Tyler K. Perrachione

Department of Speech, Language, and Hearing Sciences
College of Health and Rehabilitation Sciences: Sargent College
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Boston, MA 02215   1.617.358.7410

ACADEMIC APPOINTMENTS

Current

2020 – **Associate Professor**
Department of Speech, Language, and Hearing Sciences
College of Health and Rehabilitation Sciences: Sargent College
Boston University (Boston, Mass.)

2020 – **Faculty Affiliate**
Program in Speech and Hearing Bioscience and Technology
Division of Medical Sciences
Harvard Medical School (Cambridge, Mass.)

2013 – **Research Affiliate**
McGovern Institute for Brain Research
Massachusetts Institute of Technology (Cambridge, Mass.)

Previous

2013 – 2020 **Assistant Professor**
Department of Speech, Language, and Hearing Sciences
College of Health and Rehabilitation Sciences: Sargent College
Boston University (Boston, Mass.)

2013 **Lecturer**
Department of Speech-Language Pathology and Audiology
Bouvé College of Health Sciences
Northeastern University (Boston, Mass.)

2012 – 2013 **Postdoctoral Associate**
McGovern Institute for Brain Research
Massachusetts Institute of Technology (Cambridge, Mass.)

ACADEMIC AFFILIATIONS

Current

2020 –	*Affiliated Faculty*: Department of Biomedical Engineering
2020 –	*Director*: Hearing Research Center
2019 –	*Affiliated Faculty*: Department of Linguistics
2014 –	*Executive Member*: Center for Systems Neuroscience
2014 –	*Joint Programmatic Appointment*: Undergraduate Program in Neuroscience
2014 –	*Member*: Hearing Research Center
2013 –	*Affiliated Faculty*: Graduate Program for Neuroscience
2013 –	*Affiliated Faculty*: Program in Computational Neuroscience
2013 –	*Director*: Communication Neuroscience Research Laboratory

Previous

2019 – 2020	*Associate Director*: Hearing Research Center
2016 – 2018	*Member*: Center for Research in Sensory Communications and Neural Technology
2015 – 2019	*Affiliated Faculty*: Program in Linguistics
2013 – 2016	*Member*: Center for Computational Neuroscience & Neural Technology
2013 – 2015	*Affiliated Faculty*: Program in Applied Linguistics

EDUCATION

2012	**Ph.D., Neuroscience** **Massachusetts Institute of Technology** (Cambridge, Mass.) *Major field*: Systems Neuroscience; *Minor field*: Speech and Hearing Science *Thesis*: "Impaired learning of phonetic consistency and generalized neural adaptation deficits in dyslexia."
2007	**M.A., Linguistics** **Northwestern University** (Evanston, Ill.) *Thesis*: "A linguistic basis for the language-familiarity effect in talker identification."
2007	**B.A., Linguistics** and **Cognitive Science**, *cum laude* **Northwestern University** (Evanston, Ill.) *Major emphasis*: Cognitive Neuroscience, with departmental honors.
2005	Visiting Student, Tsinghua University (Beijing, PR China) *Studies*: Mandarin Chinese, history and political economy of China.
2001 – 2003	Post-secondary studies, Truman State University (Kirksville, Mo.) *Studies*: Mandarin Chinese, French, Italian, economics, and accounting.
1999 – 2003	Kirksville Senior High School, (Valedictorian) (Kirksville, Mo.) General studies, with advanced courses in chemistry, physics, and history.

RESEARCH INTERESTS

- Multiple timescales of neural plasticity and their role in speech, language, and communication
- Developmental disorders of language and reading (specific language impairment, dyslexia, autism)
- Neural and psychological foundations of processing variability in speech perception
- Human voice recognition and talker identification
- Brain bases of complex auditory processing in speech and language

RESEARCH FUNDING

As Principal Investigator

2018 – 2021	NIH R03 HD096098	PI: Tyler Perrachione	Total Costs: $165,000
	(NICHD) Cortical development and neuroanatomical anomalies in developmental dyslexia Role: Principal Investigator		
2018 – 2020	NSF BCS 1840674	PI: Andrew Oxenham	Total Costs: $590,313
	NeuroDataRR. Collaborative Research: Testing the relationship between musical training and enhanced neural coding and perception in noise Role: Site PI		
2016 – 2018	NARSAD Young Investigator Grant	PI: Tyler Perrachione	Total Costs: $70,000
	(Brain & Behavior Research Foundation) Dysfunction of cortical systems for language and working memory in autism spectrum disorder Role: Principal Investigator		
2015 – 2019	NIH R03 DC014045	PI: Tyler Perrachione	Total Costs: $491,100
	(NIDCD) Neural bases of phonological working memory in developmental language disorders Role: Principal Investigator		

As Co-Investigator

2020 – 2021	New Century Scholars Research Grant	PI: Sung-Joo Lim	Total Costs: $25,000
	(American Speech-Language-Hearing Foundation) Neural systems for attentional control in speech processing Role: Sub-Award PI		
2016 – 2022	NIH R01 DC004545	PI: Gerald Kidd	Total Costs: $2,790,865
	(NIDCD) Central factors in auditory masking Role: Co-Investigator		

Research Support for Trainees

2020 – 2025	NIH K99 DC018829	PI: Sarah Villard	Total Costs: $627,686
	(NIDCD) Listening effort under auditory masking conditions in persons with acquired aphasia Role: Co-Mentor		

2019 – 2021	NIH F31 HD100101	PI: Sara Beach	Total Costs: $70,294

(NICHD) Predictive coding in typical speech perception and dyslexia
Role: Co-Sponsor

2018 – 2021	NIH F32 MH117933	PI: Anila D'Mello	Total Costs: $178,866

(NIMH) Characterizing neural adaptation in autism spectrum disorder
Role: Co-Sponsor

Submissions & Pending Awards

2021 – 2023	NIH R21 HD105172	PI: Tyler Perrachione	Requested: $453,750

(NICHD) Intracortical myelination in brain development and dyslexia
Role: Principal Investigator

2021 – 2026	NIH R01 DC019344	PI: Tyler Perrachione	Requested: $2,072,396

(NIDCD) The role of talker cues in speech processing in normal and impaired hearing
Role: Principal Investigator

PROFESSIONAL HONORS AND AWARDS

2019	Early Career Travel Subsidy, Acoustical Society of America ($500)
2013 – 2016	Peter Paul Career Development Professorship, Boston University ($120,000)
2012	Walle Nauta Award for Continuing Dedication to Teaching, MIT Department of Brain and Cognitive Sciences
2011	Walle Nauta Award for Continuing Dedication to Teaching, MIT Department of Brain and Cognitive Sciences
2010	Angus McDonald Award for Excellence in Undergraduate Teaching, MIT Department of Brain and Cognitive Sciences
2008 – 2011	National Science Foundation Graduate Research Fellowship ($121,500)

PEER-REVIEWED JOURNAL PUBLICATIONS (* denotes students and trainees)

*Scott, T.L., *Haenchen, L., Dailiri, A., *Chartove, J., Guenther, F.H. & **Perrachione, T.K.** (2020). Noninvasive neurostimulation of left ventral motor cortex enhances sensorimotor adaptation in speech production. *Brain and Language*, 209, 104840.

*Kapadia, A.M. & **Perrachione, T.K.** (2020). Selecting among competing models of talker adaptation: Attention, cognition, and memory in speech processing efficiency. *Cognition*, 204, 104393.

Wagley, N., **Perrachione, T.K.**, Ostrovskaya, I., Ghosh, S.S., Saxler, P.K., Lymberis, J., Wexler, K., Gabrieli, J.D.E., & Kovelman, I. (2019). Persistent neurobehavioral markers of developmental morphosyntax errors in adults. *Journal of Speech, Language, and Hearing Research*, 62, 4497-4508.

Perrachione, T.K., *Furbeck, K.T. & *Thurston, E.J. (2019). Acoustic and linguistic factors affecting perceptual similarity judgments of voices. *Journal of the Acoustical Society of America*, 146, 3383-3399.

*Scott, T.L. & **Perrachione, T.K.** (2019). Common cortical architectures for phonological working memory identified in individual brains. *NeuroImage*, 202, 116096.

*Choi, J.Y. & **Perrachione, T.K.** (2019). Noninvasive neurostimulation of left temporal lobe disrupts rapid talker adaptation in speech processing. *Brain and Language*, 196, 104655.

*Choi, J.Y. & **Perrachione, T.K.** (2019). Time and information in perceptual adaptation to speech. *Cognition*, 192, 103982.

*Lim, S.-J., Shinn-Cunningham, B.G., & **Perrachione, T.K.** (2019). Effects of talker continuity and speech rate on auditory working memory. *Attention, Perception, & Psychophysics*, 81, 1167-1177.

