Hannah P. Rowe, Ph.D., CCC-SLP

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Position: Assistant Professor in Communication Sciences and Disorders **Email:** <u>h.rowe@northeastern.edu</u>

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RESEARCH AND TEACHING INTERESTS						
Research	Teaching					
 Improving diagnostic assessment and treatment of speech motor disorders Identifying subtypes/profiles within and across speech motor populations Leveraging artificial intelligence to develop speech-based biomarkers 	 Speech science/acoustics Neuromotor speech disorders Neuroanatomy and neurophysiology 					
• Investigating neural and physiological correlates of speech motor control	• Fluency disorders					

EDUC	EDUCATION						
Date	Degree	Institution	Location				
2022- 2024	Postdoc in <i>Speech</i> <i>Neuroscience</i>	Boston University Advisor: Dr. Frank Guenther	Boston, MA				
2018- 2022	PhD in Rehabilitation Sciences	MGH Institute of Health Professions (MGH IHP) (GPA: 4.0) Dissertation: Articulatory Phenotypes in Speech Motor Disorders: Towards an Empirical Framework Committee: Drs. Jordan Green (advisor), Adam Lammert, Dagmar Sternad, and Robert Hillman	Charlestown, MA				
2014- 2017	MA in Speech-Language Pathology	The George Washington University (GWU) (GPA: 3.95) Thesis: Typical Disfluencies in the Speech of 30-Month-Old Spanish-English Bilinguals Committee: Drs. Shelley Brundage (advisor), Cynthia Core, and Nan Bernstein Ratner	Washington, DC				
2010- 2014	BA in Psychology with Linguistics Minor	Dartmouth College (Third Honor List)	Hanover, NH				

PROFE	PROFESSIONAL EXPERIENCE						
Date	Position	Lab/University	Description	Location			
2024- present	Assistant Professor	Northeastern University	Assistant Professor in Communication Sciences and Disorders, Director of the Advancing Speech Communication through Engineering, Neuroscience, and Technology (ASCENT) Lab	Boston, MA			
2022- 2024	Postdoctoral Research Fellow	Speech Neuroscience Lab (Dr. Frank Guenther) at Boston University	Recruiting participants, conducting studies, and analyzing data from speakers with speech motor disorders	Boston, MA			
2021- 2022	Research Assistant	Brain Modulation Lab (Dr. Mark Richardson) at MGH	Evaluated phoneme alignment in spectrograms of speech of speakers with Parkinson's disease undergoing surgery for deep brain stimulation	Boston, MA			

2018- 2022	Doctoral Research Fellow	Speech and Feeding Disorders Lab (Dr. Jordan Green) at MGH IHP	Recruited participants, conducted studies, and analyzed data from speakers with speech motor disorders	Charlestown, MA
2014- 2017	Research Assistant	Language Development Lab (Dr. Cynthia Core) and Stuttering Lab (Dr. Shelley Brundage) at GWU	Performed phonetic transcriptions, coded disfluencies, and created speech rate scripts for bilingual language data	Washington, DC
2012	Undergraduate Research Fellow	Social Imitation Lab (Dr. Catherine Norris) at Dartmouth College	Conducted literature review and piloted study on social imitation and race	Hanover, NH

