

HEATHER MICHELLE KABAKOFF, PHD, CCC-SLP

New York University Grossman School of Medicine
Department of Neurology I Comprehensive Epilepsy Center
223 East 34th Street
New York, New York 10016

646.501.4253 / Heather.Kabakoff@nyulangone.org / www.heatherkabakoff.com

EDUCATION

Ph.D., Communicative Sciences and Disorders, New York University (NYU), 2021

M.S., Speech and Language Pathology (Bilingual-Spanish), Teachers College, Columbia University, 2011

B.A., Linguistics, Reed College, 2005

GRANT SUPPORT

American Speech-Language-Hearing Foundation New Investigators Research Grant, Voice in Motion: Predicting Changes in Voice and Speech Following Focused Ultrasound Surgery for Essential Tremor". 2024-25.

National Institutes of Health (NIDCD), Principal Investigator, "Cortical and Subcortical Underpinnings of Typical and Dysarthric Speech" (F32DC021094). 2023-26.

National Institutes of Health (NIDCD), Principal Investigator, "Establishing the Role of Sensorimotor Skills in Speech Development and Disorders" (F31DC018197). 2019-21.

ACTIVE RESEARCH PROJECTS AT NYU LANGONE

Assessing dysarthria severity before and after neurosurgical procedures: A prospective longitudinal study in patients with refractory movement disorders (Role: Co-Investigator)

- *Assess changes in voice and articulation in patients with essential tremor longitudinally over the course of high intensity focused ultrasound surgery.*

Behavioral and neural correlates of speech production during delayed auditory feedback in subthalamic nucleus: A prospective study in Parkinson's subjects undergoing deep brain stimulation surgery (Role: Research Study Team)

- *Measure sensorimotor control of speech while documenting voice and articulation in patients with Parkinson's disease with deep brain stimulation turned on and off.*

PROFESSIONAL LICENSURE

- Certificate of Clinical Competence in Speech-Language Pathology, *American Speech-Language-Hearing Association* (2012-current)
- Licensure in Speech-Language Pathology, *New York State* (2012-current)
- Teacher of Students with Speech Language Disabilities (*Professional, Bilingual Extension in Spanish*), *New York State Department of Education* (2011-current)

DISSERTATION

Kabakoff, H. (2021). *Establishing the role of sensorimotor skills in speech development and disorders* [Dissertation, New York University; Advisor: Tara McAllister]. New York, NY. <https://www.proquest.com/docview/2593037542?accountid=12768>

PEER-REVIEWED PUBLICATIONS

Eads, A., **Kabakoff, H.**, King, H., Preston, J.L., & McAllister, T. (in press). An articulatory analysis of American English rhotics in children with and without a history of residual speech sound disorder. Forthcoming in *Journal of Speech, Language, and Hearing Research*.

Kabakoff, H., Yu, L., Friedman, D., Dugan, P., Doyle, W., Devinsky, O., & Flinker, A. (2024). Timing and location of speech errors induced by direct cortical stimulation. *Brain Communications*, 6(2), 1-15. <https://doi.org/10.1093/braincomms/fcae053>.

Ayala, S.A., Eads, A., **Kabakoff, H.**, Swartz, M., Shiller, D.M., Hill, J., Hitchcock, E.R., Preston, J.L., & McAllister, T. (2023). Auditory and somatosensory development for speech in later childhood. *Journal of Speech, Language, and Hearing Research*, 66(4), 1252-1273. https://doi.org/10.1044/2022_JSLHR-22-00496.

McAllister, T., Eads, A., **Kabakoff, H.**, Phillips, E., Scott, M., Boyce, S., Whalen, D.H., Preston, J.L., (2022). Baseline stimulability predicts patterns of response to traditional and ultrasound biofeedback treatment for residual speech sound disorder. *Journal of Speech, Language, and Hearing Research*, 1-21. https://doi.org/10.1044/2022_JSLHR-22-00161.

Kabakoff, H., Gritsyk, O., Harel, D., Tiede, M., Preston, J.L., Whalen, D.H., & McAllister T. (2022). Characterizing sensorimotor profiles in children with residual speech sound disorder: a pilot study. *Journal of Communication Disorders*, 99(106230). 1-20. <https://doi.org/10.1016/j.jcomdis.2022.106230>.