*McLaughlin, D.E., *Carter, Y., *Cheng, C.C., & **Perrachione, T.K.** (2019). Hierarchical contributions of linguistic knowledge to talker identification: Phonological versus lexical familiarity. *Attention, Perception, & Psychophysics*, 81, 1088-1107.

Qi, Z., Han, M., Wang, Y., de los Angeles, C., Liu, Q., Garel, K., Chen, E., Whitfield-Gabrieli, S., Gabrieli, J.D.E., & **Perrachione T.K.** (2019). Speech processing and plasticity in the right hemisphere predict real-world foreign language learning in adults. *NeuroImage*, 192, 76-87.

*Choi, J.Y., *Hu, E., & **Perrachione, T.K.** (2018). Varying acoustic-phonetic similarity reveals talker normalization is obligatory in speech processing. *Attention, Perception, & Psychophysics*, 80, 784-797.

Best, V., Ahlstrom, J.B., Mason, C.R., Roverud, E., **Perrachione, T.K.**, Kidd, G., & Dubno, J.R. (2018). Talker identification: Effects of masking, hearing loss and age. *Journal of the Acoustical Society of America*, 143, 1085-1092.

Perrachione, T.K., Ghosh, S.S., Ostrovskaya, I., Gabrieli, J.D.E., & Kovelman, I. (2017). Phonological working memory for words and nonwords in cerebral cortex. *Journal of Speech, Language, and Hearing Research*, 60, 1959-1979.

Christodoulou, J.A., Murtagh, J., Cyr, A., **Perrachione, T.K.**, Chang, P., Halverson, K., Hook, P., Yendiki, A., Ghosh, S.S., & Gabrieli, J.D.E. (2017). Relation of white-matter microstructure to reading ability and disability in beginning readers. *Neuropsychology*, *31*, 508-515.

Perrachione, T.K., Del Tufo, S.N., Winter, R., Murtagh, J., Cyr, A., Chang, P., Halverson, K., Ghosh, S.S., Christodoulou, J.A. & Gabrieli, J.D.E. (2016). Dysfunction of rapid neural adaptation in dyslexia. *Neuron*, *92*, 1383-1397.

Lu, C., Qi, Z., Harris, A., Wisman Weil, L., Han, M., Halverson, K., **Perrachione, T.K.**, Kjelgaard, M., Wexler, K., Tager-Flusberg, H., & Gabrieli, J.D.E. (2016). Shared neuroanatomical substrates of impaired phonological working memory across reading disability and autism. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, *1*, 169-177.

Perrachione, T.K., Stepp, C.E., Hillman, R.E., & Wong, P.C.M. (2014). Talker identification across source mechanisms: Experiments with laryngeal and electrolarynx speech. *Journal of Speech, Language, and Hearing Research*, *57*, 1651-1665.

Perrachione, T.K., Fedorenko, E.G., Vinke, L., Gibson, E., Dilley, L.C. (2013). Evidence for shared cognitive processing of pitch in language and music. *PLoS One*, 8(8): e73372.

Perrachione, T.K. & Ghosh, S.S. (2013). Optimized design and analysis of sparse-sampling fMRI experiments. *Frontiers in Neuroscience*, 7, 55.

Perrachione, T.K., Del Tufo, S.N., Gabrieli, J.D.E. (2011). Human voice recognition depends on language ability. *Science*, *333*, 595.

Perrachione, T.K., Lee, J., Ha, L.Y.Y., & Wong, P.C.M. (2011). Learning a novel phonological contrast depends on interactions between individual differences and training paradigm design. *Journal of the Acoustical Society of America*, *130*, 461-472.

Perrachione, T.K., Chiao, J.Y. & Wong, P.C.M. (2010). Asymmetric cultural effects on perceptual expertise underlie an own-race bias for voices. *Cognition*, *114*, 44-52.

Perrachione, T.K., Pierrehumbert, J.B. & Wong, P.C.M (2009). Differential neural contributions to native- and foreign-language talker identification. *Journal of Experimental Psychology – Human Perception and Performance*, *35*, 1950-1960.

Wong, P.C.M., **Perrachione, T.K.**, Margulis, E.H. (2009). Effects of asymmetric cultural experiences on the auditory pathway: Evidence from music. *Annals of the New York Academy of Sciences*, *1169*, 157-163.

Wong, P.C.M., **Perrachione, T.K.**, Gunasekera, G., Chandrasekaran, B. (2009). Communication disorders in speakers of tone languages: Etiological bases and clinical considerations. *Seminars in Speech and Language*, *30,* 162-173.

Perrachione, T.K. & Perrachione, J.R. (2008). Brains and brands: Developing mutually informative research in neuroscience and marketing. *Journal of Consumer Behaviour*, 7, 303-318.

Perrachione, T.K. & Wong, P.C.M. (2007). Learning to recognize speakers of a non-native language: Implications for the functional organization of human auditory cortex. *Neuropsychologia*, *45*, 1899-1910.

Wong, P.C.M., **Perrachione, T.K.** & Parrish, T.B. (2007). Neural characteristics of successful and less successful speech and word learning in adults. *Human Brain Mapping, 28*, 995-1006.

Wong, P.C.M. & **Perrachione, T.K.** (2007). Learning pitch patterns in lexical identification by native English-speaking adults. *Applied Psycholinguistics*, *28*, 565-585.

CHAPTERS IN EDITED VOLUMES

Perrachione, T.K. (2019). Recognizing speakers across languages, in S. Frühholz & P. Belin (Eds.), *The Oxford Handbook of Voice Perception*, Oxford: Oxford University Press.

PEER-REVIEWED CONFERENCE PROCEEDINGS (* denotes students and trainees)

*Carter, Y.D., *Lim, S.-J. & **Perrachione, T.K.** (2019). Talker continuity facilitates speech processing independent of listeners' expectations. *19th International Congress of Phonetic Sciences* (Melbourne, August 2019).

*Choi, J.Y. & **Perrachione, T.K.** (2019). Rapid adaptation to talker-specific phonetic detail is disrupted by noninvasive brain stimulation. *19th International Congress of Phonetic Sciences* (Melbourne, August 2019).

*Kapadia, A.M. & **Perrachione, T.K.** (2019). Processing costs imposed by talker variability do not scale with number of talkers. *19th International Congress of Phonetic Sciences* (Melbourne, August 2019).

*Lim, S.-J., *Qu, A., *Tin, J.A.A., & **Perrachione, T.K.** (2019). Attentional reorientation explains processing costs associated with talker variability. *19th International Congress of Phonetic Sciences* (Melbourne, August 2019).

*Scott, T.L., *Haenchen, L., Dailiri, A., *Chartove, J., Guenther, F.G., **Perrachione, T.K.** (2019). Speech motor adaptation during perturbed auditory feedback is enhanced by noninvasive brain stimulation. *19th International Congress of Phonetic Sciences* (Melbourne, August 2019).

Perrachione, T.K., *Dougherty, S.C., *McLaughlin, D.E., & *Lember, R.A. (2015). The effects of speech perception and speech comprehension on talker identification. *18th International Congress of Phonetic Sciences* (Glasgow, August 2015).

*Petitti, E., & **Perrachione, T.K.** (2015). A fundamental bias for residue pitch perception in tone language speakers. *18th International Congress of Phonetic Sciences* (Glasgow, August 2015).

*McLaughlin, D.E., *Dougherty, S.C., *Lember, R.A., & **Perrachione, T.K.** (2015). Episodic memory for words enhances the language familiarity effect in talker identification. *18th International Congress of Phonetic Sciences* (Glasgow, August 2015).

Perrachione, T.K., Del Tufo, S.N., Ghosh, S.S., Gabrieli, J.D.E. (2011). Phonetic variability in speech perception and the phonological deficit in dyslexia. *17th Meeting of the International Congress of Phonetic Sciences*, (Hong Kong, August 2011).

Lee, J.Y., **Perrachione, T.K.**, Dees, T.M., & Wong, P.C.M. (2007). Differential effects of stimulus variability and learners' pre-existing pitch perception ability in lexical tone learning by native English speakers. *16th Meeting of the International Congress of Phonetic Sciences* (Saarbrücken, Germany, August 2007).

Perrachione, T.K. & Wong, P.C.M. (2007). Increased left-hemisphere contribution to native- versus foreign-language talker identification revealed by dichotic listening. *16th Meeting of the International Congress of Phonetic Sciences* (Saarbrücken, Germany, August 2007).

MANUSCRIPTS (* denotes students and trainees)

In revision or revisions submitted:

Alho, J., Khan, S., Bharadwaj, H., Mamashli, F., Joseph, R.M., **Perrachione, T.K.**, Losh, A., McGuiggan, N., Hämäläinen, M.S., & Kenet, T. (submitted). Altered maturation and atypical preattentive cortical processing of meaningful speech in autism spectrum disorder.

*Li, R., **Perrachione, T.K.**, Tourville, J.A., & Kiran, S. (submitted). Representation of semantic typicality in brain activation in healthy adults and individuals with aphasia: A multi-voxel pattern analysis.