PUBLICATIONS

Peer Reviewed Journal Articles

- Zaninotto, A., Makary, M., **Rowe, H.P.,** Eshghi, M., Tseng, C.-E., Chan, J., Zurcher, N.R., Hooker, J., Atassi, N., Loggia, M., Lewis, A., Reegan, M., Green, J.R., & Babu, S. (In Press). Motor speech impairment in ALS is associated with multiregional cortical thinning beyond primary motor cortex. *Frontiers in Neurology*.
- Connaghan, K.P., Green, J.R., Esghi, M., Haenssler, A.E., Burke, K.M., Sheier, Z.A., Clark, A., Iyer, A., Richburg, B., Rowe, H.P., Okada, J., Johnson, S.A., Onnela, J.-P., & Berry, J.D. (2024). The relationship of rate and pause features to the communicative participation of people living with ALS. *Muscle and Nerve*, 70(2), 217-225.
- Rowe, H.P., Tourville, J.A., Nieto-Castanon, A., Garnett, E.O., Chow, H.M., Chang, C.-E., & Guenther, F. (2024). Evidence for planning and motor subtypes of stuttering based on resting state functional connectivity. *Brain and Language*, 253, 105417.
- Kao, T.H., **Rowe, H.P.,** Green, J.R., Stipancic, K.L., Sharma, N., de Guzman, J.K., Supnet-Wells, M.L., Acunad, P., & Perry, B.J. (2024). Differentiating between X-linked dystonia-parkinsonism phenotypes using acoustic analysis of non-speech task. *Parkinsonism and Related Disorders*, 120, 105991.
- **Rowe, H.P.,** Stipancic, K.L., Campbell, T.C., Yunusova, Y., & Green, J.R. (2023). The association between longitudinal declines in phonetic accuracy and speech intelligibility in amyotrophic lateral sclerosis. *Clinical Linguistics and Phonetics*, 38(3), 227-248.
- Maffei, M., Green, J.R., Murton, O., Yunusova, Y., **Rowe, H.P.,** Wehbe, F., Diana, K., Nicholson, K., Berry, J.D., & Connaghan, K.P. (2023). Cepstral/spectral measures of dysphonia in amyotrophic lateral sclerosis (ALS). *Journal of Speech, Language, and Hearing Research*, 1-16.
- Rowe, H.P., Gochyyev, P., Lammert, A.C., Lowit, A., Spencer, K.A., Dickerson, B.C., Berry, J., & Green, J.R. (2022). The efficacy of acoustic-based articulatory phenotyping for characterizing and classifying divergent neurodegenerative diseases. *Journal of Neural Transmission*, 129, 1487-1511.
- Rowe, H.P., Shellikeri, S., Yunusova, Y., Chenausky, K., & Green, J.R. (2022). Quantifying articulatory impairments in neurodegenerative motor diseases: A scoping review and meta-analysis of interpretable acoustic features. *International Journal of Speech-Language Pathology*, 25(4), 486-499.
- Gutz, S.E., **Rowe**, **H.P.**, Tilton-Bolowsky, V., & Green, J.R. (2022). Speaking with a KN95 face mask: Speaker adaptation and strategies to improve intelligibility. *Cognitive Research: Principles and Implications*, 7(73), 1-20.

- Rowe, H.P., Gutz, S.E., Maffei, M.F., Tomanek, K., & Green, J.R. (2022). Characterizing dysarthria diversity for automatic speech recognition: A clinical perspective. *Frontiers in Computer Science (Perspectives in Human-Media Interaction)*, 4, 1-8.
- Ramanarayanan, V., Lammert, A.C., **Rowe, H.P.,** Quatieri, T.F., & Green, J.R. (2022). Speech as a biomarker: Opportunities, interpretability, and challenges. *ASHA Perspectives in Speech Science*, 7, 276-283.
- Rowe, H.P., Stipancic, K.L., Lammert, A.C., & Green, J.R. (2021). Validation of an acoustic-based framework of speech motor control: Assessing criterion and construct validity using kinematic and perceptual measures. *Journal of Speech, Language, and Hearing Research*, 64(12), 4718-4735.
- Stipancic, K.L., Palmer, K., **Rowe, H.P.,** Yunusova, Y., & Green, J.R. (2021). "You say severe, I say mild": Toward an empirical classification of dysarthria severity. *Journal of Speech, Language, and Hearing Research*, 64(12), 4736-4753.
- Rong, P., Yunusova, Y., Eshghi, M., **Rowe, H.P.,** & Green, J.R. (2020). A speech measure for early stratification of fast and slow progressors of bulbar amyotrophic lateral sclerosis: Lip movement jitter. *Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration*, 21(1-2), 34-41.
- Brundage, S. & **Rowe, H.** (2018). Rates of typical disfluency in the conversational speech of 30-month-old Spanish-English simultaneous bilinguals. *American Journal of Speech-Language Pathology*, *27*(3S), 1287-1298.

Peer Reviewed Conference Proceedings

- Gutz, S.E., **Rowe, H.P.,** & Green, J.R. (2021). Speaking with a KN95 face mask: ASR performance and speaker compensation. *Interspeech*, 4798-4802.
- Rowe, H.P., Gutz, S.E., Maffei, M.F., & Green, J.R. (2020). Acoustic-based articulatory phenotypes of amyotrophic lateral sclerosis and Parkinson's disease: Towards an interpretable, hypothesis-driven framework of motor control. *Interspeech*, 4816-4820.
- **Rowe, H.P.** & Green, J.R. (2019). Profiling speech motor impairments in persons with amyotrophic lateral sclerosis: An acoustic-based approach. *Interspeech*, 4509-4513.

