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Department of Communication Sciences and Disorders
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EDUCATION

Ph.D. Communication Sciences and Disorders, Northwestern University (2006-2011)

Dissertation: Cortical Neural Processing of Auditory Feedback during Vocal Production and Motor Control

Advisor: Dr. Charles R. Larson

M.Sc. Biomedical Engineering, Amirkabir University of Technology (2003-2006)

Thesis: Computational Analysis of Voice Disorders: Signal Processing Approaches to Non-invasive Diagnosis of Laryngeal Diseases in Patients with Pathological Speech

Advisor: Dr. Farshad Almasganj

B.Sc. Electrical Engineering, University of Tehran (1998-2003)

ACADEMIC POSITIONS

University of South Carolina

2020 – present **Associate Professor**
Department of Communication Sciences and Disorders

2014 – 2020 **Assistant Professor**
Department of Communication Sciences and Disorders

2014 – present **Affiliate Faculty**
Institute of Mind and Brain

University of Iowa School of Medicine

2011 - 2014 **Post-Doctoral Research Scholar**
Department of Neurosurgery, Human Brain Research Laboratory
Project: Neural Bases of Speech Production and Motor Control: Insights from Invasive Electrocorticography (ECoG) and Functional Neuroimaging (fMRI)

Northwestern University

2006-2011 **Graduate Research Assistant**
Department of Communication Sciences and Disorders, Speech Physiology Laboratory

2008-2011 **Graduate Teaching Assistant**
Department of Communication Sciences and Disorders

Amirkabir University of Technology

2004-2006 **Graduate Teaching Assistant**
Department of Biomedical Engineering

RESEARCH INTERESTS

Neuroscience of Speech and Sensorimotor Control
Speech Disorders in Parkinson's Disease and Post-Stroke Aphasia
Electrophysiology (EEG, ECoG) and Neuroimaging (fMRI) of Human Brain
High-Definition Transcranial Direct Current Stimulation (HD-tDCS)
Neurofeedback Training for Speech Motor Disorders Treatment
Signal Processing and Computational Modeling

HONORS AND AWARDS

American Speech-Language-Hearing Association (ASHA) Grant Review and Reviewer Training Travel Grant Award, Rockville, MD, 2019
American Speech-Language-Hearing Association (ASHA) Grant Review and Reviewer Training Travel Grant Award, Rockville, MD, 2018
American Speech-Language-Hearing Association (ASHA) Lessons for Success Travel Grant Award, Rockville, MD, 2017
Graduate Scholar Award for Aging Research in Arnold School of Public Health at University of South Carolina to Karim Johari, Role: Mentor, Columbia, SC, 2017
Master of Speech-Language-Pathology Outstanding Student Award in Communication Sciences and Disorders at University of South Carolina to Stacey Sangtian, Role: Mentor, Columbia, SC, 2016
Students Preparing for Academic and Research Careers (SPARC) Award from the American Speech-Language-Hearing Association (ASHA) to Stacey Sangtian, Role: Mentor, Columbia, SC, 2015-2016
Neuroinformatics Young Scientists Course Scholarship and Travel Grant Award, Marine Biological Laboratories, Woods Hole, MA, 2012
American Speech-Language-Hearing Association (ASHA) Meritorious Poster Recognition Award, 2012
Joseph Levin Foundation Scholarship for Advanced Doctoral Studies in Communication Sciences and Disorders, Northwestern University, Evanston, IL, 2010
Top Student Award for Highest Academic Achievement, Department of Biomedical Engineering, Amirkabir University of Technology, Tehran, Iran, 2003-2006

FUNDING

Current

<i>Principal Investigator</i>	Sensorimotor Processing of Auditory Feedback in Aphasia. NIH/NIDCD K01DC015831, Total Budget: \$693,350 (2017-2022)
<i>Principal Investigator</i>	Effect of Visual Feedback Training on Speech Production in Aphasia. USC ASPIRE-I Track-I, Total Budget: \$15,000 (2020-2022)
<i>Co-Investigator</i>	Neural Mechanisms of Vocal Communication in the Human Brain (PI: Greenlee). NIH/NIDCD R01DC015260, Total Budget: \$1,660,047 (2016-2021)
<i>Co-Investigator</i>	Aging Brain Cohort at the University of South Carolina (PI: Fridriksson). USC Excellence Initiative Grant, Total Budget: \$4,469,030 (2019-2024)
<i>Faculty Mentor</i>	Speech Error Detection and Sensorimotor Processing of Auditory Feedback in Aphasia. USC Office of the Vice President for Research SPARC Grant Awarded to Doctoral Student Stacey Sangtian, Total Budget: \$5,000 (2020-2021)
<i>Faculty Mentor</i>	EEG-Based Neurofeedback Training for Enhancing Motor Function in Neurotypical Adults. USC Magellan Undergraduate Research Grant Awarded to Emily Virag, Total Budget: \$3,000 (2020)

Pending

- Principal Investigator** Neural Bases of Vocal Sensorimotor Impairment in Post-Stroke Aphasia, NIH/NIDCD R01, Total Budget Requested: \$3,584,540
- Co-Investigator** Speech Entrainment in Aphasia (PI: Fridriksson). NIH/NIDCD R01, Total Budget Requested: \$3,649,655
- Co-Investigator** Integrative Functions of the Planum Temporale (PI: Hickok). NIH/NIDCD R01, Total Budget Requested: \$3,599,474

Completed

- Principal Investigator** Understanding the Effects of Neuro-stimulation on Speech and Hand Motor Function in Parkinson's Disease. USC ASPIRE Track I, Total Budget: \$15,000 (2017-2018)
- Co-Investigator** Speech Entrainment Treatment for Broca's Aphasia (PI: Fridriksson). NIH/NIDCD R21DC014170, Total Budget: \$402,875 (2015-2017)
- Co-Investigator** Color Envisioned: Concepts of Color in the Blind, Colorblind, and Sighted (PI: Rorden). USC Visiting Scholar Grant, Total Budget: \$15,000 (2018)
- Faculty Mentor** Validation of High Definition Transcranial Direct Stimulation (HD-tDCS) over left frontal and parietal cortex as a potential clinical method to improve motor timing deficits related with speech production and hand movement in Parkinson's disease. CAPCSD Scholarship Awarded to Doctoral Student Karim Johari, Total Budget: \$20,000 (2018)
- Faculty Mentor** Effects of Neurostimulation on Speech production and Hand movement in Parkinson's Disease. USC Arnold School of Public Health's Graduate Scholar in Aging Research Grant Awarded to Doctoral Student Karim Johari, Total Budget: \$1,000 (2017-2018)
- Faculty Mentor** Effects of Neurostimulation on Speech production and Hand movement in Parkinson's Disease. Arnold School of Public Health Webber Doctoral Scholarship Grant in Communication Disorders Research Awarded to Doctoral Student Karim Johari, Total Budget: \$1,000 (2018)
- Faculty Mentor** Behavioral and Neural Bases of Speech Sensorimotor Impairment in Post-stroke Aphasia. Arnold School of Public Health Webber Doctoral Scholarship in Communication Disorders Research Awarded to Doctoral Student Stacey Sangtian, Total Budget: \$1,000 (2018)
- Faculty Mentor** Speech and Hand Movement Rehabilitation through HD-tCDS Neurostimulation. USC Magellan Undergraduate Research Grant to Elizabeth Thompson, Total Budget: \$3,000 (2017-2018)
- Faculty Mentor** Modulating Vocal Pitch Motor Control through Neurostimulation. USC Magellan Undergraduate Research Grant to Keiko Bridwell and Caroline Hayden, Total Budget: \$6,000 (2015-2016)
- Faculty Mentor** Neural and Behavioral Correlates of Planning During Vocal Motor Control. ASHA SPARC Career Mentoring Grant Awarded to Stacey Sangtian, Total Budget: \$1,000 (2015-2016)