Kabakoff, H., Beames, S.P., Tiede, M., Whalen, D.H., Preston, J.L., & McAllister, T. (2022). Comparing metrics for quantification of children's tongue shape complexity using ultrasound imaging. *Clinical Linguistics & Phonetics*, 1-27. <https://doi.org/10.1080/02699206.2022.2039300>.

Kabakoff, H., Harel, D., Tiede, M., Whalen, D.H., & McAllister, T. (2021). Extending ultrasound tongue shape complexity measures to speech development and disorders. *Journal of Speech, Language, and Hearing Research*, 64(7), 2557-2574. https://doi.org/10.1044/2021_JSLHR-20-00537.

Kabakoff, H., Kharlamenko, J., Levy, E.S., & Levi, S.V. (2021). Differences in perceptual assimilation following training. *JASA Express Letters*, 4(1), 1-7. <https://doi.org/10.1121/10.0003863>.

- Gritsyk, O., **Kabakoff, H.**, Li, J.J., Ayala, S., Shiller, D.M. & McAllister, T. (2021). Toward an index of oral somatosensory acuity: Comparison of three measures in adults. *Perspectives of the ASHA Special Interest Groups*, 6(2) 500-512. https://doi.org/10.1044/2021_PERSP-20-00218.
- Cialdella, L., **Kabakoff, H.**, Preston, J.L., Dugan, S.H., Spencer, S., Boyce, S., Tiede, M., Whalen, D.H., & McAllister, T. (2021). Auditory-perceptual acuity in rhotic misarticulation: baseline characteristics and treatment response. *Clinical Linguistics & Phonetics*, 35(1), 19-42. <https://doi.org/10.1080/02699206.2020.1739749>.
- Kabakoff, H.**, Go, G., and Levi, S.V. (2020). Training a non-native vowel contrast with a distributional learning paradigm results in improved perception and production. *Journal of Phonetics*, 78, 1-17. <https://doi.org/10.1016/j.wocn.2019.100940>.
- Campbell, H.**, & McAllister Byun, T. (2018). Deriving individualized /r/ targets from the acoustics of children's non-rhotic vowels. *Clinical Linguistics & Phonetics*, 32(1), 70-87. <http://dx.doi.org/10.1080/02699206.2017.1330898>.
- Campbell, H.**, Harel, D., Hitchcock, E., & McAllister Byun, T. (2018). Selecting an acoustic correlate for automated measurement of American English rhotic production in children. *International Journal of Speech-Language Pathology* [special issue: Bringing Advanced Speech Processing Technology to the Clinical Management of Speech Disorders], 20(6), 635-643. <http://doi.org/10.1080/17549507.2017.1359334>.
- McAllister Byun, T., **Campbell, H.**, Carey, H., Liang, W., Park, T. H., & Svirsky, M. (2017). Enhancing intervention for residual rhotic errors via app-delivered biofeedback: A case study. *Journal of Speech, Language, and Hearing Research*, 60(6S), 1810-1817. https://doi.org/10.1044/2017_JSLHR-S-16-0248.
- McAllister Byun, T., & **Campbell, H.** (2016). Differential effects of visual-acoustic biofeedback intervention for residual speech errors. *Frontiers in Human Neuroscience* [special issue: Technology & Communication Deficits: Latest Advancements in Diagnosis and Rehabilitation], 10(567), 1-17. <http://doi.org/10.3389/fnhum.2016.00567>.

AWARDS AND HONORS

2022	Society for the Neurobiology of Language Postdoctoral Merit Award
2018	ASHFoundation New Century Scholars Doctoral Scholarship
2018	Acoustical Society of America Stetson Scholarship
2017	NYSSLHA Doctoral Student Scholarship
2016	Acoustical Society of America Travel Award
2015	ASHA Student Research Travel Award
2014	ASHFoundation Graduate Student Scholarship
2010	Buffalo State Consortium Scholarship