Magazine and Web Articles

Rowe, H.P. (2024, April). Snapshot: What is articulation? National Ataxia Foundation. https://www.ataxia.org/scasource/

PRESENTATIONS

Invited Talks

- Rowe, H.P., Lea, C., & Glasser, A. (2024, February). "I'm sorry, I didn't understand": How voice AI poses barriers and some solutions. Invited talk at the 2024 American Association for the Advancement of Science, Denver, Colorado.
- Rowe, H.P. & Case, J. (2023, November). Innovate your Clinical Practice: How auditory-perceptual, acoustic, and kinematic measures can work together to inform assessment and treatment. Invited talk at the 2023 Annual Convention of the American Speech-Language-Hearing Association, Boston, Massachusetts.
- Rowe, H.P. & Stipancic, K.L. (2020, May). Leveraging principles of motor learning to enhance speech outcomes. Talk at the 2020 Spaulding Rehabilitation Hospital Continuing Education Meeting, Boston, Massachusetts.

Oral Presentations

Rowe H.P., Frankford, S.A., Simmatis, L., Tourville, J.A., Nieto-Castanon, A., & Guenther, F.H. (2024, December).

- Exploring associations between different stuttering types and functional connectivity in feedback and feedforward control networks. Talk at the 2024 Annual Convention of the American Speech-Language-Hearing Association, Seattle, Washington.
- **Rowe, H.P.,** Lowit, A., Spencer, K.A., & Green, J.R. (2022, February). *Exploring the validity and diagnostic utility of acoustic-based articulatory impairment phenotypes in divergent speech motor disorders*. Talk at the 2022 Motor Speech Conference, Charleston, South Carolina.
- Rowe, H.P., Stipancic, K.L., & Green, J.R. (2021, November). Articulatory phenotypes of speech motor control: A perceptual validation study. Talk at the 2020 Annual Convention of the American Speech-Language-Hearing Association, Washington, D.C.
- Maffei, M.F., Green, J.R., Yunusova, Y., **Rowe, H.P.,** Cordella, C., Murton, O., Nicholson, K., Berry, J.D., & Connaghan, K.P. (2021, November). *Acoustic measures of phonatory impairment in amyotrophic lateral sclerosis (ALS)*. Talk presented by Marc Maffei at the 2021 Annual Convention of the American Speech-Language-Hearing Association, Washington, D.C.
- Rowe, H.P., Gutz, S.E., Maffei, M.F., & Green, J.R. (2020, October). Acoustic-based articulatory phenotypes of amyotrophic lateral sclerosis and Parkinson's disease: Towards an interpretable, hypothesis-driven framework of motor control. Talk at the 2020 Interspeech Conference, Shanghai, China (Virtual). (Funded).