PROFESSIONAL AFFILIATIONS

Society for Neuroscience (SfN)
Cognitive Neuroscience Society (CNS)
American Speech-Language-Hearing Association (ASHA)

EDITORIAL BOARD MEMBERSHIP

Editorial Board Member of Speech Section, Journal of Speech, Language and Hearing Research (JSLHR) 2017-present

JOURNAL PAPERS ([PubMed](#))

1. Behroozmand R, Johari K, Bridwell K, Hayden C, Fahey D, den Ouden DB. Modulation of Vocal Pitch Control through High-Definition Transcranial Direct Current Stimulation of the Left Ventral Motor Cortex. *Experimental Brain Research* (2020)
2. Johari K, Behroozmand R. Event-related Desynchronization of Alpha and Beta Band Neural Oscillations Predict Speech and Limb Motor Timing Deficits in Normal Aging. *Behavioural Brain Research* (2020)
3. Cardenas AR, Behroozmand R, Kocsis Z, Gander PE, Nourski KV, Kovach CK, Ibayashi K, Pipoly M, Kawasaki H, Howard MA, Greenlee JDW. Differential Causal Involvement of Human Auditory and Frontal Cortices in Vocal Motor Control. *bioRxiv* (2020)
4. Phillip Johnson L, Sangtian S, Johari K, Behroozmand R, Fridriksson J. Slowed Compensation Responses to Altered Auditory Feedback in Post-Stroke Aphasia: Implications for Speech Sensorimotor Integration. *Journal of Communication Disorders* (2020)
5. Behroozmand R, Johari K, Kelley R, Kapnola E, Narayanan N, Greenlee J. Effect of Deep Brain Stimulation on Vocal Motor Control Mechanisms in Parkinson's Disease. *Parkinsonism & Related Disorders* (2019)
6. Behroozmand R, Johari K. Pathological Attenuation of the Right Prefrontal Cortex Activity Predicts Speech and Limb Motor Timing Disorder in Parkinson's Disease. *Behavioural Brain Research* (2019)
7. Johari K, den Ouden DB, Behroozmand R. Behavioral and Neural Correlates of Normal Aging Effects on Motor Preparatory Mechanisms of Speech Production and Limb Movement. *Experimental Brain Research* (2019)
8. Wilmskoetter J, Del Gaizo J, Phillip L, Behroozmand R, Gleichgerrcht E, Fridriksson J, Riley E, Bonilha L. Predicting Naming Responses Based on Pre-Articulatory Electrical Activity in Individuals with Aphasia. *Clinical Neurophysiology* (2019)
9. Johari K, Walenski M, Reifegerste J, Ashrafi F, Behroozmand R, Daemi M, Ullman MT. A Dissociation between Syntactic and Lexical Processing in Parkinson's Disease. *Journal of Neurolinguistics* (2019)
10. Behroozmand R, Phillip L, Johari K, Bonilha L, Rorden C, Hickok G, Fridriksson J. Sensorimotor Impairment of Speech Auditory Feedback Processing in Aphasia. *Neuroimage* (2018)
11. Behroozmand R, Sangtian S. Neural Bases of Sensorimotor Adaptation in the Vocal Motor System. *Experimental Brain Research* (2018)
12. Behroozmand R, Johari K. Sensorimotor Impairment of Speech and Hand Movement Timing Processing in Parkinson's Disease. *Journal of Motor Behavior* (2018)
13. Johari K, Behroozmand R. Functional Dissociation of Temporal Processing Mechanisms during Speech Production and Hand Movement: An ERP Study. *Behavioural Brain Research* (2018)
14. Johari K, den Ouden DB, Behroozmand R. Effects of Aging on Temporal Predictive Mechanisms of Speech and Hand Motor Reaction Time. *Aging Clinical and Experimental Research* (2018)
15. Singh T, Phillip L, Behroozmand R, Gleichgerrcht E, Piai V, Fridriksson J, Bonilha L. Pre-articulatory electrical activity associated with correct naming in individuals with aphasia. *Brain and Language* (2018)
16. Johari K, Behroozmand R. Premotor Neural Correlates of Predictive Motor Timing for Speech Production and Hand Movement: Evidence for a Temporal Predictive Code in the Motor System. *Experimental Brain Research* (2017)
17. Johari K, Behroozmand R. Temporal predictive mechanisms modulate motor reaction time during initiation and inhibition of speech and hand movement. *Human Movement Science* (2017)