Ozernov-Palchik, O., *Beach, S.D., Brown, M., Centanni, T., Gaab, N., Kuperberg, G., **Perrachione, T.K.**, Gabrieli, J.D.E. (submitted). Speech-specific perceptual adaptation deficits in children and adults with dyslexia.

*Lee, J.J. & **Perrachione, T.K.** (submitted). Implicit and explicit learning in talker identification.

*Lim, S.-J., *Carter, Y.D., *Njoroge, J.M., Shinn-Cunningham, B.G., & **Perrachione, T.K.** (submitted). Talker discontinuity disrupts attention to speech: Evidence from EEG and pupillometry.

Submitted for peer review:

*Fleming, J.T., *Njoroge, J.M., Noyce, A.L., **Perrachione, T.K.**, & Shinn-Cunningham, B.G. (submitted). Similarity in sensory modality and information domain impair processing in a dual-task context: Evidence from behavior, pupillometry, and EEG.

*Beach, S.D., *Lim, S.-J., Cardenas-Iniguez, C., Eddy, M.D., Gabrieli, J.D.E., & **Perrachione, T.K.** (submitted). Electrophysiological correlates of perceptual prediction error are attenuated in dyslexia.

*Choi, J.Y., *Kou, R.S.N., & **Perrachione, T.K.** (submitted). Distinct attentional and cognitive processes in talker adaptation.

In preparation by trainees and collaborators:

Learning to identify emotional voices. (with *Shen, L., *Kapadia, A.M. & Wong, P.C.M.)

Neural responses during procedural memory tasks are related to foreign language learning outcomes. (with *Lim, S.-J., *Babcock, S., Han, M., Salvatore, J. Minas, J.E., Finn, A.S., Gabrieli, J.D.E., & Qi, Z.)

Subject-specific conjunction maps reveal functional dissociation between language and working memory. (with *Scott, T.L.)

Who's at the cocktail party? Effects of masking noise on talker identification. (with Best, V., *Razak, A., *Thurston, E.J., Kidd, G., & Swaminathan, J.)

Differential effects of listeners' phonetic and lexical expectations on speech processing efficiency. (with *Carter, Y.D. & *Lim, S.-J.)

Foreign language talker identification training does not generalize to new talkers. (with *Lee, J.J.)

Structural predictors and functional outcomes of foreign language speech-sound learning. (with *Choi, J.Y., Finn, A.S., Minas, J.E., Gabrieli, J.D.E., et al.)

Spoken language processing improves memory for talker identity. (with *McLaughlin, D.E., *Dougherty, S.C., & *Lember, R.A.)

I've heard enough: Reliability and stability of shortened versions of an auditory functional language localizer. (with *Lee, J.J. & *Scott, T.L.)

Effects of indexical, phonetic, and phonological variability on spoken word recognition efficiency. (with *Kapadia, A.M.)

Tone and non-tone languages speakers are biased to different experiences of a fundamental auditory illusion. (with *Petitti, E.M., et al.)

Auditory stream discontinuity interferes with speech processing efficiency. (with *Lim, S.-J. & Shinn-Cunningham, B.G.)

Convergence of phonological awareness in text and speech in dyslexia and typical reading development. (with *Torre, G.A., et al.)

Speech perception in noise reveals dual mechanisms for talker adaptation. (with *Saupe, M., *Choi, J.Y., *Lim, S.-J., & Best, V.)

Talker discontinuity disrupts speech processing efficiency. (with *Lim, S.-J. & *Tin, J.A.A.)

Talker adaptation is independent of talker familiarity. (with *Nastaskin, I. & *Lim, S.-J.)

The language-familiarity effect in talker identification by bilinguals. (with *Dougherty, S.C.)

Contextual adaptation in dyslexia across development. (with Ozernov-Palchik, O., Brown, M., *Beach, S.D., Georgan, W., Centanni, T., Gaab N., Kuperberg, G., Gabrieli, J.D.E.)

Individual differences in the acquisition of the complex three-way Korean plosive contrast. (with Finn, A.S., Minas, J.E., Gabrieli, J.D.E., et al.)

CONFERENCE PRESENTATIONS (* denotes students and trainees)

*Alam, A., **Perrachione, T.K.**, Kidd, G., & Villard, S. (submitted). Listening effort under two types of auditory masking conditions, as measured by pupillometry.

Perrachione, T.K. & Oppenheimer, B.B. (2021). A listening laboratory-based approach to teaching clinical phonetic transcription. *180th Meeting of the Acoustical Society of America* (Online, June 2020).

*Choi, J.Y., *Kou, R.S.N., & **Perrachione, T.K.** (2020). Parametrically varying speech adapter length suggests two mechanisms for talker adaptation. *179th Meeting of the Acoustical Society of America* (Online, December 2020).

*Lee, J.J., *Tin, J.A.A., & **Perrachione, T.K.** (2020). Foreign language talker identification training does not generalize to new talkers. *179th Meeting of the Acoustical Society of America* (Online, December 2020).

*Lim, S.-J., Shinn-Cunningham, B.G., & **Perrachione, T.K.** (2020). Auditory stream discontinuities interfere with speech processing efficiency. *179th Meeting of the Acoustical Society of America* (Online, December 2020).

*Saupe, M., Best, V.A., *Lim, S.-J., *Choi, J.Y., & **Perrachione, T.K.** (2020). Processing mixed talkers in noise suggests two mechanisms for perceptual adaption to speech. *179th Meeting of the Acoustical Society of America* (Online, December 2020).

*Lee, J.J., *Scott, T.L., & **Perrachione, T.K.** (2020). Reliability and stability in shortened versions of an auditory functional language localizer. *12th Annual Meeting of the Society for the Neurobiology of Language* (Online, October 2020).

*Fleming, J.T., *Njoroge, M., **Perrachione, T.K.**, Shinn-Cunningham, B.G., & Noyce, A.L., (2020). Task interference incurs greater costs than task switching: Simultaneous EEG-pupillometry investigation of visual and auditory working memory. *20th Annual Meeting of the Vision Sciences Society* (St. Pete Beach, Florida, March 2020).

*Choi, J.Y., *Torre, G.A., *Carter, Y.D., *Scott, T.L., Ghosh, S.S., & **Perrachione, T.K.** (2020). Multivoxel pattern analyses of brain structure to classify dyslexia. *27th Annual Meeting of the Cognitive Neuroscience Society* (Boston / Online, March 2020).

*Fleming, J.T., *Njoroge, M., Noyce, A.L., **Perrachione, T.K.**, & Shinn-Cunningham, B.G. (2020). Sensory modality and information domain modulate behavioral and neural signatures of working memory interference. *27th Annual Meeting of the Cognitive Neuroscience Society* (Boston / Online, March 2020).

*Kapadia, A.M., *Torre, G.A., *Scott, T.L., *Carter, Y.D., & **Perrachione, T.K.** (2020). Macroanatomical morphology of superior temporal lobe in adults with dyslexia. *27th Annual Meeting of the Cognitive Neuroscience Society* (Boston / Online, March 2020).

*Li, R., **Perrachione, T.K.**, Tourville, J., & Kiran, S. (2020). Predicting semantic category typicality from brain activation patterns in healthy adults and individuals with aphasia: A multi-voxel pattern analysis study. *27th Annual Meeting of the Cognitive Neuroscience Society* (Boston / Online, March 2020).

*Torre, G.A., *Choi, J.Y., *Scott, T.L., *Carter, Y.D., & **Perrachione, T.K.** (2020). Differences in left fusiform gyrus morphometry in adults with dyslexia: Voxel- and surface-based analyses. *27th Annual Meeting of the Cognitive Neuroscience Society* (Boston / Online, March 2020).

*Scott, T.L., *Carter, Y.D., *Choi, J.Y., & **Perrachione, T.K.** (2019). Relationships between phonological working memory and language processing in adults with dyslexia. *11th Annual Meeting of the Society for the Neurobiology of Language* (Helsinki, August 2019).

*Choi, J.Y.& **Perrachione, T.K.** (2019). Noninvasive neurostimulation reveals a causal role for left superior temporal lobe in speech adaptation. *11th Annual Meeting of the Society for the Neurobiology of Language* (Helsinki, August 2019).

Perrachione, T.K. & *Scott, T.L. (2019). Functional neuroanatomy of phonological working memory in dyslexia. *4th Annual Meeting of the New England Research on Dyslexia Society* (Boston, June 2019).

*Carter, Y.D., *Kapadia, A.M., *Lim, S.-J., & **Perrachione, T.K.** (2019). Facilitation of speech processing by both expected and unexpected talker continuity. *177th Meeting of the Acoustical Society of America* (Louisville, May 2019).

*Kapadia, A.M., *Tin, J.A.A. & **Perrachione, T.K.** (2019). Effects of type, token, and talker variability in speech processing efficiency. *177th Meeting of the Acoustical Society of America* (Louisville, May 2019).