Poster Presentations

- Kim, J.S., **Rowe H.P.,** Tourville, J.A., Wan, H., & Guenther, F.H. (2024, December). Speech motor sequence learning of multisyllabic nonwords in adults who stutter and neurotypical speakers. Poster at the 2024 Annual Convention of the American Speech-Language-Hearing Association, Seattle, Washington.
- **Rowe, H.P.,** Frankford, S.A., & Guenther, F.H. (2024, February). *The relationship between disfluency types and resting state functional connectivity in the feedback and feedforward control networks.* Poster at the 2024 Motor Speech Conference, San Diego, California.
- Rowe, H.P., Tourville, J.A., Nieto-Castanon, A., Garnett, E.O., Chow, H.M., Chang, S.-E., & Guenther, F.H. (2023, September). Resting state functional connectivity reveals potential motor- and planning-based subtypes of stuttering. Poster at the 13th Oxford Dysfluency Conference, Oxford, England (Canceled).
- Rowe, H.P., Tourville, J.A., Nieto-Castanon, A., Garnett, E.O., Chow, H.M., Chang, S.-E., & Guenther, F.H. (2023, June). Preliminary evidence for motor- and planning-based subtypes of stuttering based on resting state functional connectivity abnormalities. Poster at the 2023 Boston Speech Motor Control Symposium, Boston, Massachusetts.
- Maffei, M.F., Green, J.R., Murton, O., Yunusova, Y., **Rowe, H.P.,** Wehbe, F., Diana, K., Nicholson, K., Berry, J.D., & Connaghan, K.P. (2022, December). *Cepstral/spectral measures of voice quality in amyotrophic lateral sclerosis.*Poster presented by Marc Maffei at the 33rd International Symposium on ALS/MND (Virtual).
- Haenssler, A.E., Green, J.R., Maffei, M., Rowe, H.P., Kao, T., Scheier, Z., Clark, A., Burke, K.M., Onnela, J.P., Berry, J.D., & Connaghan, K.P. (2022, December). *Approaches to evaluating speech severity of remote speech recordings*. Poster presented by Abigail Haenssler at the 33rd International Symposium on ALS/MND (Virtual).
- Kao, T.H., Perry, B.J., **Rowe, H.P.,** & Green, J.R. (2022, November). *Differentiating between phenotypes of X-linked dystonia-parkinsonism using acoustic analysis of non-speech task.* Poster presented by Tabitha Kao at the 2022 Annual Convention of the American Speech-Language-Hearing Association, New Orleans, Louisiana.
- **Rowe, H.P.,** Gochyyev, P., Lowit, A., Spencer, K.A., Lammert, A.C., & Green, J.R. (2022, August). *The efficacy of acoustic-based articulatory impairment phenotypes for characterizing and classifying divergent*

- neurodegenerative diseases. Poster at the 2022 International Conference on Speech Motor Control, Groningen, The Netherlands.
- Rowe, H.P., Stipancic, K.L., Campbell, T.F., & Green, J.R. (2022, August). *The association between longitudinal declines in phonetic accuracy and speech intelligibility in amyotrophic lateral sclerosis.* Poster at the 2022 International Conference on Speech Motor Control, Groningen, The Netherlands.
- Maffei, M.F., Chenausky, K.V., Gutz, S.E., **Rowe, H.P.,** Tager-Flusberg, H., & Green, J.R. (2022, February). *Correlations between perceptual speech features and language in minimally verbal children with autism spectrum disorder.*Poster at the 2022 Motor Speech Conference, Charleston, South Carolina.
- Rowe, H.P., Stipancic, K.L., Lammert, A.C., & Green, J.R. (2021, June). *Using perceptual and kinematic measures to validate an acoustic-based framework of speech motor control.* Poster at the 2021 Boston Speech Motor Control Symposium, Boston, Massachusetts.
- Coladarci, J., Rowe, H.P., Connaghan, K.P., Berry, J.D., & Green, J.R. (2021, June). Longitudinal remote analysis of articulatory motor performance in individuals with amyotrophic lateral sclerosis (ALS). Poster presented by Jenna Coladarci at the 2021 Boston Speech Motor Control Symposium, Boston, Massachusetts.
- Connaghan, K.P., **Rowe, H.P.,** Okada, J., Richburg, B., Berry, J.D., & Green, J.R. (2021, June). *The association of acoustic measures of speech function with communicative participation in ALS*. Poster presented by Kate Connaghan at the 2021 Boston Speech Motor Control Symposium, Boston, Massachusetts.
- Rowe, H.P., Maffei, M.F., Gutz, S.E., Lammert, A.C., & Green, J.R. (2020, December). *Profiling speech motor control:* Validation of novel and existing acoustic features. Poster at the 2020 International Seminar on Speech Production, Providence, Rhode Island. (Funded). (Received Award).
- Connaghan, K.P., Green, J.R., **Rowe, H.P.,** Richburg, B., Onella, J.P., & Berry, J.D. (2020, December). *The association of bulbar impairment and communicative participation in ALS.* Poster presented by Kate Connaghan at the 31st International Symposium on ALS/MND (Virtual).
- Rowe, H.P., Stipancic, K.L., & Green, J.R. (2020, November). *Articulatory phenotypes of speech motor control: A perceptual validation study*. Abstract accepted at the 2020 Annual Convention of the American Speech-Language-Hearing Association, San Diego, California (Canceled).
- Connaghan, K.P., Green, J.R., Rowe, H.P., Collins, E., Richburg, B., Onella, J.P., & Berry, J.D. (2020, September). *The impact of bulbar impairment on the communicative participation of people with ALS*. Poster presented by Kate Connaghan at the 2020 Annual Northeast ALS Consortium Meeting (Virtual).
- **Rowe, H.P.** & Green, J.R. (2020, February). *Acoustic profiles of speech motor control: Towards a differential diagnosis of dysarthria subtypes.* Poster at the 2020 Motor Speech Conference, Santa Barbara, California.
- **Rowe, H.P.** & Green, J.R. (2019, September). *Profiling speech motor impairments in persons with amyotrophic lateral sclerosis: An acoustic-based approach*. Poster at the 2019 Interspeech Conference, Graz, Austria.