TEACHING EXPERIENCE

Full Courses

Adjunct Instructor, Phonetics, NYU online (master's, Spring 2021)
Adjunct Instructor, Clinical Methods in Communicative Sciences & Disorders, NYU (undergraduate, Fall 2019, 2020)
Adjunct Instructor, Acoustic Phonetics, NYU (undergraduate, Spring 2020)
Adjunct Instructor, Speech Science Instrumentation, NYU online (master's, Spring/Summer 2019)
Adjunct Instructor, Speech Sound Disorders in Children, NYU (master's, Fall 2017-18)
Teaching Assistant and Recitation Instructor, Science of Language, NYU (undergraduate, Fall 2016, Spring 2017, 2019)
Teaching Assistant, Language Disorders in Children, Teachers College, Columbia University (master's, Fall 2010)

Invited Talks

"Lessons from the Other Side: Post-Doc Edition" (*panel*)

- NYU, Dept of Communicative Sciences and Disorders (New York, NY, Fall, 2022)

"Feedback-Driven Technology in Clinical Speech Settings" (*CE event & panel*)

- Molloy College, Dept of Communication Sciences and Disorders (Rockville Centre, NY, Spring 2022)

"Clinical Use of Ultrasound" (*training*)

- UltraFest IX, Master Class Series, Indiana University (Bloomington, IN, Fall 2020)

"Professional Development Session: Applying to a F31 Grant" (*panel*)

- NYU, Dept of Communicative Sciences and Disorders (New York, NY, Spring, 2021)
- NYU, Dept of Biostatistics, School of Global Public Health (New York, NY, Fall, 2020)

"Biofeedback for Treatment-Resistant Speech Errors" (*guest lecture*)

- UCLA, Introduction to Applied Phonetics (undergraduate, Summer 2020)

"Optimization of Biofeedback Treatment for Speech Sound Disorder" (*research talk*)

- Adelphi University Manhattan Center, Spring Lecture Series, Communication Sciences and Disorders (master's, 2019)

"Technology-Enhanced Approaches to Speech Sound Intervention" (*guest lecture*)

- Columbia University, Speech and Hearing Science (master's, three times 2017-18)

"Bilingual Speech and Language Pathology in Public Schools" (*guest lecture*)

- NYU, Language Disorders in Children (undergraduate, Spring 2016)

"Target Selection in App-based Intervention for Speech Sound Disorder" (*guest lecture*)

- Columbia University, Speech and Hearing Science (master's, Spring 2016)
- Montclair State University, Speech and Hearing Science (master's, Fall 2015)

"Technology in Intervention for Speech Sound Disorders" (*guest lecture*)

- PACE University, Intro Communication Disorders (undergraduate, Spring 2015-16)

PRESENTATIONS

- Kabakoff, H.**, Mogilner, A., Pourfar, M., & Flinker, A. (September 28, 2024). *Examining the effects of deep brain stimulation on speech in Parkinson's disease*. Poster presented at the International Congress of Parkinson's Disease and Movement Disorders. Philadelphia, PA.
- Ayala, S., Eads, A., **Kabakoff, H.**, Hitchcock, E., Preston, J.L., & McAllister, T. (November 17, 2022, Meritorious Poster Submission). *Auditory and somatosensory abilities of typically developing children*. Poster to be presented at the American Speech-Language Hearing Association Convention, New Orleans, LA.
- Eads, A., **Kabakoff, H.**, King, H., Preston, J.L., & McAllister, T. (November 17, 2022). *Articulatory analyses of American English /ɹ/ in typically developing children and children receiving ultrasound biofeedback*. Poster to be presented at the American Speech-Language Hearing Association Convention, New Orleans, LA.
- Eads, A., **Kabakoff, H.**, King, H., Preston, J.L., McAllister, T. (November 3, 2020). *An articulatory analysis of American English /ɹ/ in typically developing children and children receiving ultrasound biofeedback*. Talk presented at UltraFest X. Manchester, United Kingdom.
- Kabakoff, H.**, Yu, L., Friedman, D., Dugan, P., Doyle, W., Devinsky, O., & Flinker, A. (October 6, 2022, Meritorious Postdoctoral Submission). *Timing and location of speech errors induced by direct cortical stimulation*. Talk presented at the Society for the Neurobiology of Language Annual Meeting. Philadelphia, PA.
- Ayala, S., Eads, A., **Kabakoff, H.**, Preston, J., Hitchcock, E., & McAllister, T. (June 10, 2022). *Auditory and somatosensory abilities of children with and without residual speech sound disorder*. Poster presented at the International Child Phonology Conference, West Lafayette, IN.
- Eads, A., **Kabakoff, H.**, King, H., Preston, J., & McAllister, T. (June 10, 2022). *Tongue shapes for American English /ɹ/ in children with and without history of residual speech sound disorder*. Talk presented at the International Child Phonology Conference, West Lafayette, IN.
- Eads, A., **Kabakoff, H.**, Boyce, S., Preston, J.L., Whalen, D.H., & McAllister, T. (November 18, 2021, Meritorious Poster Submission). *Stimulability as a predictor of treatment response in an ultrasound biofeedback study of rhotic misarticulation*. Poster presented at the American Speech-Language Hearing Association Convention. Washington, D.C.
- Eads, A., **Kabakoff, H.**, Boyce, S., Preston, J.L., Whalen, D.H., & McAllister, T. (June 18, 2021). *Stimulability as a predictor of treatment response in an ultrasound biofeedback study of rhotic misarticulation*. Poster presented at the Boston Speech Motor Control Symposium. Online.