18. Basilakos A, Fridriksson J, Rorden C, **Behroozmand R**, Hanayik T, Naselaris T, Del Gaizo J, Breedlove J, Vandergrift WA, Bonilha L. Activity Associated with Speech Articulation Measured Through Direct Cortical Recordings. *Brain and Language* (2017)
19. **Behroozmand R**, Oya H, Nourski KV, Kawasaki H, Larson CR, Brugge JF, Howard MA, Greenlee JWD. Neural Correlates of Vocal Production and Motor Control in Human Heschl's Gyrus. *Journal of Neuroscience* (2016)
20. **Behroozmand R**, Sangtian S, Korzyukov O, Larson CR. A Temporal Predictive Code for Voice Motor Control: Evidence from ERP and Behavioral Responses to Pitch-shifted Auditory Feedback. *Brain Research* (2016)
21. Price R, Vargas RV, **Behroozmand R**, Parkinson AL, Larson CR, Greenlee JDW, Robin DA. Dynamic Connectivity Mapping of Electroencephalographic Data using Bayesian Differential Structural Equation Modeling. *Biometrics & Biostatistics International Journal* (2016)
22. **Behroozmand R**, Shebek R, Hansen D, Oya H, Robin DA, Howard MA, Greenlee JD. Sensory-Motor Networks Involved in Speech Production and Motor Control: An fMRI Study. *Neuroimage* (2015)
23. **Behroozmand R**, Ibrahim N, Korzyukov O, Robin DA, Larson CR. Functional role of delta and theta band oscillations for auditory feedback processing during vocal pitch motor control. *Frontiers in Neuroscience* (2015)
24. Kingyon J, **Behroozmand R**, Kelley R, Oya H, Kawasaki H, Narayanan NS, Greenlee JDW. High-gamma Band Fronto-temporal Coherence as a Measure of Functional Connectivity in Speech Motor Control. *Neuroscience* (2015)
25. **Behroozmand R**, Ibrahim N, Korzyukov O, Robin DA, Larson CR. Left-Hemisphere Activation is Associated with Enhanced Vocal Pitch Error Detection in Musicians with Absolute Pitch. *Brain and Cognition* (2014)
26. Korzyukov O, Tapaskar N, Pflieger ME, **Behroozmand R**, Lodhavia A, Patel S, Robin DA, Larson C. Event related potentials study of aberrations in voice control mechanisms in adults with attention deficit hyperactivity disorder. *Clinical Neurophysiology* (2014)
27. Parkinson AL, **Behroozmand R**, Ibrahim N, Korzyukov O, Larson CR, Robin DA. Effective Connectivity Associated with Auditory Error Detection in Musicians with Absolute Pitch. *Frontiers in Neuroscience* (2014)
28. Greenlee JD, **Behroozmand R**, Narayanan K, Kingyon JR, Larson CR, Oya H, Kawasaki H, Howard MA. Sensorimotor integration during human self-vocalization: Insights from invasive electrophysiology. *Journal of Acoustical Society of America (JASA)* (2013)
29. Greenlee JD, **Behroozmand R**, Jackson A, Hansen D, Larson CR, Chen F, Oya H, Kawasaki H, Chen H, Howard MA. Sensory-Motor Interaction for Vocal Pitch Monitoring in non-primary Human Auditory Cortex. *PLoS ONE* (2013)
30. Korzyukov O, **Behroozmand R**, Larson CR. Neuronal Mechanisms of Voice Control are Affected by the Expectancy of Externally Triggered Perturbations in Auditory Feedback. *PLoS ONE* (2012)
31. **Behroozmand R**, Korzyukov O, Larson CR. Opposing vs. Following Vocal Responses to Pitch-Shifted Auditory Feedback: Evidence for Different Mechanisms of Voice Pitch Control. *Journal of Acoustical Society of America (JASA)* (2012)
32. **Behroozmand R**, Korzyukov O, Larson CR. ERP Correlates of Pitch Error Detection in Complex Tones and Voice Feedback with Missing Fundamental. *Brain Research* (2012)
33. Korzyukov O, Karvelis L, **Behroozmand R**, Larson CR. ERP Correlates of Auditory Processing during Automatic Correction of Unexpected Alternations in Vocalization". *International Journal of Psychophysiology* (2012)
34. **Behroozmand R**, Larson CR. Error-dependent Modulation of Speech-Induced Auditory Suppression for Pitch-Shifted Voice Feedback. *BMC Neuroscience* (2011)
35. **Behroozmand R**, Korzyukov O, Larson CR. Effects of Voice Harmonic Complexity on ERP Responses to Pitch-Shifted Auditory Feedback. *Clinical Neurophysiology* (2011)

36. Liu H, **Behroozmand R**, Bove M, Larson CR. Laryngeal Electromyographic Responses to Perturbations in Voice Pitch Auditory Feedback. *Journal of Acoustical Society of America (JASA)* (2011)
37. **Behroozmand R**, Liu H, Larson CR. Time-Dependent Neural Processing of Auditory Feedback during Voice Pitch Error Detection. *Journal of Cognitive Neuroscience* (2011)
38. Liu H, Meshman M, **Behroozmand R**, Larson CR. Differential Effects of Perturbation Direction and Magnitude on the Neural Processing of Voice Pitch Feedback. *Clinical Neurophysiology* (2011)
39. Liu H, **Behroozmand R**, Larson CR. Enhanced Neural Responses to Self-Triggered Voice Pitch Feedback Perturbations. *Neuroreport* (2010)
40. Vaziri G, Almasganj F, **Behroozmand R**. Pathological Assessment of Patients' Speech Signals using Nonlinear Dynamical Analysis. *Computers in Biology and Medicine* (2010)
41. **Behroozmand R**, Karvelis L, Liu H, Larson CR. Vocalization-Induced Enhancement of the Auditory Cortex Responsiveness during Voice F0 Feedback Perturbation. *Clinical Neurophysiology* (2009)
42. **Behroozmand R**, Almasganj F. Optimal Selection of Wavelet Packet-Based Features using Genetic Algorithm in Pathological Assessment of Patients' Speech Signal with Unilateral Vocal Fold Paralysis. *Computers in Biology and Medicine* (2007)

JOURNAL PAPERS UNDER REVIEW

1. Sangtian S, Fridriksson J, **Behroozmand R**. Impairment of Speech Auditory Feedback Error Detection and Motor Correction in Post-Stroke Aphasia. *Brain and Language* (under review)
2. Phillip L, Sangtian S, Johari K, **Behroozmand R**, Fridriksson J. Behavioral Correlates of Speech Sensorimotor Impairment in Post-Stroke Aphasia. *Journal of Communication Disorders* (under review)
3. Phillip L, Sangtian S, Johari K, **Behroozmand R**, Fridriksson J. Neurophysiological Correlates of Speech Sensorimotor Impairment in Aphasia. *Clinical Neurophysiology* (under review)
4. Miller CA, **Behroozmand R**, Etler CP, Nourski KV, Reale RA, Oya H, Kawasaki H, Greenlee JDW. Neural Correlates of Vocalization and Feedback: Unique Insights From a Cochlear Implant User. *eNeuro* (under review)
5. Arabi A, **Behroozmand R**, Ghelichi L. Voice Quality in Iranian Theater Actors: A Relationship between Auditory Perceptual Evaluation and Acoustic Measurements. *Journal of Voice* (under review)
6. Wang Y, **Behroozmand R**, Philip L, Fridriksson J. Topological Data Analysis of Multi-Trial Electroencephalographic Signals. *IEEE Transaction on Signal Processing* (under review)
7. Wang Y, **Behroozmand R**, Philip L, Bonilha L, Fridriksson J. An exact spectral permutation test of correlation matrices with application to EEG connectivity in aphasia. *Journal of Neuroscience Methods* (under review)

BOOKS AND BOOK CHAPTERS

1. **Behroozmand R**, Cortical Neural Processing of Auditory Feedback during Vocal Production and Control. Ph.D. Dissertation. ProQuest, UMI Dissertation Publishing, Ann Arbor, MI (2012)
2. **Behroozmand R**, Almasganj F, Computational Analysis of Voice Disorders: Signal Processing Approaches to Non-invasive Diagnosis of Laryngeal Diseases in Patients with Pathological Speech. *LAMBERT Academic Publishing (LAP) GmbH & Co. KG Germany* (2011)
3. Liu H, **Behroozmand R**, Larson CR. Audio-Vocal Interactions in the Mammalian Brain. *Handbook of Mammalian Vocalization - An Integrative Neuroscience Approach. Volume 19 (Chapter 9.3). pp: 393-402* (2009)

JOURNAL PAPERS IN PREPARATION

1. **Behroozmand R**, Phillip R, Sangtian S, Bonilha L, Rorden C, Hickok G, Fridriksson J. Neurophysiological Evidence for Sensorimotor Impairment of Speech Auditory Feedback Processing in Post-Stroke Aphasia.
2. **Behroozmand R**, Fitzpatrick M, Thompson E, Johari L. Effects of High Definition transcranial Direct Current Stimulation of the Left Ventral Motor Cortex on Speech and Hand Motor Timing.
3. Johari K, **Behroozmand R**. Levodopa Equivalency Dose Accounts for Differences in Pre-motor Beta Band Oscillations for Motor Timing Deficits of Speech vs. Limb Movement in Parkinson's Disease.
4. Sangtian S, Phillip L, Bonilha L, Rorden R, Hickok G, Fridriksson J, **Behroozmand R**. Lesion Predictors of Speech Error Processing in Post-Stroke Aphasia.