- Rowe, H.P., Stipancic, K.L., Eshghi, M., & Green, J.R. (2019, June). Speech motor impairment profiling based on acoustic features. Poster at the 2019 Boston Speech Motor Control Symposium, Boston, Massachusetts. (Received Award).
- Green, J.R., Connaghan, K.P., Yunusova, Y., Stipancic, K.L., Gutz, S.E., **Rowe, H.P.,** Cordella, C., & Berry, J.D. (2018, November). *Exploring voice measures to track disease onset and progression in amyotrophic lateral sclerosis (ALS)*. Poster presented by Kate Connaghan at the 29th International Symposium on ALS/MND, Glasgow, Scotland.
- Green, J.R., Connaghan, K.P., Yunusova, Y., Stipancic, K.L., Gutz, S.E., **Rowe, H.P.,** Cordella, C., & Berry, J.D. (2018, May). *Vocal changes across disease progression in amyotrophic lateral sclerosis*. Poster presented by Kate Connaghan at the 2018 Acoustical Society of America Annual Meeting, Minneapolis, Minnesota.
- **Rowe, H.** & Brundage, S. (2017, September). *Typical disfluencies in speech of Spanish-English bilinguals at 30 months.*Poster at the 11th Oxford Dysfluency Conference, Oxford, England.
- Rowe, H., Corcoran, T., & Brundage, S. (2016, November). *Typical disfluencies in speech of Spanish-English bilinguals at 30 months*. Poster at the 2016 Annual Convention of the American Speech-Language-Hearing Association, Philadelphia, Pennsylvania.

GRAN	GRANTS					
Date	Grant	Organization	Description	Location		
2022	National Research Service Award Institutional Research Training Grant (T32) (PI: Dean Moore)	National Institute of Deafness and Other Communication Disorders (NIDCD) section of National Institute of Health (NIH)	To develop and/or enhance research training opportunities for individuals interested in careers in biomedical, behavioral and clinical research that are relevant to NIH mission (\$53,000 per year for 2 years)	Boston, MA		
2021	Raymond H. Stetson Scholarship in Phonetics and Speech Science	Acoustical Society of America (ASA)	For graduate study and research in scientific areas related to field of phonetics and speech production (\$30,000)	Charlestown, MA		
2021	Council of Academic Programs in Communication Sciences and Disorders (CAPCSD) PhD Scholarship	CAPCSD	For students pursuing PhD and who are focused on academic career in communication sciences and disorders (\$20,000)	Charlestown, MA		
2021	Ruth L. Kirschstein Predoctoral Individual National Research Service Award (F31)	NIDCD (part of NIH)	For promising predoctoral students with potential to develop into productive, independent research scientists (\$29,520 per year for 3 years)	Charlestown, MA		
2018	Dr. David Krebs Doctoral Research Fund Scholarship	MGH IHP	For MGH IHP doctoral students who demonstrate research potential in motor control (\$500)	Charlestown, MA		
2017	Shenkman Career Services Student Professional and Career Development Grant	GWU	For GWU graduate students who demonstrate drive in professional and career development (\$250)	Washington, D.C.		
2015	Joan Roddy Regnell	GWU	For GWU graduate students who	Washington,		

	Fellowship in Speech and Hearing Sciences		demonstrate clinical potential in voice studies (\$10,000)	D.C.
2011	Undergraduate Research Grant in Psychological and Brain Sciences	Dartmouth College	For Dartmouth College students who demonstrate promising research in detailed proposal (\$4,000)	Hanover, NH