Kabakoff, H., Gritsyk, O., Li, J.J., Ayala, S., Hitchcock, E.R., Preston, J.L., Harel, D., Shiller, D.M., & McAllister, T. (December 15, 2020). *Tracking development of somatosensory acuity: Age-based comparison of three measures*. Poster presented at the 12th International Seminar on Speech Production. Online.

Kabakoff, H., Feeny, G.T., Harel, D., Tiede, M., Preston, J.L., Whalen, D.H., & McAllister T. (December 15, 2020). *Characterizing sensorimotor profiles in children with residual speech errors*. Poster presented at the 12th International Seminar on Speech Production. Online.

Gritsyk, O., **Kabakoff, H.**, Li, J.J., Ayala, S., Shiller, D. & McAllister, T. (December 11, 2020). *Establishing an index of somatosensory acuity: comparison of three measures in adults*. Poster presented at the 179th Meeting of the Acoustical Society of America. Online.

Kabakoff, H., McAllister, T., Whalen, D.H., & Tiede, M. (October 22, 2020). *Improving children's ultrasound-based tongue complexity measures by quantifying midsagittal alignment*. Talk presented at UltraFest IX. Online.

McAllister, T., Preston, J.L., **Kabakoff, H.**, Boyce, S., & Whalen, D.H. (November, 2020). *Who Responds to Ultrasound Biofeedback Treatment for Rhotic Misarticulation?* Proposal accepted at the American Speech-Language Hearing Association Convention. San Diego, California. (Convention cancelled).

Feeny, G.T., **Kabakoff, H.**, Phillips, E., Tiede, M., Preston, J.L. & McAllister, T. (June 21, 2019). *Longitudinal emergence of perception, production, and motor skills in preschoolers*. Poster presented at the Boston Speech Motor Control Symposium. Boston, MA.

Feeny, G.T., **Kabakoff, H.**, Phillips, E., Tiede, M., Preston, J.L., & McAllister, T. (June 15, 2019). *Motor and perceptual precursors of speech production: A longitudinal study*. Talk presented at the International Child Phonology Conference. Montréal, Québec, Canada.

Kabakoff, H., Feeny, G.T., Tiede, M., Preston, J.L. & McAllister, T. (May 15, 2019). *Detecting changes in lingual differentiation over the course of speech sound intervention*. Poster presented at the 177th Meeting of the Acoustical Society of America. Louisville, KY.

Kharlamenko, J., **Kabakoff, H.**, Levy, E.S., & Levi, S.V. (May 15, 2019). *Changes to perceptual assimilation following training*. Poster presented at the 177th Meeting of the Acoustical Society of America. Louisville, KY.

Cialdella, L., **Kabakoff, H.**, Preminger, K., & McAllister, T. (November 16, 2018). *Perceptual characteristics of children with rhotic misarticulation*. Poster presented at the American Speech-Language Hearing Association Convention. Boston, Massachusetts.

