
Assistant Professor, Dept. of Communication Sciences and Disorders, University of Wisconsin–Madison

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
- 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 GRANTS

- UW-Madison VCRGE Award** 2020–2021
Fall Research Competition (PI, with Prof. Ben Parrell)
Title: Modulating speech behavior to predict the effectiveness of sensorimotor training
- NIH Pathway to Independence Award (K99/R00)** 2015–2020
K99 Grant (PI): 1K99DC014520
Title: Neural markers of speech error detection and correction abilities in aphasia

NSF Cognitive Neuroscience Program BCS-1262297 (personnel) <i>Title: Function of auditory feedback processing during speech</i>	2013–2016
NIH Ruth L. Kirschstein National Research Service Award (F32) F32 Grant (PI): 1F32DC011249 <i>Title: Phonetic influences on auditory feedback control</i>	2011–2014
Emerald Literati Awards for Excellence: Outstanding Paper for “Assessing the Landscape of US Postdoctoral Salaries”	2019
Forward in Access Award, McBurney Disability Resource Center <i>Award for supporting inclusion and access within the UW-Madison community</i>	2019
Best Poster Award, 7 th International Conference on Speech Motor Control	2017
ASHA “Lessons for Success” Conference Fellow	2017
Saffran Student Scholar Award	2016
BU Dudley Allen Sargent Research Fund Faculty/Post-doctoral Competition <i>Seed grant to support undergraduate mentee</i>	2016
BU Clinical & Translational Science Institute Funding Opportunity Award	2016
BU Professional Development & Postdoctoral Affairs Travel Award	2016
UCSF Scientific Leadership and Management Scholarship <i>J. David Gladstone Institutes, Course in Scientific Management</i>	2014
NIH Training Grant <i>Harvard-MIT Speech and Hearing Bioscience and Technology program</i>	2005–2009
Martha Gray Prize for Excellence in Research <i>Harvard-MIT Health Sciences and Technology Forum Best Poster: Imaging and Optics</i>	2008
MIT Kelly-Douglas Traveling Fellowship	2004

MANUSCRIPTS SUBMITTED OR IN PREPARATION

McDowell, G.S., Niziolek, C.A. and Lijek, R.S. (submitted). Practical changes to reduce ghostwriting in peer review.

Parrell, B. and Niziolek, C.A. (in preparation). Increased vowel contrast induced by sensorimotor adaptation to a non-uniform auditory perturbation in speech.

Bakst, S. and Niziolek, C.A. (in preparation). How many targets does schwa have? An altered auditory feedback study.

Niziolek, C.A. and Agnew, Z.K. (in preparation). Predictably unpredictable: how neural suppression encodes the auditory consequences of motor acts.

Niziolek, C.A., Beach, S.D., and Kiran, S. (in preparation). Speech acoustics are modulated by cognitive interference in a vowel-modified Stroop task.

Niziolek, C.A., Bouchard, K.E., Anumanchipalli, G.K., Dichter, B., Hamilton, L.S., and Chang, E.F. (in preparation). Speech feedback processing in human auditory cortex.

Niziolek, C.A., Nagarajan, S.S., and Houde, J.F. (in preparation). Task-dependent auditory predictions of self-produced speech.

Niziolek, C.A., Nagarajan, S.S., and Houde, J.F. (in preparation). The contribution of auditory feedback to corrective movements in vowel formant trajectories.

JOURNAL ARTICLES

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.

Athanasiadou, R., Bankston, A., Carlisle, M., Niziolek, C.A., and McDowell, G.S. (2018). Assessing the landscape of US postdoctoral salaries. *Studies in Graduate and Postdoctoral Education* 9(2):213–242.

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.

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.

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.

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.

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.

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. * equal contribution

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.

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.

CONFERENCE PAPERS

Bakst, S. and Niziolek, C.A. (2019). Self-correction in L1 and L2 vowel production. *Proceedings of the 19th International Congress of Phonetic Sciences*, Melbourne, Australia, 2019.

Bakst, S. and Niziolek, C.A. (2019). Does schwa have an auditory target? An altered auditory feedback study. *Proceedings of the 19th International Congress of Phonetic Sciences*, Melbourne, Australia, 2019.

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 ICPs 2015* (Ed.), *Proceedings of the 18th International Congress of Phonetic Sciences*. Glasgow, UK: the University of Glasgow. ISBN 978-0-85261-941-4.

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.

INVITED TALKS

Niziolek, C.A. (2019). *A series of tubes: contextual modulation of voices*. UCL Institute of Cognitive Neuroscience Workshop, “Meaning and Flexibility in Human Voice,” London, UK. November 29, 2019.

Niziolek, C.A. (2019). *Speak your mind: neural control of speech production*. MIT Club of Wisconsin 110th Anniversary Celebration, Madison, Wisconsin. November 2, 2019.