HONG	HONORS/AWARDS					
Date	Honor/Award	Organization	Description	Location		
2020	Outstanding Student Presentation Award at International Seminar on Speech Production (ISSP)	Haskins Laboratories	For poster presentation at ISSP	Providence, RI (virtual)		
2020	Travel Scholarship for ISSP	National Science Foundation (NSF)	For travel to ISSP	Providence, RI (virtual)		
2020	Travel Scholarship for Interspeech Conference	International Speech Communication Association (ISCA)	For travel to Interspeech Conference	Shanghai, China (virtual)		
2020	Academy of Neurologic Communication Disorders and Sciences (ANCDS) Fellowship Award	ANCDS	For master's or doctoral students specializing in clinical neurologically-based communication disorders and sciences	San Diego, CA (virtual)		
2019	Best Poster Design Award at Boston Speech Motor Control Symposium (BSMCS)	Boston University	For poster presentation at BSMCS	Boston, MA		
2010- 2014	Dartmouth College Athletics	Dartmouth College	Competed for 12 Seasons of NCAA Division I Cross Country and Track at Dartmouth College	Hanover, NH		

CLINICAL	CLINICAL EXPERIENCE					
Date	Position	Organization	Description	Location		
2017- 2018	Speech- Language Pathology Clinical Fellow	Joy and Laughter Developmental Therapy	Diagnostic evaluation and therapy for children with speech, language, and pragmatic disorders	San Jose, CA		
Jan 2017- May 2017	Graduate Clinician	Pediatric Development Center	Diagnostic evaluation and therapy for children with Down syndrome, autism spectrum disorders, orofacial myofunctional disorders, phonological disorders, auditory processing disorder, cerebral palsy, receptive-expressive language disorders, and feeding disorders	Derwood, MD		
Aug 2016- Dec 2016	Graduate Clinician	Johns Hopkins Voice Center	Diagnostic evaluation and therapy for adults with presbylaryngis, muscle tension dysphonia, chronic cough, vocal fold paralysis, paradoxical vocal fold movement, laryngitis, nodules, polyps, and dysphagia due to chemoradiation therapy for head and neck cancer	Bethesda, MD & Baltimore, MD		
Nov 2015- Apr 2017	Graduate Clinician	GWU Speech and Hearing	Fluency Disorders (adult): stuttering and cluttering disorders Aural Rehabilitation (adult): experience with hearing aid and	Washington, D.C.		

cochlear implants users
Voice Treatment (adult): male-to-female transgender voice
Neurologic Communication Disorders (adult): aphasia,
traumatic brain injury, acquired apraxia of speech, and
dysarthria
Accent Modification and Literacy (adult): accent reduction
for students and literacy training
Audiology (adult): presbycusis and acoustic neuromas
Pediatric Speech and Language Disorders (pediatric):
telepractice experience with Down syndrome
Speech Motor Disorders (pediatric): childhood apraxia of
speech

VOLUNTEER EXPERIENCE						
Date	Position	Organization	Description	Location		
2013	Undergraduate Intern	Lurie Center for Autism	Led social groups and prepared materials for speech-language pathologists	Lexington, MA		

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Date	Position	Organization	Description	Location
2022- present	Mentor to Boston University Undergraduate Research Assistants (Mia Graziano, Hannah Indiviglio, Adanna Thomas)	Speech Neuroscience Lab at Boston University	Mentor for project on using tDCS to examine neural underpinnings of speech motor learning	Boston, MA
2021- 2022	Mentor to Postgrad Research Assistant (Joycelyn Wang)	Speech and Feeding Disorders Lab at MGH IHP	Mentor for project on acoustic analysis using Praat and phonetic analysis using PEPPER	Charlestown, MA
2021- 2022	Mentor to MGH IHP Doctoral Student (Tabitha Kao)	Speech and Feeding Disorders Lab at MGH IHP	Mentor for project on using acoustic analysis to explore articulatory motor control in speakers with X-linked dystonia parkinsonism	Charlestown, MA
2021	Mentor to Suffolk University Undergraduate Research Intern (Jenna Coladarci)	Speech and Feeding Disorders Lab at MGH IHP	Mentor for project on exploring longitudinal changes in articulatory motor control in speakers with ALS	Charlestown, MA
2020	Mentor to Postgrad Research Assistant (June Okada)	Speech and Feeding Disorders Lab at MGH IHP	Mentor for project on acoustic analysis using Praat	Charlestown, MA
2013- 2014	Tutor and Mentor	Summer Enrichment at Dartmouth (SEAD) Program	Academic tutor and mentor for students from low-income backgrounds	Hanover, NH
2011	Camp Counselor for Individuals with Autism	Camp Akeela	Counselor for children and teenagers with autism spectrum disorder	Thetford, NH