CONFERENCE PAPERS

1. Wang Y, **Behroozmand R**, Philip L, Fridriksson J. Topology Highlights Neural Deficits of Post-Stroke Aphasia Patients. *IEEE International Symposium on Biomedical Imaging* (2019)
2. den Ouden DB, Johari K, Bridwell K, Hayden H, **Behroozmand R**. Modulation of the Speech Motor Control Network through High-Definition Transcranial Direct Current Stimulation. *Proceedings of the 7th International Conference on Speech Motor Control* (2017)
3. Greenlee JD, **Behroozmand R**, Nourski KV, Oya H, Kawasaki H, Howard MA. Using speech and electrocorticography to map human auditory cortex. *Proceedings of the IEEE Conference on Engineering in Medicine and Biology Society* (2014)
4. Hosseini PT, Almasganj F, Emami T, **Behroozmand R**, Gharibzade S, Torabinezhad F. Local discriminant wavelet packet basis for voice pathology classification. *International Conference on Bioinformatics and Biomedical Engineering (ICBBE)* (2008)
5. **Behroozmand R**, Almasganj F, Moradi MH. Pathological Assessment of Vocal Fold Nodules and Polyp using Acoustic Perturbation and Phase Space Features. *Proceedings of IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)* (2006)
6. **Behroozmand R**, Almasganj F, Moradi MH. Application of Fractal Dimension and Phase Space Nonlinear Dynamics in Pathological Diagnosis of Vocal Fold Paralysis. *Proceedings of Iranian Conference on Electrical Engineering (ICEE)* (2006)
7. **Behroozmand R**, Almasganj F. Genetic-Based Optimization of Energy and Entropy Features for Pathological Assessment of Vocal Fold Paralysis. *Proceedings of the International CSI Computer Conference (CSICC)* (2006)
8. **Behroozmand R**, Almasganj F. Comparison of Neural Networks and Support Vector Machines Applied to Optimized Features Extracted from Patients' Speech Signal for Classification of Vocal Fold Inflammation. *Proceedings of IEEE International Symposium on Signal Processing and Information Technology (ISSPIT)* (2005)
9. **Behroozmand R**, Almasganj F. Optimal Feature Selection of Patients' Speech Signal using Genetic Algorithm for Classification of Vocal Fold Edema, Nodules and Polyp. *Proceedings of International Conference on speech and computer (SPECOM)* (2005)
10. **Behroozmand R**, Almasganj F. Application of Teager Nonlinear Energy Operator for Pathological Assessment of Patients' Speech Signal with Vocal Fold Lesion. *Proceedings of Iranian Conference on Biomedical Engineering (ICBME)* (2005)
11. **Behroozmand R**, Almasganj F, Moradi MH. Comparison of Wavelet Transform and Modified Cepstrum Method in Pitch Frequency Estimation of Patients' Speech Signal with Laryngeal Disorder. *Proceedings of the International Conference on Information and Knowledge Technology (IKT)* (2005)

CONFERENCE PRESENTATIONS/ABSTRACTS

1. Johari K, **Behroozmand R**. Neural Correlates of Impaired Speech and Hand Motor Timing Processing in Parkinson's Disease. IMB Conference on Executive Function in Mind and Brain, *University of South Carolina, Columbia, SC* (2019)
2. Sangtian S, **Behroozmand R**. Sensorimotor Impairment of Speech Production and Motor Control in Post-Stroke Aphasia: Evidence from Behavioral and Neurophysiological Biomarkers. IMB Conference on Executive Function in Mind and Brain, *University of South Carolina, Columbia, SC* (2019)
3. Sangtian S, Miller J, Pang C, Reagor J, **Behroozmand R**. Neural Mechanisms of Speech Sensorimotor Impairment in Post-Stroke Aphasia. *University of South Carolina Neuroscience Community Retreat, Columbia, SC* (2019)
4. Miller J, Pang C, Reagor J, **Behroozmand R**. Neural Mechanisms of Speech Sensorimotor Impairment in Post-Stroke Aphasia. *University of South Carolina Discovery Day, Columbia, SC* (2019)
5. Sangtian S**, **Behroozmand R***, Neural Mechanisms of Speech Sensorimotor Impairment in Post-Stroke Aphasia, *Department Communication Disorders Conference, University of South Carolina, Columbia, SC* (2019)
6. Phillip L, **Behroozmand R**, Bonilha L, Rorden C, Hickok G, Fridriksson J. Behavioral and neurophysiological correlates of sensorimotor impairment in aphasia. Invited Research Talk at the Center for the Study of Aphasia Recovery (C-STAR) Lecture Series, *University of South Carolina, Columbia, SC* (2019)
7. Stofik N, **Behroozmand R**, Jamshidi P. Neurofeedback-based reinforcement learning game design for improving speech and limb motor function. *University of South Carolina Discovery Day, Columbia, SC* (2019)
8. Ramirez-Cardenas A, **Behroozmand R**, Gander PE, Kovach C, Kelley R, Nourski K, Oya H, Kawasaki H, Howard M, Greenlee JG. Speaking-Induced Modulation of Multi and Single Unit Neuronal Activities in Human Heschl's Gyrus. *49th Annual Meeting of Society for Neuroscience (SfN), Chicago, IL* (2019)
9. **Behroozmand R**, Phillip L, Johari K, Bonilha L, Rorden C, Hickok G, Fridriksson J. Sensorimotor Impairment of Speech Production and Motor Control in Post-Stroke Aphasia: Evidence from Behavioral and Neurophysiological Biomarkers. *Motor Speech Conference, Savannah, GA* (2018)
10. **Behroozmand R**, Sangtian S, Phillip L, Johari K, Bonilha L, Rorden C, Hickok G, Fridriksson J. Brain Lesion Associated with Impaired Sensorimotor Processing of Speech Auditory Feedback in Aphasia. *Neuroscience Community Retreat, University of South Carolina, Columbia, SC* (2018)
11. Johari K, **Behroozmand R**. Neural Correlates of Impaired Speech and Hand Motor Timing Processing in Parkinson's Disease. *48th Annual Meeting of Society for Neuroscience (SfN), San Diego, CA* (2018)
12. Johari K, **Behroozmand R**. Age-related Changes in Temporal Processing Mechanisms of Speech Production and Hand Movement: An ERP Study. *Cognitive Aging Conference, Georgia Tech University, Atlanta, GA* (2018)
13. Johari K, **Behroozmand R**. Cathodal Stimulation Improves Motor Timing Deficits in Parkinson's Disease during Speech Production and Hand Movements. *University of South Carolina Discovery Day, Columbia, SC* (2018)
14. Hyatt K, Sovde N, McDuffie C, Johari K, **Behroozmand R**. Effect of Altered Auditory Feedback on Sensorimotor Deficits in Aphasic Individuals. *University of South Carolina Discovery Day, Columbia, SC* (2018)
15. Fitzpatrick M, Thompson E, Johari K, **Behroozmand R**. Effects of high definition transcranial direct current stimulation (HD-tDCS) on motor reaction time during speech production and hand movement. *University of South Carolina Discovery Day, Columbia, SC* (2018)
16. Phillip L, **Behroozmand R**, Fridriksson J. Speech Compensation Behavior for Unexpected Errors in Aphasia is Related to Language Performance Beyond Repetition Skill. *10th Annual Meeting of Society for the Neurobiology of Language (SNL), Quebec City, Canada* (2018)