*Lee, J.J. & **Perrachione, T.K.** (2019). Speech exposure familiarizes listeners with talkers' vocal identity. *177th Meeting of the Acoustical Society of America* (Louisville, May 2019).

*Lim, S.-J., *Tin, J.A.A., *Qu, A., & **Perrachione, T.K.** (2019). Attention vs. adaptation in processing talker variability in speech. *177th Meeting of the Acoustical Society of America* (Louisville, May 2019).

Perrachione, T.K. (2019). Talker variability, auditory attention, and speech processing efficiency. *177th Meeting of the Acoustical Society of America* (Louisville, May 2019). *(Invited presentation)*

Perrachione, T.K. (2019). Talker adaptation as efficient allocation of auditory attention. *13th Meeting of the Auditory Cognitive Neuroscience Society.* (Gainesville, January 2019). *(Invited presentation)*

*Scott, T.L. & **Perrachione, T.K.** (2018). Functional dissociation of language and working memory revealed by pattern analysis of subject-specific conjunction maps. *48th Annual Meeting of the Society for Neuroscience* (San Diego, November 2018).

*Scott, T.L., *Dougherty, S.C., *Choi, J.Y. & **Perrachione, T.K.** (2018). Nonword repetition recruits distinct and overlapping nodes of language and working memory networks. *10th Annual Meeting of the Society for the Neurobiology of Language* (Quebec City, August 2018).

*Lim, S.-J., *Tin, J.A.A. Shinn-Cunningham, B.G., & **Perrachione, T.K.** (2018). Impact of talker adaptation on speech processing and working memory. *175th Meeting of the Acoustical Society of America* (Minneapolis, May 2018).

*Furbeck, K.T., *Thurston, E.J., *Tin, J.A.A., & **Perrachione, T.K.** (2018). Perceptual similarity judgments of voices: Effects of talker and listener language, vocal source acoustics, and time-reversal. *175th Meeting of the Acoustical Society of America* (Minneapolis, May 2018).

*Lim, S.-J., *Tin, J.A.A., Shinn-Cunningham, B.G., & **Perrachione, T.K.** (2018). Impact of talker adaptation on speech processing and working memory. *25th Annual Meeting of the Cognitive Neuroscience Society* (Boston, March 2018).

Perrachione, T.K., *Babcock, S., Han, M., Salvatore, J., Minas, J., Finn, A.S., Gabrieli, J.D.E., & Qi, Z. (2018). Neural responses during procedural memory tasks are related to foreign language learning outcomes. *25th Annual Meeting of the Cognitive Neuroscience Society* (Boston, March 2018).

*Scott, T.L., *Dougherty, S.C., *Choi, J.Y. & **Perrachione, T.K.** (2018). Common recruitment of neural resources for phonological working memory regardless of behavioral demands. *25th Annual Meeting of the Cognitive Neuroscience Society* (Boston, March 2018).

*Lim, S.-J., Shinn-Cunningham, B.G., & **Perrachione, T.K.** (2017). Effects of voice continuity and stimulus rate on auditory working memory. *Advances and Perspectives in Auditory Neuroscience XV* (Washington, DC, November. 2017).

*Beach, S.D., Centanni, T.M., *Ozernov-Palchik, O., May, S.C., Pantazis, D. **Perrachione, T.K.**, & Gabrieli, J.D.E. (2017). Neural correlates of atypical categorical perception in dyslexia. *9th Annual Meeting of the Society for the Neurobiology of Language* (Baltimore, November. 2017).

Qi, Z., Han, M., Wang, Y., de los Angeles, C., Liu, Q., Garel, K., Chen, E.S., Whitfield-Gabrieli S., Gabrieli, J.D.E., & **Perrachione T.K.** (2017). Speech processing and plasticity in the right hemisphere predict real-world foreign language learning in adults. *9th Annual Meeting of the Society for the Neurobiology of Language* (Baltimore, November 2017).

*Ozernov-Palchik, O., Brown, M., Norton, E.S., Georgan, W., **Perrachione, T.K.**, Beach, S.D., Wolf, M., Kuperberg, G., Gaab, N., & Gabrieli, J.D.E. (2017). Investigating lexical and perceptual learning effects on phonetic processing in young children with dyslexia. *24th Annual Meeting of the Society for the Scientific Study of Reading* (Halifax, July 2017).

*Haenchen, L., Daliri, A., *Dougherty, S.C., *Thurston, E.J., *Chartove, J., Guenther, F.H., & **Perrachione, T.K.** (2017). Sensorimotor adaptation to auditory perturbation of speech is facilitated by noninvasive brain stimulation. *173rd Meeting of the Acoustical Society of America* (Boston, June 2017).

*Razak, A., *Thurston, E.J., *Gustainis, L.E., Kidd, G. Jr., Swaminathan, J., & **Perrachione, T.K.** (2017). Talker identification in three types of background noise. *173rd Meeting of the Acoustical Society of America* (Boston, June 2017).

*McLaughlin, D.E., *Cheng, C.C., *Thurston, E.J., *Dougherty, S.C., & **Perrachione, T.K.** (2017). Talker identification is not improved by lexical access in the absence of familiar phonology. *173rd Meeting of the Acoustical Society of America* (Boston, June 2017).

*Scott, T.L., *Dougherty, S.C., *Choi, J.Y., & **Perrachione, T.K.** (2017). The role of language-specific vs. domain-general systems in phonological working memory. *23rd Annual Meeting of the Organization for Human Brain Mapping* (Vancouver, June 2017).

Perrachione, T.K., *Dougherty, S.C., *Choi, J.Y., *Hu, E.R. (2016). Noninvasive brain stimulation to facilitate foreign language speech-sound learning in low-aptitude learners. *172nd Meeting of the Acoustical Society of America* (Honolulu, November 2016).

Best, V. Ahlstrom, J.B. Mason, C., Roverud, E., **Perrachione, T.K.**, Kidd, G., Jr., Dubno, J.R. (2016). Talker identification: effects of masking, age and hearing loss. *172nd Meeting of the Acoustical Society of America* (Honolulu, November 2016).

Qi, Z., Sanchez, Y., de los Angeles, C., Harris, A., Wisman Weil, L., Halverson, K., Goetz, C., Han, M., **Perrachione, T.K.**, Kjelgaard, M., Wexler, K., Tager-Flusberg, H., & Gabrieli, J.D.E. (2016). Neural development of phonological working memory: Interplay between language and memory systems. *7th Annual Meeting of the Society for the Neurobiology of Language*, (London, August 2016).

*Choi, J.Y., *Hu, E.R., & **Perrachione, T.K.** (2016). Orthogonal interference of indexical information occurs even when phonetic contrasts are unambiguous across talkers. *171st Meeting of the Acoustical Society of America* (Salt Lake City, May 2016).

Perrachione, **T.K.** & *Choi, J.Y. (2016). Extrinsic talker normalization via rapid accumulation of talker-specific phonetic detail. *171st Meeting of the Acoustical Society of America* (Salt Lake City, May 2016).

*Dougherty, S.C. & **Perrachione, T.K.** (2016). The language-familiarity effect in talker identification by highly proficient bilinguals depends on second-language immersion. *171st Meeting of the Acoustical Society of America* (Salt Lake City, May 2016).

Qi Z., Pantazis D., de los Angeles C., **Perrachione T.K.**, & Gabrieli J.D.E. (2015). Sensitivity to speech distributional information in children with autism: a MEG study. *International Meeting for Autism Research*, (Shanghai, November 2015).

Qi, Z., Pantazis, D., de los Angeles, C., **Perrachione, T.K.**, & Gabrieli, J.D.E. (2015). Sensitivity to speech-distributional information in children with autism: An MEG study. *40th Boston University Conference on Language Development* (Boston, November 2015).

Qi, Z., Lu, C., Harris, A., Wisman Weil, L., Han, M., Halverson, K., **Perrachione, T.K.**, Kjelgaard, M., Wexler, K., Tager-Flusberg, H., Gabrieli, J.D.E. (2015). Transdiagnostic neural basis for impaired phonological working memory across reading disability and autism. *7th Annual Meeting of the Society for the Neurobiology of Language*, (Chicago, October 2015).

Qi Z., Pantazis D., de los Angeles C., **Perrachione T.K.**, & Gabrieli J.D.E. (2015). Sensitivity to speech distributional information in children with autism: a MEG study. *7th Annual Meeting of the Society for the Neurobiology of Language*, (Chicago, October 2015).

Qi Z., Lu C., Harris A., Weil L. W., Han M., Halverson K., **Perrachione T.K.**, Kjelgaard M., Wexler K., Tager-Flusberg H., & Gabrieli J.D.E. (2015). Transdiagnostic neural basis for impaired phonological working memory across reading disability and autism spectrum disorder. *45th Annual Meeting of the Society for Neuroscience* (Chicago, October 2015).