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.

Niziolek, C.A. (2019). *Language made audible: how speech acoustics reflect cognition*. Cognitive Science Speaker Series '18-19, Northwestern, Illinois. April 2, 2019.

- Niziolek, C.A. (2019). *Language made audible: how speech acoustics reflect communicative goals*. Workshop in General Linguistics (WIGL 16), Madison, Wisconsin. March 30, 2019.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- Niziolek, C.A. (2014). *Auditory self-monitoring catches speech errors before they happen*. VA Northern California Colloquium series, Martinez, California. February 11th, 2014.
- 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.
- 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.
- 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.
- Niziolek, C.A. (2011). *The role of linguistic contrasts in speech feedback control*. UC Berkeley Phonetics and Phonology Forum. February 7th, 2011.

ORAL PRESENTATIONS

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

Niziolek, C.A. (2015). Auditory self-monitoring catches speech errors before they happen. UCSF Postdoctoral Neuroscience Seminar Series, San Francisco, California. February 9th, 2015.

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

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.

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.

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.

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

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.

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.

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.

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.

Niziolek, C.A. and Bakst, S. (2019). Self-correction in L1 and L2 vowel production. *19th International Congress of Phonetic Sciences*, Melbourne, Australia.

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.

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.

Niziolek, C.A. (2019). Effects of cognitive interference and priming on speech acoustics. 26th Annual Meeting of the *Cognitive Neuroscience Society*, San Francisco, California.

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.

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.

Niziolek, C.A. and Kiran, S. (2018). Vowel dynamics in persons with aphasia. 175th Meeting of the *Acoustical Society of America*, Minneapolis, Minnesota.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.

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:

Course Director, Dept. of Communication Sci. & Disorders, UW–Madison Fall 2017–19

CSD 303: Speech Acoustics and Perception

New course development, creation of interactive acoustics and perception demos, incorporation of a game-based learning platform (Kahoot!) and supervision of 27 independent honors projects.

Teaching Assistant, Dept. of Neuroscience, UCSF Spring 2015

NS219: Neuroscience of Speech Perception and Production

Course Directors: Profs. Christoph Schreiner & John Houde

Assisted with selection of course readings; led discussion of perception–production interactions.

Teaching Assistant, Dept. of Neuroscience, UCSF Spring 2011

NS219: Neuroscience of Speech Perception and Production

Course Directors: Profs. Christoph Schreiner & John Houde

Led discussions of scientific articles in speech perception, production, and modeling.

Teaching Fellow, Dept. of Neurobiology, Harvard University Fall 2007

NB101: Auditory Neurobiology of Language and Music

Course Directors: Profs. Mark Tramo & Jonathan Matsui

Taught weekly 1.5-hour sections, lectured, wrote problem sets and final exam, gave final grades.

Guest lectures:

Guest Lecturer, Dept. of Zoology, UW–Madison Spring 2019,

ZOO 500: Undergraduate Neurobiology Seminar

Course Director: Michael Koenigs

Fall 2018

Guest Lecturer, Dept. of Speech, Language & Hearing Sciences, Boston U. Spring 2017

SAR SH 810: Academic Grant Preparation and Review

Course Directors: Cara Stepp and Gerald Kidd

Guest Lecturer, Dept. of Speech, Language & Hearing Sciences, Boston U. Summer 2016

SAR SH 522: Anatomy and Physiology of the Speech Mechanism

Course Director: Prof. Adele Raade

“Nervous System and Cranial Nerves”

Guest Lecturer, SCERCH Spring Cross-Program Event, Boston University Spring 2016

Sargent College Committee to Enhance Research Collaboration in Health & Rehabilitation

Guest Lecturer, Dept. of Health Sciences, Boston University Fall 2015
SAR HS 361/CAS NE 360: Intro. to Computational Neurosci. of Speech, Language, and Hearing
Course Director: Prof. Jason Bohland
 “The role of feedback in speech: delayed and altered feedback studies”

Guest Lecturer, Dept. of Health Sciences and Technology, Harvard-MIT 2006–2008
Tutorial: Cognitive Neuroscience and Psychology
 Lectured and gave lab demonstrations as part of a tutorial series for first-year graduate students.