17. Den Ouden DB, Fahey D, McDonald T, Rocktashel J, **Behroozmand R**. Effects of HD-tDCS Current Intensity on Vocal Pitch Motor Control. *10th Annual Meeting of Society for the Neurobiology of Language (SNL), Quebec City, Canada* (2018)
18. Wilmskoetter J, Delgaizo J, Phillip L, **Behroozmand R**, Gleichgerrcht Z, Fridriksson J, Bonilha L. Predicting Naming Responses Based on Pre-Articulatory Electrical Activity in Individuals with Aphasia. *10th Annual Meeting of Society for the Neurobiology of Language (SNL), Quebec City, Canada* (2018)
19. **Behroozmand R**, Johari K, Herath P, Greenlee JG. Neural Correlates of Impaired Motor Timing Processing during Speech Production and Hand Movement in Parkinson's disease. *47th Annual Meeting of Society for Neuroscience (SfN), Washington, DC* (2017)
20. **Behroozmand R**, Phillip L, Johari K, Bonilha L, Rorden C, Hickok G, Fridriksson J. Brain Lesion Associated with Impaired Sensorimotor Processing of Speech Auditory Feedback in Aphasia. *9th Annual Meeting of Society for the Neurobiology of Language (SNL), Baltimore, MD* (2017)
21. den Ouden DB, Johari K, Bridwell K, Hayden C, **Behroozmand R**. Modulation of the Speech Motor Control Network through High-Definition Transcranial Direct Current Stimulation. *7th International Conference on Speech Motor Control, Groningen, the Netherlands* (2017)
22. Johari K, Reifegerste J, Walenski M, Ashrafi F, **Behroozmand R**, Ullman M. Language impairment and improvement in Parkinson's disease: what, when, and why. *9th Annual Meeting of Society for the Neurobiology of Language (SNL), Baltimore, MD* (2017)
23. Reifegerste J, Johari K, Walenski M, Ashrafi B, **Behroozmand R**, Ullman M. A Comprehensive Examination of Language in Parkinson's Disease: Evidence from Syntax, Morphology, and Lexical Processing. *24th Annual Meeting of Cognitive Neuroscience Society (CNS), San Francisco, California* (2017)
24. **Behroozmand R**. Neural Bases of Impaired Sensorimotor Integration in the Human Speech Production System. *Neuroscience Community Retreat, University of South Carolina, Columbia, SC* (2017)
25. Hurst E, Johnson M, Neal S, Johari K, Herath P, **Behroozmand R**. Neurobasis of Impaired Voice Motor Control in Parkinson's Disease. *University of South Carolina Discovery Day, Columbia, SC* (2017)
26. Johari K, Herath P, **Behroozmand R**. Neural correlates of impaired temporal processing before initiation and inhibition of speech production and hand movement: Evidence from Parkinson's disease. *University of South Carolina Discovery Day, Columbia, SC* (2017)
27. **Behroozmand R**, Sangtian S. Neural Basis of Sensorimotor adaptation in the Speech Production System. *American Speech-Language-Hearing Association (ASHA) Conference, Philadelphia, PA* (2016)
28. **Behroozmand R**, Herath P, Johari K, Kelley R, Kapnoura, Bryant K, Narayanan N, Greenlee JDW. Effects of STN deep brain stimulation on voice motor control in Parkinson's disease. *Annual Meeting of Society for Neuroscience (SfN), San Diego, CA* (2016)
29. **Behroozmand R**, Herath P, Johari K, Kelley R, Kapnoura, Bryant K, Narayanan N, Greenlee JDW. Effects of STN deep brain stimulation on voice motor control in Parkinson's disease. *University of South Carolina Neuroscience Retreat, Columbia, SC* (2016)
30. Bridwell K, Hayden C, **Behroozmand R**, den Ouden DB. Modulating Vocal Pitch Motor Control through Neurostimulation. *University of South Carolina Discovery Day, Columbia, SC* (2016)
31. Rogers V, Juitt C, Sangtian S, **Behroozmand R**. Behavioral and Neurophysiological Correlates of Vocal Motor Learning during Altered Auditory Feedback. *University of South Carolina COMD Annual Research Festival, Columbia, SC* (2016)