*Choi, J.Y., Minas, J.E., Finn, A.S., Gabrieli, J.D.E., & **Perrachione, T.K.** (2015). Functional brain changes associated with learning a novel phonological contrast. *21st Annual Meeting of the Organization for Human Brain Mapping* (Honolulu, June 2015).

Perrachione, T.K., Christodoulou, J.A., & Gabrieli, J.D.E. (2015). Adaptation to repeated speech in children with and without dyslexia. *21st Annual Meeting of the Organization for Human Brain Mapping* (Honolulu, June 2015).

*Dougherty, S.C., *McLaughlin, D.E., & **Perrachione, T.K.** (2015). A language familiarity effect for talker identification in forward but not time-reversed speech. *169th Meeting of the Acoustical Society of America* (Pittsburgh, May 2015).

Perrachione, **T.K.**, Finn, A.S., Minas, J., Tan, C., Chan, B., & Gabrieli, J.D.E. (2014). Acquisition of the complex three-way Korean plosive contrast by native English speakers. *167th Meeting of the Acoustical Society of America* (Providence, May 2014).

Beach, S.D., Cardenas-Iniguez, C., Chang, P., Eddy, M.D., Gabrieli, J.D.E., & **Perrachione, T.K.** (2014). Expectation-based neural adaptation deficits in dyslexia. *21st Annual Meeting of the Cognitive Neuroscience Society* (Boston, April 2014).

Qi, Z., **Perrachione, T.**, Han, M., Garel, K., Chen, E.S., & Gabrieli, J.D.E. (2014). Functional brain imaging predicts foreign language learning success in the classroom. *21st Annual Meeting of the Cognitive Neuroscience Society* (Boston, April 2014).

Murtagh, J., Christodoulou, J.A., Cyr, A., **Perrachione, T.K.**, Chang, P., Halverson, K., Hook, P., Ghosh, S., Gabrieli, J.D.E. (2014). White matter integrity differences between early readers with and without developmental dyslexia. *21st Annual Meeting of the Cognitive Neuroscience Society* (Boston, April 2014).

Christodoulou, J.A., Murtagh, J., **Perrachione, T.K.**, Cyr, A., Halverson, K., Chang, P., Hook, P., & Gabrieli, J.D.E (2014). Functional neuroanatomical differences between early readers with and without developmental dyslexia. *21st Annual Meeting of the Cognitive Neuroscience Society* (Boston, April 2014).

Qi Z., **Perrachione T.**, Harris A., Ostrovskaya I., Beach S., Halverson K., Cyr A., Sher K., Kjelgaard M., Gabrieli, J., Wexler K., Tager-Flusberg H. (2013). Neural signatures of phonological working memory and grammatical processing in autism spectrum disorders. *5th Neurobiology of Language Conference & 43rd Annual Meeting of the Society for Neuroscience* (San Diego, November 2013)

Wisman Weil, L., Qi, Z., **Perrachione, T.K.**, Kjelgaard, M., Tager-Flusberg, H., Wexler, K., Gabrieli, J.D.E. (2013). Does fMRI scanner performance on a non-word repetition task accurately represent out-of-scanner ability for children with and without ASD? *Research Symposium of the Autism Consortium*, (Boston, November 2013).

Osher, D.E., Saygin, Z.M., **Perrachione, T.K.**, & Gabrieli, J.D.E. (2012). The functional connectomics underlying dyslexic adaptation deficits. *42nd Annual Meeting of the Society for Neuroscience*, (New Orleans, October 2012).

Norton, E.S., Beach, S.D., Cyr, A.B., Ozernov-Palchik, O., Garel, K.A., **Perrachione, T.K.**, Wolf, M., Gabrieli, J.D.E., & Gaab, N. (2012). Brain differences in kindergarten children with and without behavioral risk for dyslexia: Toward finding fMRI and EEG predictors of reading difficulties. *19th Annual Meeting of the Society for the Scientific Study of Reading*, (Montreal, July 2012).

Perrachione, T.K., Del Tufo, S.N., Gabrieli, J.D.E. (2011). Dysfunction of rapid cortical plasticity in dyslexia. *41st Annual Meeting of the Society for Neuroscience*, (Washington DC, November 2011).

Perrachione, T.K., Fedorenko, E.G., Vinke, L., Gibson, E., Dilley, L.C. (2011). Pitch processing is shared between language and music. *Experimental and Theoretical Advances in Prosody 2*, (Montreal, September 2011).

Perrachione, T.K., Gabrieli, J.D.E., Ghosh, S.S. (2011). Optimized design and analysis of sparse-sampling functional magnetic resonance imaging experiments of speech and hearing. *161st Meeting of the Acoustical Society of America*, (Seattle, May 2011). *(Best Student Paper)*

Norton, E.S., Eddy, M.D., **Perrachione, T.K.**, Cyr, A.B., Wolf, M., & Gabrieli, J.D.E. (2011). ERP mismatch negativity predicts reading fluency in young children. *18th Annual Meeting of the Cognitive Neuroscience Society*. (San Francisco, April 2011).

Perrachione, T.K. (2010). Voice recognition deficits in dyslexia. *7th International Conference on Cognitive Science*. (Beijing, August 2010). *(Invited presentation)*

Perrachione, T.K., Stepp, C.E., Hillman, R.E., & Wong, P.C.M. (2009). The role of source and filter characteristics in human talker identification: Experiments with laryngeal and electrolarynx speech. *158th Annual Meeting of the Acoustical Society of America*, (San Antonio, October 2009).

Perrachione, T.K., Kovelman, I., Ostrovskaya, I., Lymberis, J., O'Loughlin, P., Norton, E.S., Ghosh, S.S., & Gabrieli, J.D.E. (2009). Temporal and prefrontal cortical contributions to phonological working memory for words and pseudowords. *39th Annual Meeting of the Society for Neuroscience*, (Chicago, October 2009).

Ostrovskaya, I., Ghosh, S.S., Kovelman, I., O'Loughlin, P., Lymberis, J., **Perrachione, T.K.**, Norton, E.S., Wexler, K.N. & Gabrieli, J.D.E. (2009). Persistent markers of developmentally typical syntax errors in adult behavior and neurophysiology. *39th Annual Meeting of the Society for Neuroscience*, (Chicago, October 2009).

Lymberis, J., Christodoulou, J., O'Loughlin, P., Del Tufo, S., **Perrachione, T.K.**, Gabrieli, J.D.E. (2009). Neural correlates of rapid automatized naming. *39th Annual Meeting of the Society for Neuroscience*, (Chicago, October 2009).

Ha, L.Y.Y., **Perrachione, T.K.**, Wong, P.C.M. (2009). High-variability speech training is not always beneficial. *University of Illinois at Chicago Bilingualism Forum*, (Chicago, April/May 2009).

Kovelman, I., Ghosh, S., O'Loughlin, P., Ostrovskaya, I., **Perrachione, T.K.**, Lymberis, J., Norton E.S., Cosman, S., Wexler, K., Gabrieli J.D.E. (2009). Optional infinitive: Evidence of how adult brain processes grammatical errors that are typical and atypical of childhood language acquisition. *16th Annual Cognitive Neuroscience Society Meeting* (San Francisco, March 2009).

Perrachione, T.K., Chiao, J.Y. & Wong, P.C.M. (2008). Influences of perceived racial identity on human talker identification. *155th Meeting of the Acoustical Society of America* (Paris, June 2008).

Warhadpande, D., Wong, P.C.M., **Perrachione, T.K.**, Wang, J.-P. (2007). Large scale neural connectivity analysis using network theory. *1st Annual Midwest Symposium on Computational Biology and Bioinformatics* (Evanston, Illinois, October 2007).

Perrachione, T.K., Chiao, J.Y., Parrish, T.B., Pierrehumbert, J.B., & Wong, P.C.M. (2007). Integration of speech- and voice-perception systems for native language talker identification. *13th Annual Meeting of the Organization for Human Brain Mapping* (Chicago, June 2007).

Wong, P.C.M., Parrish, T.B., **Perrachione, T.K.** & Mazotas, A.J. (2006). Neural characteristics of successful and less successful speech and word learning in adults. *12th Annual Meeting of the Organization for Human Brain Mapping* (Florence, Italy, June 2006).

Wong, P.C.M. & **Perrachione, T.K.** (2005). Training native English-speaking adults to use Mandarin tones lexically. *11th Conference on Processing Chinese and Other East Asian Languages* (Hong Kong, December 2005).

Perrachione, T.K. & Wong, P.C.M. (2005). Using lexical tones in word identification: Patterns of learning in native English-speaking adults. *11th Mid-Continental Workshop on Phonology*, (University of Michigan, Ann Arbor, November 2005).

