2009
Ultrasonic Rock Orchestra	2007–2008
Singer, <i>A Night at the Rock Opera</i> , Wilbur Theatre, Boston	

Last updated March 2024