- Kabakoff, H.**, McAllister, T., Preston, J.L., Tiede, M., & Whalen, D.H. (November 15, 2018). *Identifying individualized sensorimotor predictors of response to ultrasound treatment*. Poster presented at the American Speech-Language Hearing Association Convention. Boston, Massachusetts.
- Campbell, H.**, Cialdella, L., & McAllister, T. (November 9, 2018). *Perception-production relations in residual speech errors before and after biofeedback training*. Poster presented at the 176th Meeting of the Acoustical Society of America. Victoria, BC, Canada.
- McCabe, C., **Campbell, H.**, Harel, D., & McAllister, T. (June 20, 2018). *Clinical evidence for the representational status of American English rhotic allophones*. Poster presented at LabPhon16. Lisbon, Portugal.
- Go, G., **Campbell, H.**, & Levi, S.V. (May 10, 2018). *The effect of distributional training on the production of non-native vowel contrasts*. Poster presented at the 175th Meeting of the Acoustical Society of America. Minneapolis, Minnesota.
- Campbell, H.**, Go, G., & Levi, S.V. (February 24, 2018). *A perceptual learning paradigm to support production of a non-native vowel contrast*. Poster presented at the Conference on Motor Speech. Savannah, GA.
- Campbell, H.**, Whalen, D.H., & McAllister, T. (February 22, 2018). *Extending lingual complexity measures to speech development and disorders*. Poster presented at the Conference on Motor Speech. Savannah, GA.
- Campbell, H.**, Whalen, D.H., & McAllister, T. (September 6, 2017). *Quantifying complexity of children's tongue contours using ultrasound imaging*. Poster presented at the "Workshop on Speech Disorders" at the Annual Meeting on Phonology. New York, NY.
- Campbell, H.**, Harel, D., Hitchcock, E., & McAllister Byun, T. (June 26, 2017). *Selecting an acoustic correlate for automated measurement of /r/ production in children*. Talk presented at the special session "Acoustics Outreach to Budding Scientists: Planting Seeds for Future Clinical and Physiological Collaborations" at the 173rd meeting of the Acoustical Society of America. Boston, MA.
- Campbell, H.**, & McAllister Byun, T. (June 1, 2017). *Selecting a metric for quantifying preschoolers' tongue shape complexity using ultrasound imaging*. Talk presented at the International Child Phonology Conference. Washington, D.C.
- Campbell, H.**, & McAllister Byun, T. (April 21, 2017). *App-Delivered Biofeedback for Speech Intervention: Pilot Testing and Development*. Poster presented at the New York State Speech-Language-Hearing Association Convention. Saratoga Springs, NY.
- Campbell, H.**, & McAllister Byun, T. (March 31, 2017). *Selecting a metric for quantifying preschoolers' tongue shape complexity using ultrasound imaging*. Poster presented at the Boston Speech Motor Control Mini-Symposium. Boston, MA.

- McAllister Byun, T., & **Campbell, H.** (November 18, 2016). *Visual-Acoustic Biofeedback for Residual /r/ Errors: Synthesis of Research & Implications for Practice*. Talk presented at the American Speech-Language Hearing Association Convention. Philadelphia, PA.
- McAllister Byun, T., **Campbell, H.**, Carey, H., Forsyth, J., Liang, W., Park, T., Sanders, T., Steklov, N. & Svirsky, M. (March 3, 2016). *Enhancing speech intervention through app-delivered biofeedback: Pilot testing*. Talk presented at the special session "Cutting-edge technology for speech rehabilitation" at the Motor Speech Conference. Newport Beach, CA.
- Campbell, H.**, & McAllister Byun, T. (November 12, 2015). *Individualized targets for acoustic biofeedback to treat residual /r/ errors*. Poster presented at the American Speech-Language Hearing Association Convention. Denver, CO.
- Crowley, C., Baigorri, M., Gold, D., Henry, A., Inniss, M., Torres, J., **Campbell, H.**, et al., (November 19, 2010). *Developing sustainability through student clinical experiences: five years in Bolivia*. Poster presented at the annual conference of the American Speech-Language-Hearing Association. Philadelphia, PA.