TEACHING

Courses taught

2021   Neurobiology of Language – SAR SH 501 (Boston Univ.)
Instructor, (30 students, graduate & undergraduate)

2021   Phonetics – SAR SH 221 (Boston Univ.)
Instructor, (18 students, undergraduate)

2020   Reading, Language, and the Brain – KHC NE 102 (Boston Univ.)
Instructor, (11 students, undergraduate; Kilachand Honors College)

2020   Phonetics – SAR SH 221 (Boston Univ.)
Instructor, (25 students, undergraduate)

2019   Neuroimaging for Speech and Hearing Research – SAR SH 620 (Boston Univ.)
Instructor, (6 students, graduate)

2019   Phonetics – SAR SH 221 (Boston Univ.)
Instructor, (28 students, undergraduate)

2018   Reading, Language, and the Brain – KHC NE 102 (Boston Univ.)
Instructor, (14 students, undergraduate; Kilachand Honors College)

2017   Reading, Language, and the Brain – KHC NE 102 (Boston Univ.)
Instructor, (15 students, undergraduate; Kilachand Honors College)

2017   Applied Speech Science – SAR SH 755 (Boston Univ.)
Instructor, (29 students, graduate)

2017   Phonetics – SAR SH 221 (Boston Univ.)
Instructor, (18 students, undergraduate)

2016   Reading, Language, and the Brain – KHC NE 102 (Boston Univ.)
Instructor, (15 students, undergraduate; Kilachand Honors College)

2016   Applied Speech Science – SAR SH 755 (Boston Univ.)
Instructor, (32 students, graduate)

2016   Phonetics – SAR SH 221 (Boston Univ.)
Instructor, (22 students, undergraduate)

2015   Reading, Language, and the Brain – KHC NE 102 (Boston Univ.)
Instructor, (10 students, undergraduate; Kilachand Honors College)

2015   Applied Speech Science – SAR SH 755 (Boston Univ.)
Instructor, (49 students, graduate)

2015   Introduction to Health and Rehabilitation Professions – SAR HP 151 (Boston Univ.)
Instructor, (13 students, undergraduate)

2014   Reading, Language, and the Brain – KHC NE 102 (Boston Univ.)
Instructor, (12 students, undergraduate; Kilachand Honors College)

2014   Applied Speech Science – SAR SH 755 (Boston Univ.)
Instructor, (29 students, graduate)

2014   Introduction to Health and Rehabilitation Professions – SAR HP 151 (Boston Univ.)
Instructor, (12 students, undergraduate)

2013   Phonetics – SAR SH 521 (Boston Univ.)
Instructor, (16 students, undergraduate / graduate)

2013   Introduction to Health and Rehabilitation Professions – SAR HP 151 (Boston Univ.)
Instructor, (12 students, undergraduate)

2013   Speech Science – SLPA 6301 (Northeastern Univ.)
Instructor, (64 students, graduate)

Teaching assistantships

2012   9.00 Introduction to Psychology (MIT, Prof. J. Gabrieli)
Head (administrative) TA, (280 students).

2012   9.59 Psycholinguistics (MIT, Prof. E. Gibson)

2011   9.00 Introduction to Psychology (MIT, Prof. J. Gabrieli)

Head (administrative) TA, (254 students); taught two weekly recitation sections (48 students).
This course available online at MIT *OpenCourseWare:* "Introduction to Psychology"

2010	HST.583 fMRI Data Acquisition and Analysis (MIT, Prof. R. Gollub)
2010	9.00 Introduction to Psychology (MIT, Prof. J. Gabrieli)
	Taught two weekly recitation sections (43 students).
2009	9.00 Introduction to Psychology (MIT, Prof. J. Gabrieli)
	Taught two weekly recitation sections (37 students).

Guest lectures and incidental teaching

2021	SHBT.205 Audition: Neural Mechanisms, Perception and Cognition (Harvard Univ., Profs. J. McDermott & D. Polley)
	"Neurobiology of speech"
2018	SHBT.200 Acoustics, Production and Perception of Speech (Harvard Univ., Prof. S. Ghosh)
	"Neural mechanisms of speech I and II"
2017	SHBT.200 Acoustics, Production and Perception of Speech (Harvard Univ., Prof. S. Ghosh)
	"Neural mechanisms of speech"; "Neural representations of speech and voice"
2016	HST.710 / 6.541 / 24.968 Speech Communication (MIT, Prof. S. Ghosh)
	"Cognitive phenomena in speech perception"
2015	HST.710 / 6.541 / 24.968 Speech Communication (MIT, Prof. S. Ghosh)
	"How speech experience at multiple timescales changes behavior and changes the brain"
2014	GRS NE 500 Frontiers in Neuroscience (BU, Prof. S. Russek)
	SAR HS 370 Neuroanatomy and Neurophysiology (BU, Prof. J. Schotland)
	"Language and reading in the typical and dyslexic brain"
	HST.710 / 6.541 / 24.968 Speech Communication (MIT, Dr. S. Ghosh)
	"Cognitive phenomena in speech perception and production"
2013	HST.710 / 6.541 / 24.968 Speech Communication (MIT, Dr. S. Ghosh)
	"Neural bases of speech production and perception"
2012	HST.710 / 6.541 / 24.968 Speech Communication (MIT, Dr. S. Ghosh)
	"Cognitive consequences of phonetic variability in speech perception"
	"Talker variability in speech and voice recognition"
2011	9.59 / 24.905 Psycholinguistics (MIT, Prof. E. Gibson)
	"Phonetics, phonology, and speech production"
	"Perception, cognition, and neurology of speech"
	HST.710 / 6.541 / 24.968 Speech Communication (MIT, Dr. S. Ghosh)
	"Talker variability in speech and voice recognition"
	9.03 Neurobiology of Learning and Memory (MIT, Prof. S. Corkin)
	"Brain imaging techniques in the study of human learning and memory"
2009 – 2011	Sheep (*Ovis aries*) brain dissections (MIT)
	2 led; 5 assisted.

STUDENTS AND MENTORING

Postdoctoral Trainees

2019 –	Gabrielle-Ann Torre, Ph.D.
2017 – 2019	Sung-Joo Lim, Ph.D.

Doctoral Students

2019 –	Alexandra M. Kapadia
	Boston University, Department of Speech, Language, and Hearing Sciences
2016 –	Jayden J. Lee
	Boston University, Department of Speech, Language, and Hearing Sciences
2016 –	Ja Young Choi
	Harvard University, Program in Speech and Hearing Bioscience and Technology
2014 – 2020	Terri L. Scott, Ph.D.
	Boston University, Graduate Program for Neuroscience
	Dissertation: "Neural bases of phonological working memory"

Masters Students in Speech-Language Pathology (Boston University)

2020 –	Ayesha Alam
2019 – 2020	Lue (Stella) Shen, M.S.
	Thesis: "Learning to identify emotional voices"

2019	Alexandra Spark
2018 – 2020	Jamie Chin, M.S.
	Thesis: "Examining morphological differences in Heschl's gyrus between neurotypical and dyslexic brains"
2018 – 2020	Maya Saupe, M.S.
	Thesis: "Talker adaptation in calibrated noise"
2017 – 2019	Rita Sio Nga Kou, M.S.
	Thesis: "Time course of talker adaptation"
2017 – 2019	Isabelle Nastaskin, M.S., CCC-SLP
	Thesis: "Effects of talker familiarity on talker adaptation"
2017 – 2019	Alexandra M. Kapadia, M.S.
	Thesis: "Effects of type, token, and talker variability in speech processing efficiency"
2016 – 2018	Andrea C.-L. Chang, M.S., CCC-SLP
	Thesis: "Effects of early language experiences on the auditory brainstem"
2015 – 2017	Jennifer Golditch, M.S., CCC-SLP
2015 – 2017	Laura Haenchen, M.S., CCC-SLP
	Thesis: "Noninvasive neurostimulation of sensorimotor adaptation in speech production"
2015 – 2017	Deirdre E. McLaughlin, M.S., CCC-SLP
	Thesis: "Talker identification is not improved by lexical access in the absence of familiar phonology"
2014 – 2017	Cheng (Cecilia) Cheng, M.S.
	Thesis: "Can visual feedback improve English speakers' Mandarin tone production?"
2014 – 2016	Michelle Lee, M.S., CCC-SLP
2013 – 2015	Rebecca A. Lember, M.S., CCC-SLP
	Thesis: "Lexical effects in talker identification"
2013 – 2015	Elizabeth M. Petitti, M.S., CCC-SLP
	Thesis: "A fundamental pitch perception bias for tone language speakers"

Undergraduate Students (Boston University)