32. **Behroozmand R**, Sangtian S, Korzyukov O, Larson CR. A Temporal Predictive Code for Voice Motor Control: Evidence from ERP and Behavioral Responses to Pitch-shifted Auditory Feedback. *45th Annual Meeting of Society for Neuroscience (SfN), Chicago, IL* (2015)
33. **Behroozmand R**, Ibrahim N, Korzyukov O, Robin DA, Larson CR. Functional Role of Delta and Theta Band Oscillations for Auditory Feedback Processing during Vocal Pitch Motor Control. *22nd Annual Meeting of Cognitive Neuroscience Society (CNS), San Francisco, California* (2015)
34. Bridwell K, Hayden C, **Behroozmand R**, den Ouden DB. Modulating Vocal Pitch Motor Control through Neurostimulation. *University of South Carolina Discovery Day, Columbia, SC* (2015)
35. **Behroozmand R**, Ibrahim N, Korzyukov O, Larson CR. Distinct Roles of Induced and Evoked Cortical Oscillations for Speech Motor Control. *44th Annual Meeting of Society for Neuroscience (SfN), Washington, DC* (2014)
36. **Behroozmand R**, Greenlee JD, Oya H, Kawasaki H, Howard MA. Neural Coding of Pitch in Human Auditory Cortex: Evidence from Intracranial ECoG Recordings. *44th Annual Meeting of Society for Neuroscience (SfN), Washington, DC* (2014)
37. **Behroozmand R**, Greenlee JD, Oya H, Kawasaki H, Howard MA. Neural Coding of Pitch in Human Auditory Cortex: Evidence from Intracranial ECoG Recordings. *Tucker-Davis Symposium on Advances and Perspectives in Auditory Neurophysiology (APAN), Washington, DC* (2014)
38. **Behroozmand R**, Greenlee JD, Larson CR, Nourski KV, Oya H, Kawasaki H, Howard MA, Brugge JF. Distinct Roles of Anterolateral and Posteromedial Heschl's Gyrus in Coding Human Voice Fundamental Frequency. *43rd Annual Meeting of Society for Neuroscience (SfN), San Diego, California* (2013)
39. **Behroozmand R**, Greenlee JD, Larson CR, Nourski KV, Oya H, Kawasaki H, Howard MA, Brugge JF. Distinct Roles of Anterolateral and Posteromedial Heschl's Gyrus in Coding Human Voice Fundamental Frequency. *Tucker-Davis Symposium on Advances and Perspectives in Auditory Neurophysiology (APAN), San Diego, California* (2013)
40. **Behroozmand R**, Greenlee JD, Hansen D, Larson CR, Chen H, Oya H, Kawasaki H, Howard MA. High Gamma Oscillations Reveal Cortical Auditory Processing of Pitch Perturbation in Voice Feedback. *42nd Annual Meeting of Society for Neuroscience (SfN), New Orleans, Louisiana* (2012)
41. Korzyukov O, Sattler L, **Behroozmand R**, Larson CR. Stimulus direction predictability dampens auditory neural responses to pitch-shifted voice feedback. *162nd Meeting of the Acoustical Society of America (ASA), San Diego, California* (2011)
42. **Behroozmand R**, Larson CR. Motor-induced suppression of auditory neural responses to pitch-shifted voice feedback. *161st Meeting of the Acoustical Society of America (ASA), Seattle, Washington* (2011)
43. **Behroozmand R**, Korzyukov O, Larson CR. Spectral Cues for Mismatch Detection in Voice Pitch Auditory Feedback. *34th Mid-winter Meeting of the Association for Research in Otolaryngology, Baltimore (ARO), Maryland* (2011)
44. **Behroozmand R**, Korzyukov O, Larson CR. Cortical neural mechanisms of mismatch detection in self-voice auditory feedback. *40th Annual Meeting of Society for Neuroscience (SfN), San Diego, California* (2010)
45. **Behroozmand R**, Larson CR. Vocal Pitch Regulation Depends on the Baseline Voice F0 Feedback: An ERP Study for Investigating the Role of Auditory Feedback for Voice Pitch Error Correction. *159th Meeting of the Acoustical Society of America (ASA), Baltimore, Maryland* (2010)
46. **Behroozmand R**, Larson CR. Modulation of Vocal Responses to Auditory Feedback Pitch Perturbation as a Result of Changes in the Baseline Pitch Frequency. *International Conference on Voice Physiology and Biomechanics (ICVPB), Madison, Wisconsin* (2010)
47. **Behroozmand R**, Larson CR. Neural Correlates of Auditory Feedback Processing for Voice Pitch Control in Humans. *39th Annual Meeting of Society for Neuroscience (SfN), Chicago, Illinois* (2009)

48. Greenlee JD, Chen F, **Behroozmand R**, Larson CR, Oya H, Kawasaki H, Chen H, Howard MA. Processing of Self-vocalization in Human Auditory Cortex on Superior Temporal Gyrus. *39th Annual Meeting of Society for Neuroscience (SfN), Chicago, Illinois (2009)*
49. Liu H, **Behroozmand R**, Larson CR. Predictability of Self-initiated Stimulation Modulates Auditory Event-Related Potentials. *39th Annual Meeting of Society for Neuroscience (SfN), Chicago, Illinois (2009)*
50. **Behroozmand R**, Larson CR. Effect of Stimulus Onset Delay on Auditory Cortex Neural Responses to Voice Pitch Feedback Perturbation. *157th Meeting of the Acoustical Society of America (ASA), Portland, Oregon (2009)*
51. **Behroozmand R**, Karvelis L, Liu H, Larson CR. Modulation of Middle and Long-Latency Cortical Potentials During Pitch-Shifted Auditory Feedback Perturbation. *156th Meeting of the Acoustical Society of America (ASA), Miami, Florida (2008)*
52. **Behroozmand R**, Liu H, Larson CR. Neural Representation of Pitch-Shifted Voice Feedback at N100 and P200 Components: an ERP Study. *154th Meeting of the Acoustical Society of America (ASA), New Orleans, Louisiana (2007)*

INVITED PRESENTATIONS

1. **Behroozmand R**. Speech Sensorimotor Impairment in Aphasia and the Role of Dorsal Stream Network, *Motor Speech Conference, Santa Barbara, CA (2020)*
2. **Behroozmand R**. Sensory-Motor Impairment of Speech Auditory Feedback Processing in Post-Stroke Aphasia and the Role of Dorsal Stream Network. *University of Texas at Dallas, Dallas, TX (2020)*
3. **Behroozmand R**. Speech Sensorimotor Deficits in Post-Stroke Aphasia and the Role of Dorsal Stream Network. American Speech and Hearing Association Technical Research Session on Language Disorders in Adults. *American Speech-Language-Hearing Association (ASHA) Convention, Orlando, FL (2019)*
4. **Behroozmand R**. Sensorimotor Impairment of Speech Auditory Feedback Processing in Post-Stroke Aphasia. Cognitive Neuroscience Society (CNS) Satellite Symposium: Neural bases of speech production. *University of California San Francisco (UCSF), San Francisco, CA (2019)*
5. **Behroozmand R**. Sensorimotor Impairment of Speech Auditory Feedback Processing in Aphasia: Evidence from Behavioral, Neurophysiological, and Neuroimaging Data. Department of Communication Sciences and Disorders. *University of Pittsburgh, Pittsburgh, PA (2019)*
6. **Behroozmand R**. Sensorimotor Impairment of Speech Auditory Feedback in Aphasia. American Speech and Hearing Association Special Session on Speech and Language Science: Revolutionary Learning, Evolutionary Practice. *American Speech and Hearing Association (ASHA) Convention, Boston, MA (2018)*
7. **Behroozmand R**. Effect of STN-DBS on Sensorimotor Integration Mechanisms of Voice Motor Control in Parkinson's Disease. *48th Annual Meeting of Society for Neuroscience (SfN), San Diego, CA (2018)*
8. **Behroozmand R**. Mechanisms of Speech Production and Motor Control. *Invited Guest Lecture at University of South Carolina COMD Course on Normal Basis of Speech Production (COMD-822), Columbia, SC (2018)*
9. **Behroozmand R**. Behavioral and Neural Bases of Speech Sensorimotor Impairment in Aphasia. Invited Research Talk at the Center for the Study of Aphasia Recovery (C-STAR) Lecture Series, *University of South Carolina, Columbia, SC (2017)*
10. **Behroozmand R**. Mechanisms of Speech Production and Motor Control. *Invited Guest Lecture at University of South Carolina COMD Course on Normal Basis of Speech Production (COMD-822), Columbia, SC (2017)*
11. **Behroozmand R**. Neural bases of temporal processing and sensory-motor integration in the human speech production system. Invited Research Talk at the Institute for Mind and Brain Colloquium Series, *University of South Carolina, Columbia, SC (2017)*