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

Sarah Bakst, UW–Madison 2017–present

Ph.D. students

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

Full-time research assistants

Alexa Bushinski, lab manager and research assistant, UW–Madison 2018–present
 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

<i>UW–Madison speech–language pathology masters students</i>		<i>UW–Madison undergraduate RAs</i>	
Anna Mah	2019–present	Dominick Battistini	2019–present
Erin Tippit	2019–present	Sarah Bildsten	2019–present
Carissa Ernat	2017–2019	Paige Cameron	2019–present
Danielle Revai	2017–2018	Sophie Johnson	2019–present
		Lauren Powell	2019–present
		McKensy van Wie	2019–present
		Erica Uyenbat	2018–present

<i>UW–Madison electrical and computer engineering masters students</i>		Nickolas Comeau	2018–present
Akshat	2019	Claire Manske	2018–present
Elisa Ou	2018–2019	Sarah Alpert	2019
		Shelby Behnke	2019
		Andreas Endresen	2019
<i>Boston University undergraduate RAs</i>		Kate Gesteland	2019
Kimberly Lin	2016–2017	Hannah Klunk	2019
Ian Quillen	2016	Giovanni Battistini	2018–2019
		Jordyn Salm	2018–2019
<i>UCSF undergraduate RAs</i>		<i>UCSF visiting speech–language pathology masters students</i>	
Roshni Ravindran	2014	Chiara Bertolini	2012
Christopher Constantine	2012	Laura Visentin	2012

Thesis committees

Anna Mah, masters thesis advisor, UW–Madison	2019–present
Erin Tippet, masters thesis advisor, UW–Madison	2019–present
Jasenia Hartman, Ph.D. dissertation committee, UW–Madison	2019–present
Courtney Broadfoot, Ph.D. dissertation committee, UW–Madison	2018–present
Tanvi Thakkar, Ph.D. dissertation committee, UW–Madison	2018–2019
Helen Vradelis, masters thesis committee, UW–Madison	2018–2019
Alexander Foote, preliminary exam committee, UW–Madison	2019
Renee King, preliminary exam committee, UW–Madison	2018
Ian Quillen, undergraduate thesis in neuroscience, Boston University	2017

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

Board of Directors , Future of Research, Inc.	2015–present
Science advocacy group addressing critical challenges affecting the biomedical research enterprise.	
Associate Editor , <i>Frontiers for Young Minds</i>	2019–present
Role: distribute article invitations and coordinate review of kid-focused scientific manuscripts.	
Science Mentor , <i>Frontiers for Young Minds</i>	2013–2019
Role: coordinate and guide classrooms in reviewing kid-focused scientific manuscripts.	

- Exploration Station Organizer**, UW–Madison Science Expeditions 2018–2019
 Developed physical models of vowel acoustics for a hands-on activity for all ages.
- 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

- Reviewer, Stroke Association in the UK 2018–present
 Reviewer, National Science Foundation 2016–present

Conferences

- Reviewer, International Congress of Phonetic Sciences 2018–present
 Judge, Acoustical Society of America Student Poster Competition 2013, 17-19
 Reviewer, Organization for Human Brain Mapping 2012–present
 Reviewer, Society for the Neurobiology of Language 2011–present

Journals

- Reviewer, PLOS ONE 2019–present
 Reviewer, Nature Communications 2019–present
 Reviewer, Biological Psychiatry: Cognitive Neuroscience and Neuroimaging 2019–present
 Reviewer, Journal of Neurophysiology 2018–present
 Reviewer, Frontiers in Psychology 2018–present
 Reviewer, Canadian Journal of Speech–Language Pathology and Audiology 2018–present
 Reviewer, PNAS (Proceedings of the National Academy of Sciences) 2018–present
 Reviewer, Annals of Neurology 2016–present
 Reviewer, Cerebral Cortex 2016–present
 Reviewer, Human Brain Mapping 2016–present
 Review Editor, Frontiers in Auditory Cognitive Neuroscience 2016–present
 Reviewer, Proceedings of the Royal Society B 2014–present
 Reviewer, Frontiers in Neuroscience 2014–present
 Reviewer, The Journal of Neuroscience 2014–present
 Review Editor, Frontiers in Human Neuroscience 2013–present
 Review Editor Mentor, Frontiers for Young Minds 2013–present
 Reviewer, NeuroImage 2013–present
 Reviewer, Psychological Science 2013–present
 Reviewer, Journal of the Acoustical Society of America 2013–present

COMPUTER SKILLS

Linux and Windows operating systems, Matlab, Scheme, HTML/CSS, neuroimaging analysis (SPM, FreeSurfer, Brainstorm, FSL, Nipype, NUTMEG), audio analysis (Praat, Audacity), version control (Git, Mercurial, Subversion), Adobe Creative Suite (Photoshop, Illustrator, InDesign, Flash), common applications (MS Office, Emacs, etc.)

I developed and maintain the code for the following software packages:

- wave_viewer, a waveform analysis GUI: github.com/carrien/wave_viewer
- Free Speech, speech analysis and plotting code: github.com/carrien/free-speech
- FUSP lite, a software library for the Feedback Utility for Speech Processing system developed by John Houde: github.com/carrien/fusp_lite

OTHER PROJECTS, ACTIVITIES, & INTERESTS

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