2021 –	Kendrick Tak
	Neuroscience
2021 –	Maya Zeldich
	Speech, Language, and Hearing Sciences
2020 –	Megan Lee
	Speech, Language, and Hearing Sciences
2020 –	Yennie Lee
	Neuroscience and Philosophy
2020 –	Homoon (Brian) Jung
	Biomedical Engineering
	Undergraduate Research Opportunities Program, Student Research Award
2018 – 2019	Chinazo Otiono
	Behavioral Biology
	Undergraduate Research Opportunities Program, Student Research Award
2018 –	Grace Mecha
	Behavior and Health
	Undergraduate Research Opportunities Program, Student Research Award (x2)
2018 – 2019	Yijing (Trista) Lin
	Psychology
2018 – 2019	Kamilah Harruna
	Health Science
2018 – 2019	Amabel Antwi
	Behavior and Health
2018 – 2019	Nicole Chen
	Electrical and Computer Engineering
	Undergraduate Research Opportunities Program, Student Research Award (x2)
2017 – 2018	Allen Qu
	B.S., Electrical and Computer Engineering, 2019
2017 – 2020	Joan (Michelle) Njoroge
	B.A., Neuroscience, 2020
	Undergraduate Research Opportunities Program, Student Research Award (x5)

2017 – 2018	Kristina Furbeck

B.S., Speech, Language, and Hearing Sciences, 2018
Undergraduate Research Opportunities Program, Supplies Award
Senior Thesis for Distinction: "Acoustic features associated with similarity judgments of voices"

2017   Dana Gordon
B.S., Speech, Language, and Hearing Sciences, 2017

2015 – 2017 Alina Razak
B.S., Speech, Language, and Hearing Sciences, 2017
Kilachand Honors College Senior Keystone Project: "Effects of noise in talker identification"

2015 – 2018 Lauren Gustainis
B.S., Speech, Language, and Hearing Sciences, 2018
Kilachand Honors College Senior Keystone Project: "Forming talker expectations from visual cues"

2015 – 2018 Cassandra Chan
B.S., Speech, Language, and Hearing Sciences, 2018
Undergraduate Research Opportunities Program, Student Research Award (x2)

2015 – 2017 Tyrone Hou
B.A., Computer Science, 2018
Undergraduate Research Opportunities Program, Student Research Award (x3)

2015 – 2016 Jonathan Mirsky
B.A., Neuroscience, 2018
Undergraduate Research Opportunities Program, Student Research Award

2014 – 2015 Elly R. Hu
B.A., Neuroscience, 2016
Undergraduate Research Opportunities Program, Student Research Award (x3)
HHMI Summer Research Experience for Undergraduates
CAS NE 492 Undergraduate Neuroscience Research

2014 – 2015 Carly Schimmel
B.A., Neuroscience, 2015
Undergraduate Research Opportunities Program, Student Research Award

2014 – 2015 Molly Cleveland
B.S., Speech, Language, and Hearing Sciences, 2015
Undergraduate Research Opportunities Program, Student Research Award (x2)

2014   Kara Ryan
B.S., Human Physiology, 2016

2014   Monica Arrieta
B.S., Speech, Language, and Hearing Sciences, 2014
SAR SH 640 Senior Internship

2014   Rosa (Cecilia) Blanco
B.S., Speech, Language, and Hearing Sciences, 2014
SAR SH 640 Senior Internship

2013 – 2014 Jane Kelley
B.A., English, 2014
Undergraduate Research Opportunities Program, Student Research Award

2013 – 2015 Deirdre McLaughlin
B.S., Speech, Language, and Hearing Sciences, 2015
Undergraduate Research Opportunities Program, Student Research Award (x4)

Undergraduate Students (Massachusetts Institute of Technology)

George Bailey	Lina Kim	Jenny (Yuan) Lu
Diana Bernstein	Nayeon Kim	Anton Nguyen
Katy Bragg	Yihua Li	Eric Schmidt
Kathryn Dere	Jiayi Lin	Ajoke Williams
Alexandra Hall	Jamin Liu	Karl Wolff

Doctoral Student Laboratory Rotations

2021   Rohan Deshpande (Biomedical Engineering, Boston University)
2020   Makaila Banks (Graduate Program for Neuroscience, Boston University)
2017   Stuart Babcock (Graduate Program for Neuroscience. Boston University)
2015   Nathan Perkins (Graduate Program for Neuroscience. Boston University)
2015   Julia Chartove (Graduate Program for Neuroscience. Boston University)

Dissertation Committee Memberships

2020 –   Susrita Sarkar (Biology, Boston University)

	Reader; Primary Advisor: Jeff Gavornik, PhD
2019 –	Dana Boebinger (Speech and Hearing Bioscience and Technology, Harvard University)
	Reader; Primary Advisor: Josh McDermott, PhD
2019 –	Malinda McPherson (Speech and Hearing Bioscience and Technology, Harvard University)
	Reader; Primary Advisor: Josh McDermott, PhD
2019	Sophie Schwartz (Graduate Program for Neuroscience, Boston University)
	Reader; Primary Advisor: Helen Tager-Flusberg, PhD
2018 – 2020	Justin T. Fleming (Speech and Hearing Bioscience and Technology, Harvard University)
	Reader; Primary Advisor: Barbara Shinn-Cunningham, PhD
2017 –	Sara D. Beach (Speech and Hearing Bioscience and Technology, Harvard University)
	Reader; Primary Advisor: John D.E. Gabrieli, PhD
2016 – 2018	Erin Meier (Speech, Language, and Hearing Sciences, Boston University)
	Reader; Primary Advisor: Swathi Kiran, PhD, CCC-SLP
2016	Christopher Markiewicz (Cognitive and Neural Systems, Boston University)
	Reader; Primary Advisor: Jason Bohland, PhD
2016	Alejna Brugos (Applied Linguistics, Boston University)
	Reader; Primary Advisor: Jonathan Barnes, PhD

Thesis and Qualifying Committee Memberships

2021	Saima Malik Moraleda (Speech and Hearing Bioscience and Technology, Harvard University)
	Qualifying Committee; Primary Advisor: Evelina Fedorenko, PhD
2020	Adrian Cho (Speech and Hearing Bioscience and Technology, Harvard University)
	Qualifying Committee; Primary Advisor: Gerald Kidd, PhD
2019	Susrita Sarkar (PhD Program in Biology, Boston University)
	Qualifying Committee; Primary Advisor: Jeff Gavornik, PhD
2019	Ran Li (PhD Program in Speech, Language, and Hearing Sciences, Boston University)
	Qualifying Project Committee; Primary Advisor: Swathi Kiran, PhD, CCC-SLP
2018	Malinda McPherson (Speech and Hearing Bioscience and Technology, Harvard University)
	Qualifying Committee; Primary Advisor: Josh McDermott, PhD
2018	Saul Frankford (PhD Program in Speech, Language, and Hearing Sciences, Boston University)
	Qualifying Project Committee; Primary Advisor: Frank Guenther, PhD, MS
2017	Sara Beach (Speech and Hearing Bioscience and Technology, Harvard University)
	Qualifying Committee; Primary Advisor: John D.E. Gabrieli, PhD
2017	I Lei (Vicky) Chan (MA Program in Applied Linguistics, Boston University)
	Thesis Committee; Primary Advisor: Charles B. Chang, PhD
2016	Brett McCardel (MS Program in Speech-Language Pathology, Boston University)
	Thesis Committee; Primary Advisor: Swathi Kiran, PhD, CCC-SLP
2016	Erin Meier (PhD Program in Speech, Language, and Hearing Sciences, Boston University)
	Qualifying Project Committee; Primary Advisor: Swathi Kiran, PhD, CCC-SLP
2016	Jeffrey Johnson (PhD Program in Speech, Language, and Hearing Sciences, Boston University)
	Qualifying Project Committee; Primary Advisor: Swathi Kiran, PhD, CCC-SLP

INTRAMURAL SERVICE

2020 –	Institutional Review Board, Boston University Charles River Campus
2020 –	Sargent College Faculty Council
2020 –	Chair, Sargent College Committee on Academic Policies & Procedures
2019 – 2020	Chair, Faculty Search Committee (tenure-track assistant professor with specialization in language acquisition)
2019 –	Kilachand Honors College Curriculum Committee
2018 –	Program Director, Joint Bachelor of Science in Linguistics and Speech, Language, & Hearing Sciences
2017 –	Technology Governance Committee for Research Computing
2017	Academic Program Review of the Program in Linguistics
2015 –	Sargent College Committee on Academic Policies & Procedures
2015 – 2016	Department of Speech, Language, and Hearing Sciences, Senior Faculty Search Committee
2015 –	Center for Systems Neuroscience, Executive Committee
2015	Academic Program Review of the Department of Psychological & Brain Sciences

2015	Sargent Virtual Conference ("HealthMatters") Committee
2014 –	Graduate Program for Neuroscience Graduate Education Committee
2014 –	Graduate Program for Neuroscience Steering Committee
2014 –	Undergraduate Research Opportunities Program (UROP) Faculty Advisory Committee
2014	New Faculty Orientation Panel
2014 – 2015	Dudley Allen Sargent Faculty / Post-Doc Research Grant Review Committee
2014 – 2015	Dudley Allen Sargent Graduate Student Research Grant Review Committee
2014 – 2017	Center for Integrated Life Sciences and Engineering (CILSE) Human Brain Imaging Center Design Committee