12. **Behroozmand R.** Neural Bases of Impaired Sensorimotor Integration in the Human Speech Production System. Invited Research Talk at the Neuroscience Community Retreat, *University of South Carolina, Columbia, SC* (2017)
13. **Behroozmand R.** Mechanisms of Speech Production and Motor Control. *Invited Guest Lecture at University of South Carolina Program on Carolina Master Scholars (CMS), Columbia, SC* (2017)
14. **Behroozmand R.** Modulation of Neural Responses to Auditory Feedback Perturbation during Speech Motor Planning. Invited Research Talk at American Speech-Language-Hearing Association Seminar on “Modulation of Sensory Systems before and during Speech Production: Typical and Disordered Speech”. *American Speech-Language-Hearing Association Convention, Philadelphia, PA* (2016)
15. **Behroozmand R.** Effects of Planning and Preparation on Behavioral and ERP Correlates of Speech Motor Control. *Motor Speech Conference, New Port Beach, CA* (2016)
16. **Behroozmand R.** Behavioral and Functional Mechanisms of Speech Production and Motor Control. *Invited Guest Lecture at University of South Carolina COMD Course on Normal Basis of Speech Production (COMD-822), Columbia, SC* (2016)
17. **Behroozmand R.** Mechanisms of Speech Production and Motor Control. *Invited Guest Lecture at University of South Carolina Program on Carolina Master Scholars (CMS), Columbia, SC* (2016)
18. **Behroozmand R.** Functional Role of Delta and Theta Band Oscillations for Auditory Feedback Processing during Vocal Pitch Motor Control. *Cognitive Neuroscience Society (CNS) Satellite Symposium on Neural Bases of Speech Production, University of California at San Francisco (UCSF), San Francisco, California* (2015)
19. **Behroozmand R.** Neural Basis of Speech Motor Control Disorders in Patients with Parkinson’s Disease. *Murray Center for Research on Parkinson’s Disease and Movement Disorders. Department of Neurology. Medical University of South Carolina (MUSC), Charleston, South Carolina* (2015)
20. **Behroozmand R.** Neurological Mechanisms of Speech Motor Control. *Guest Lecture for the Neurogenic Specialization Interest Group. Department of Communication Sciences and Disorders. University of South Carolina, Columbia, South Carolina* (2015)
21. **Behroozmand R.** Neural Mechanisms of Speech Production and Motor Control. Invited Speaker at *Hard Data Cafe. Department of Psychology. University of South Carolina, Columbia, South Carolina* (2015)
22. **Behroozmand R.** Greenlee JD, Larson CR, Nourski KV, Oya H, Kawasaki H, Howard MA, Brugge JF. Neural Correlates of Vocal Production and Motor Control in Primary and Non-primary Human Auditory Cortex. *Acoustical Society of America (ASA) Satellite Symposium on Neural bases of speech production, University of California at San Francisco (UCSF), San Francisco, California* (2013)
23. **Behroozmand R.** Greenlee JD, Larson CR, Nourski KV, Oya H, Kawasaki H, Howard MA, Brugge JF. Distinct Roles of Anterolateral and Posteromedial Heschl’s Gyrus in Coding Human Voice Fundamental Frequency. *43rd Annual Meeting of Society for Neuroscience (SfN), San Diego, California* (2013)
24. **Behroozmand R.** Greenlee JD, Hansen D, Larson CR, Chen H, Oya H, Kawasaki H, Howard MA. High Gamma Oscillations Reveal Cortical Auditory Processing of Pitch Perturbation in Voice Feedback. *Tucker-Davis Symposium on Advances and Perspectives in Auditory Neurophysiology (APAN), New Orleans, Louisiana* (2012)

TEACHING EXPERIENCE

University of South Carolina

COMD-899: Doctoral Research and Dissertation Preparation

COMD-800: Research Seminar in Speech and Language Pathology

COMD-799: Master’s Research and Thesis Preparation

COMD-790: Introduction to Research Methods in Speech Pathology and Audiology
COMD-708: Directed Study in Speech and Language Pathology
COMD-501: Anatomy and Physiology of the Speech and Hearing Mechanism

Northwestern University

CSD-404: Experimental Design and Statistics in Communication Sciences and Disorders
CSD-301: Anatomy and Physiology of Vocal Mechanisms
CSD-307: Acoustic Phonetics
CSD-108: Communication Disorders

Amirkabir University of Technology

BME-780: Neural Networks
BME-750: Microprocessors

Guest Lectures

Lab Management Methods and Administration. Guest Lecture and Moderator at PhD/Postdoc ProSeminar, COMD Department, University of South Carolina, 2019
The Underlying Mechanisms of Speech Production and Motor Control. Guest Lecture at COMD-822 Course on Normal Basis of Speech Production, COMD Department, University of South Carolina, 2016-208
Anatomical and Neurophysiological Mechanisms of Speech Production. Guest Lecture at Carolina Master Scholars Program, University of South Carolina, 2016-2017
Neurological Disorders and their Influence on Speech Motor Control Mechanisms. Guest Lecture at Neurogenic Specialization Track, COMD Department, University of South Carolina, 2015-2016
Neurological Bases of Sensory-Motor Mechanisms for Speech Production and Motor Control. Guest Lecture at Movement Disorder Program, Dept. of Neurology, Medical University of South Carolina, 2015

RESEARCH SUPERVISION/MENTORSHIP

PhD Advisor

Stacey Sangtian (COMD) – Primary Advisor	2018-present
Lorelei Phillip (COMD) – Co-Adviser, Primary Advisor: Julius Fridriksson	2016-2019
Karim Johari (COMD) – Primary Advisor	2015-2019

PhD Dissertation Committee

Stacey Sangtian (COMD) – Committee Chair: Roozbeh Behroozmand Dissertation: Behavioral and Neurophysiological Correlates of Speech Sensorimotor Error Processing in Post-Stroke Aphasia.	2020-present
Chuanji Gao (PSYC) – Committee Chair: Jessica Green Dissertation: The Behavioral and Neural Effects of Audiovisual Affective Processing.	2018-2020
Spencer McAdams (PSYC) – Committee Chair: Svetlana Shinkareva Dissertation: Sound-evoked activations of visual cortex and the principles of multisensory integration.	2018-2019
Karim Johari (COMD) – Committee Chair: Roozbeh Behroozmand Dissertation: Behavioral and Neural Correlates of Aging Effects on Temporal Predictive Mechanisms during Speech Production and Limb Movement.	2017-2019
Lorelei Phillip (COMD) – Committee Chair: Julius Fridriksson Dissertation: Behavioral and Neurophysiological Correlates of Speech Sensorimotor Impairment in Aphasia.	2017-2018