RESEARCH LAB AFFILIATIONS

- 2021- Flinker Speech Electrocoricography Lab, NYU Grossman School of Medicine
2013-21 Biofeedback Intervention Technology for Speech (BITS) Lab, NYU
2018-19 Speech Production Acoustics and Perception Lab, Graduate Center, CUNY
2016-19 Acoustic Phonetics and Perception Lab (APPL), NYU
2008-9 Language Learning and Bilingualism Lab, UT Austin

EMPLOYMENT

- 2021- *Postdoctoral Research Fellow*, Speech Language Electrocoricography Lab, NYU Langone Comprehensive Epilepsy Center, NYU Grossman School of Medicine
- 2019-23 *Independent Speech Provider*, New York City Department of Education
- 2019-21 *Research Clinician*, NYU PRIISM (Center for Practice and Research at the Intersection of Information, Society, and Methodology)
- 2016-21 *Adjunct Instructor*, NYU Communicative Sciences and Disorders Department
- 2020 *School-based Speech/Language Pathologist (Teletherapy)*, City Sounds NY
- 2018-19 *Research Clinician*, Research Foundation of the City University of New York
- 2016-18 *Adjunct Clinical Supervisor*, NYU Speech-Language-Hearing Clinic
- 2013-21 *Research Clinician*, Biofeedback Intervention Technology for Speech (BITS) Lab, NYU
- 2013-14 *Speech and Language Pathologist*, Auditory Processing Center at the Center for Hearing and Communication
- 2013-14 *Speech and Language Pathologist*, The Lang School
- 2011-13 *Clinical Fellow*, Speech/Language Pathologist, DREAM Charter School

INTERNAL AWARDS

2022	Best Dissertation Award Nomination (NYU Steinhardt)
2019	Doctoral Research and Travel Grant (NYU Steinhardt)
2018-19	Doctoral Students' Individual Research Fund (NYU CSD Department)
2018	Student Senators Council Conference Fund: Conference on Motor Speech
2017-18	Phyllis Tureen Fellowship (NYU CSD Department)
2016	Doctoral Student Travel Fund: Motor Speech Conference (NYU Steinhardt)
2009	Teachers College General and Biobehavioral Sciences Dept Scholarships

MENTORING PROGRAMS

2024	NYU Langone Neurology Department Staff Mentorship Program (mentor: Dr. Karyn Marsh)
2022	American Speech-Language-Hearing Association Lessons for Success Program (mentor: Dr. Edwin Maas)
2018-19	American Speech-Language-Hearing Association Pathways Program (mentor: Dr. Yana Yunusova)
2017-19	Acoustical Society of America Students Meet Members for Lunch (mentors: Dr. Chao-Yang Lee; Dr. William Katz; Dr. Anders Löfqvist)
2016-17	American Speech-Language-Hearing Association Mentoring Academic-Research Careers (MARC) Program (mentor: Dr. Ramesh Kaipa)

REVIEWING ACTIVITY

2024	Ad-hoc journal review, <i>Clin. Ling. Phonet.</i>
2022	Ad-hoc journal review, <i>J. Speech Lang. Hear. Res.</i>
2018,20	Ad-hoc journal reviews (2), <i>Clin. Ling. Phonet.</i>
2019	Ad-hoc journal review assist, <i>PLOS One</i> .
2019	Guest editor assist, <i>J. Speech Lang. Hear. Res.</i>
2016	Ad-hoc journal review assists (2), <i>J. Speech Lang. Hear. Res.</i>
2015	Ad-hoc journal review assist, <i>Am. J. Speech Lang. Pathol.</i>

PROFESSIONAL AFFILIATIONS

- Member, International Parkinson and Movement Disorder Society (2024-current)
- Member, Society for Neuroscience (2021)
- Member, Society for the Neurobiology of Language (2021-2022)
- Member, New York Academy of Sciences (2021-current)
- Member, National Postdoctoral Association (2021-current)
- Member, ASHA Special Interest Group 18, Telepractice, (2018-2020)
- Member, ASHA Special Interest Group 19, Speech Science, (2018-2020)
- Member, Acoustical Society of America (2016-2021)
- Member, Association for Laboratory Phonology (2016-2020)
- Member, New York State Speech-Language-Hearing Association (2016-2022)

LANGUAGES, SKILLS, WORKSHOPS

- Languages: Professional working proficiency in Spanish, experienced with Mandarin, Ancient Greek, and Basque
- Programs for speech processing and analysis: Proficient in Praat, Phon (*The PhonBank Project*), E-Prime, and the Computerized Speech Lab (CSL)
- Programs for statistical computing and graphics: Fluent in R, proficient in SPSS and STATA, and experienced with MATLAB
- Completed workshop: OpEd Project “Write to Change the World” public workshop (2020)
- Sounds in Motion Training (2012)
- Lee Silverman Voice Technique Certification (2010)