PROFESSIONAL DEVELOPMENT

Professional Affiliations

Acoustical Society of America (ASA); American Association for the Advancement of Science (AAAS); Society for Neuroscience (SfN); Cognitive Neuroscience Society (CNS); International Phonetics Association (IPA); Organization for Human Brain Mapping (OHBM); Society for the Neurobiology of Language (SNL)

Extramural Service

2019	Member, Raymond H. Stetson Scholarship in Phonetics and Speech Science Review Committee, Acoustical Society of America
2017 – 2020	Member, Speech Communication Technical Committee, Acoustical Society of America
2017 – 2019	Editorial Board Member, *Journal of Speech, Language, and Hearing Research*

Invited Reviewer

Journals:

Applied Psycholinguistics
Attention, Perception, & Psychophysics
Bilingualism: Language & Cognition
Brain & Language
Brain Structure & Function
British Journal of Psychology
Cerebral Cortex
Cognition
Current Biology
Developmental Neuropsychology
Developmental Science
eLife
Frontiers in Psychology
Hearing Research
Human Brain Mapping

Journal of Consumer Behaviour
Journal of Experimental Child Psychology
Journal of Experimental Psychology – General
Journal of Experimental Psychology – Human Perception and Performance
Journal of Experimental Psychology – Learning, Memory, and Cognition
Journal of Memory and Language
Journal of Neurodevelopmental Disorders
Journal of Neuroscience
Journal of Neuroscience, Psychology, and Economics
Journal of Speech, Language, and Hearing Research
Journal of the Acoustical Society of America

Journal of the Acoustical Society of America – Express Letters
Language and Cognitive Processes
Language and Speech
Language Learning
Nature Communications
NeuroImage
Neuropsychologia
Phonetica
PLoS One
Proceedings of the National Academy of Sciences
Psychonomic Bulletin & Review
Research in Developmental Disorders

Grants:

American Speech-Language-Hearing Foundation

National Science Foundation (ad hoc)
National Institutes of Health (ad hoc)

Invited and Extramural Talks

2018	University of Texas at Austin, "Diehl-a-Palooza: A celebration of the career of Randy Diehl" *"Social consequences of phonetic expertise: The language-familiarity effect in talker identification."*
2018	University of Iowa, Department of Communication Sciences and Disorders *"Multiple timescales of plasticity in speech and language: Adaptation, learning, and expertise."*
2017	Coalition for National Science Funding, Capitol Hill Exhibition (on behalf of Federal Association of Behavioral and Brain Sciences) *"Neuroscience discoveries in reading and dyslexia."*
2017	Northwestern University, Department of Communication Sciences and Disorders *"Multiple timescales of plasticity in speech and language."*
2016	Northwestern University, Department of Linguistics, "The Future of Language Science" *"Foreign language learning by adults: New insights from neuroscience."*
2016	ASHA, "Lessons for Success" Workshop *"Lessons learned."*
2016	Northwestern University, Department of Linguistics *"Two studies of talker normalization."*

	"Exploring careers with linguistics alumni."
2015	Haskins Laboratories
	"Cognitive consequences of talker variability."
2013	Harvard University, Graduate School of Education
	"Tin ears and silver tongues: Exploring individual differences in second language learning."
2013	Case Western Reserve University, Department of Psychological Sciences
2013	Purdue University, Department of Speech and Hearing Sciences
2013	Boston University, College of Health and Rehabilitation Sciences: Sargent College
2012	University of Washington, Department of Speech and Hearing Sciences
	"From phonetics to phonology: Developmental language disorders and brain plasticity."
2011	University of Washington, Institute for Learning and Brain Science
	"Dysfunction of rapid cortical plasticity in dyslexia."

Intramural Talks

2017	"Learning fast and learning slow: Understanding multiple timescales of neuroplasticity in speech and language disorders." BU Sargent College Dean's Advisory Board
2017	"Neural adaptation as a core computation in speech perception: How language makes use of a general-purpose tool." BU College of Arts and Sciences Junior Faculty Colloquium
2016	"Developmental language disorders: New insights from brain imaging." BU Dept. of Speech, Language, and Hearing Sciences.
2015	"Meet a linguist: A conversation with Professor Perrachione." BU Department of Linguistics
2015	"Cognitive consequences of talker variability." BU Hearing Research Center
2015	"Communication neuroscience." BU Sargent College *HealthMatters* Virtual Conference.
2015	"Learning fast and learning slow: How speech experience at multiple timescales changes behavior and changes the brain." BU Dept. of Speech, Language, and Hearing Sciences.
2014	"Developmental disorders of language and reading: New insights from brain imaging." BU Sargent College Dean's Advisory Board
2014	"Communication Neuroscience: The listening, talking, and reading brain." BU Sargent College
2014	"Speech-language disorders and the brain." BU Dept. of Speech, Language, and Hearing Sci.
2011	McGovern Institute for Brain Research Annual Retreat presentation
2010	"Dysfunction of rapid cortical plasticity in dyslexia." MIT Dept. of Brain & Cognitive Sciences
2010	"An introduction to R: Basic statistics and programming." MIT Dept. of Brain & Cognitive Sciences.
2008	"An own-race bias for voices results from asymmetric experience with acquired features of spoken language." MIT Dept. Brain & Cognitive Sciences.
2006	Northwestern University Institute for Neuroscience Annual Retreat presentation
2005, 2006	Northwestern University Communication Sciences and Disorders Research Forum

Miscellaneous

2017	Participant; ASHA Grant Review and Reviewer Training
2015	Participant; Alan Alda Center for Communicating Science Workshop
2014	Faculty Sponsor; HHMI Summer Lab Experience; BU Undergraduate Neuroscience (1 student)
2014	Participant; ASHA "Lessons for Success" Workshop
2013-	Supervisor; BU Undergraduate Research Opportunities Program
2007 – 2013	Supervisor; MIT Undergraduate Research Opportunities Program (13 students)
2009 – 2011	Mentor; The Education Cooperative, intensive summer science internship program for high-school students (4 students)
2005 – 2007	"Phonatics" phonology and phonetics discussion group, Northwestern University
2006 – 2007	Cognitive Brain Mapping Group, member, Northwestern University
2006	MGH Visiting Fellowship Program in fMRI at the Athinoula A. Martinos Center for Biomedical Imaging
2006	Mentor; Illinois Mathematics and Science Academy Student Inquiry and Research Program

LABORATORY TRAINEESHIPS

2007 – 2013   Cognitive & Affective Neuroscience Laboratory
(MIT Department of Brain & Cognitive Sciences; Dr. John D.E. Gabrieli, PI)

2007 – 2008   The Language Laboratory at MIT
(MIT Department of Brain & Cognitive Sciences; Dr. Ted Gibson, PI)

2007 – 2008   Ab/Normal Language Laboratory
(MIT Department of Brain & Cognitive Sciences; Dr. Kenneth N. Wexler, PI)

2005 – 2006   Psycholinguistics Laboratory
(Northwestern University Department of Linguistics; Dr. Matt Goldrick, PI)

2004 – 2007   Communication Neural Systems Research Group (formerly Speech Research Laboratory)
(Northwestern University Department of Communication Sciences & Disorders; Dr. Patrick C.M. Wong, PI)

OTHER RECOGNITION AND AWARDS

2007   National Science Foundation Graduate Research Fellowship Honorable Mention

2007   Northwestern University Academic Year Undergraduate Research Grant "Integration of speech- and voice-perception systems for native language talker identification."

2006   Weinberg College of Arts and Sciences (Northwestern Univ.) Summer Undergraduate Research Grant "Brain bases of an interaction between voice perception and language proficiency."

2005 – 2006   Abraham Demoz Prize for Undergraduate Excellence in Linguistics, Northwestern University Department of Linguistics.
2006 – (1st) "Intra-talker variation: Audience design factors affecting lexical selections."
2005 – (Hon. Men.) "The bǎ-construction in Mandarin Chinese: A derivational analysis."

2005   Northwestern University Summer Undergraduate Research Grant "Effects of linguistic proficiency on speaker identification."

2003 – 2007   Dean's List, Weinberg College of Arts and Sciences, Northwestern University.

2003   National Merit Scholar

2003   Eagle Scout, Boy Scouts of America

2001   Standing Ovation Award, Missouri Scholars Academy

OTHER EMPLOYMENT EXPERIENCE

2004 – 2007   Research Assistant, Speech Research Laboratory, Department of Communication Sciences and Disorders, Northwestern University, Evanston, Illinois.

2002 – 2005   Office Manager, King Appliance and Furniture. Kirksville, Missouri.

LANGUAGES

American English, French, Mandarin Chinese, Italian, Korean