TEACHI	TEACHING EXPERIENCE					
Date	Position	Organization	Description	Location		
2024	Guest Lecturer	Boston University	Guest lectured for SAR SH 732: Fluency Disorders (Professor: Caroline Brinkert, MS, CCC- SLP) in Department of Speech, Language and Hearing Sciences	Boston, MA		
2023	Teaching Assistant	Boston University	Teaching assistant for SAR SH 732: Fluency Disorders (Professor: Diane Constantino, MS, CCC- SLP, BCS-F) in Department of Speech, Language and Hearing Sciences	Boston, MA		
2019	Guest Lecturer	Emerson College	Guest lectured for CD650: Motor Speech Disorders (Professor: Bridget Perry, PhD, CCC-SLP) in Department of Communication Sciences and Disorders	Boston, MA		
2019	Teaching Assistant	MGH IHP	Teaching assistant for CD8 ₃₃ : Neuromotor Speech Disorders (Professor: Kaila Stipancic, PhD, CCC- SLP) in Department of Communication Sciences and Disorders	Charlestown, MA		

PROFESSIONAL SERVICE

Committees

ASHA 2023 Planning Committee - Motor Speech Disorders Across the Lifespan

Ad-Hoc Reviewer

Folia Phoniatrica et Logopaedica

Frontiers in Rehabilitation Sciences (Disability, Rehabilitation, and Inclusion)

IEEE Journal of Biomedical and Health Informatics

IEEE Open Journal of Engineering in Medicine and Biology

Journal of Fluency Disorders

Journal of Speech, Language, and Hearing Research

PLOS ONE

PROFESSIONAL DEVELOPMENT

Date	Activity
2023	ASHA's Research Mentoring Network: Lessons for Success
2023	NIH K-Writing Workshop at Harvard University
2022	Learning the CONN Toolbox for Functional Connectivity Analysis
2021	ASHA's Research Mentoring Network: Pathways Program
2020	NIH F31-Writing Course at MGH IHP
2020	Power, Privilege, and Positionality Workshop

MEMBERSHIPS AND LICENSURE

Date	Membership or Licensure
2018-present	Member of American Speech-Language-Hearing Association (ASHA)
2018-present	ASHA Certificate of Clinical Competence (CCC) in Speech-Language Patholog

2014-present Society for the Neurobiology of Language

2020-2022	Student Member of Institute of Electrical and Electronics Engineers (IEEE)
2020-2022	Student Member of Academy of Neurologic Communication Disorders and Sciences (ANCDS)
2019-2022	Student Member of International Speech Communication Association (ISCA)
2019-2022	Student Member of Acoustical Society of America (ASA)
2018-2019	California State License in Speech and Language Pathology (#27164)

TECHNICAL SKILLS	
Area	Skills
Acoustics	Audacity, Praat, TF ₃₂
Kinematics	electromagnetic articulography (EMA), optical motion capture, Speech Movement Analysis for Speech and Hearing Research (SMASH)
Neuroimaging	electroencephalogram (EEG), Freesurfer, Functional Connectivity Toolbox (CONN), functional magnetic resonance imaging (fMRI), Statistical Parametric Mapping (SPM)
Neurostimulation	transcranial magnetic current stimulation (tDCS), transcranial magnetic stimulation (TMS), Magstim and Brainsight electromyography (EMG)
Phonetic Analysis	Computerized Language Analysis (CLAN) Program, Programs to Examine Phonetic and Phonologic Evaluation Records (PEPPER), Phon
Signal Processing and Statistical Analysis	Matlab, Python, R

CLINICAL SKILLS		
Area	Skills	
Augmentative and Alternative Communication	Boardmaker, The Picture Exchange Communication System (PECS), Tobii Dynavox	
Dysphagia	Fiberoptic Endoscopic Evaluation of Swallowing (FEES), Modified Barium Swallow Study (MBSS)	
Speech Motor Disorders	modified Prompts for Restructuring Oral Muscular Phonetic Targets (PROMPT), modified Dynamic Temporal and Tactile Cueing (DTTC)	
Voice Disorders	Kay Voice Analysis System (KayPENTAX), stroboscopy, modified Lee Silverman Voice Treatment (LSVT)	