PhD Comprehensive Exam Committee

Charles Smith (EXSC) – Committee Chair: Jill Stewart Comprehensive Exam Project: Applied Human Biomechanics.	2020-present
Stacey Sangtian (COMD) – Committee Chair: Roozbeh Behroozmand Comprehensive Exam Project: Impairment of Speech Auditory Feedback Error Detection and Motor Correction in Post-Stroke Aphasia.	2018-2020
Chuanji Gao (PSYC) – Committee Chair: Jessica Green Comprehensive Exam Project: The Nature of Audiovisual Affective Processing: A Review of 20 Years of Research.	2017-2018
Spencer McAdams (PSYC) – Committee Chair: Svetlana Shinkareva Comprehensive Exam Project: Sound-Evoked Activations of Occipital Cortex: Unimodal Auditory-Evoked Activations Follow the Principle of Inverse Effectiveness.	2017-2018
Lorelei Phillip (COMD) – Committee Chair: Julius Fridriksson Comprehensive Exam Project: None (Written Exam)	2016-2017
Karim Johari (COMD) – Committee Chair: Roozbeh Behroozmand Comprehensive Exam Project: Understanding the Temporal Processing Mechanisms of Speech Production and Hand Movement.	2015-2017

PhD Research Project Supervision

Stacey Sangtian (COMD) – Primary Advisor: Roozbeh Behroozmand Project: Speech Sensorimotor Error Processing in Post-Stroke Aphasia.	2018-present
Sun Yuxiang (CSE) – Primary Advisor: Pooyan Jamshidi Project: EEG-Based Neurofeedback Training for Speech and Limb Motor Disorder Treatment in Parkinson's Disease.	2018-2019
Danielle Fahey (LING) – Primary Advisor: Dirk den Ouden Project: Neurophysiological correlates of lexical overlap of diverse bilinguals.	2017-2019
Lorelei Phillip (COMD) – Primary Advisor: Julius Fridriksson Project: Impaired Sensorimotor Mechanisms of Speech in Post-Stroke Aphasia.	2016-2019
Janelle Rocktashel (EXSC) – Primary Advisor: Jill Stewart Project: Experimental Recording and Analysis of Electroencephalography (EEG) signals in Stroke Individuals with Stroke during Speech Tasks.	2016
Karim Johari (COMD) – Primary Advisor: Roozbeh Behroozmand Project: Neural Mechanisms of Speech and Limb Motor Timing Processing.	2015-2019

Master Thesis Committee

Xingpei Zhao (BIOS) – Committee Chair: Yuan Wang Thesis Project: Network-based Statistical Analysis of Functional Magnetic Resonance Imaging Data from Aphasia Patients.	
Ali Arabi (Iran University of Medical Sciences) – Committee Chair: Leila Ghelichi Thesis Project: Study of Perceptual and Acoustic Voice Features of Theatre Stage Actors and Voice Therapy in Voice Complainant Group.	2018-present
Shafagh Yazdani (EXSC) – Committee Chair: Troy Herter Thesis Project: Cortical Damage and Disconnection Contribute to Post-Stroke Sensorimotor Impairment.	2017-2018
Stacey Sangtian (COMD) – Committee Chair: Roozbeh Behroozmand Thesis Project: Neural and Behavioral Correlates of Planning during Vocal Motor Control.	2015-2017

Master Research Project/Practicum Supervision

Samantha Kazimer (COMD) – Primary Advisor: Roozbeh Behroozmand Research Practicum Project: Effect of Visual Feedback Training on Limb and Speech Motor Control.	2019-present
Sara House (COMD) – Primary Advisor: Roozbeh Behroozmand Research Practicum Project: Effect of Visual Feedback Training on Limb and Speech Motor Control.	2019-present
Eileen Durkin (COMD) – Primary Advisor: Roozbeh Behroozmand Research Practicum Project: Effect of Visual Feedback Training on Limb and Speech Motor Control.	2019-present
Eliza Jane Sessions (COMD) – Primary Advisor: Roozbeh Behroozmand Research Practicum Project: Effect of Visual Feedback Training on Limb and Speech Motor Control.	2019-present
Jacqueline Galbraith (COMD) – Primary Advisor: Roozbeh Behroozmand Research Practicum Project: Neural and Behavioral Bases of Speech Sensorimotor Impairment in Post-Stroke Aphasia.	2018-present
Julia Biernat (COMD) – Primary Advisor: Roozbeh Behroozmand Research Practicum Project: Neural and Behavioral Bases of Speech Sensorimotor Impairment in Post-Stroke Aphasia.	2018-present
Kimberly Chambers (COMD) – Primary Advisor: Roozbeh Behroozmand Research Practicum Project: Neural and Behavioral Bases of Speech Sensorimotor Impairment in Post-Stroke Aphasia.	2018-present
Janna McIntyre (COMD) – Primary Advisor: Roozbeh Behroozmand Research Practicum Project: Neural and Behavioral Bases of Speech Sensorimotor Impairment in Post-Stroke Aphasia.	2018-present
Christine Pang (COMD) – Primary Advisor: Roozbeh Behroozmand Research Practicum Project: Sensorimotor Impairment of Speech in Patients with Post-Stroke Aphasia.	2017-2019
Jacqueline Reagor (COMD) – Primary Advisor: Roozbeh Behroozmand Research Practicum Project: Sensorimotor Impairment of Speech in Patients with Post-Stroke Aphasia.	2017-2019
Jessica Miller (COMD) – Primary Advisor: Roozbeh Behroozmand Research Practicum Project: Sensorimotor Impairment of Speech in Patients with Post-Stroke Aphasia.	2016-2019
Cameron McDuffie (COMD) – Primary Advisor: Roozbeh Behroozmand Research Practicum Project: Effects of Aging on the Neural Mechanisms of Speech Sensorimotor Integration and Motor Timing Deficits.	2016-2018
Kathryn Hyatt (COMD) – Primary Advisor: Roozbeh Behroozmand Research Practicum Project: Effects of Aging on the Neural Mechanisms of Speech Sensorimotor Integration and Motor Timing Deficits.	2016-2018
Nicole Sovde (COMD) – Primary Advisor: Roozbeh Behroozmand Research Practicum Project: Effects of Aging on the Neural Mechanisms of Speech Sensorimotor Integration and Motor Timing Deficits.	2016-2018
Megan Johnson (COMD) – Primary Advisor: Roozbeh Behroozmand Research Practicum Project: Age-related Reorganization of Sensorimotor Brain Networks Involved in Vocal Production and Motor Control: Insights from Behavioral and Neurophysiological Recordings.	2015-2017
Sarah Neal (COMD) – Primary Advisor: Roozbeh Behroozmand	2015-2017

Research Practicum Project: Age-related Reorganization of Sensorimotor Brain Networks Involved in Vocal Production and Motor Control: Insights from Behavioral and Neurophysiological Recordings.	
Erin Hurst (COMD) – Primary Advisor: Roozbeh Behroozmand	2015-2017
Research Practicum Project: Age-related Reorganization of Sensorimotor Brain Networks Involved in Vocal Production and Motor Control: Insights from Behavioral and Neurophysiological Recordings.	
Stacey Sangtian (COMD) – Primary Advisor: Roozbeh Behroozmand	2014-2016
Research Practicum Project: Neural Mechanisms of Sensorimotor Learning in the Speech Production System.	
Chantel Juitt (COMD) – Primary Advisor: Roozbeh Behroozmand	2014-2016
Research Practicum Project: Neural Mechanisms of Sensorimotor Learning in the Speech Production System.	
Victoria Rogers (COMD) – Primary Advisor: Roozbeh Behroozmand	2014-2016
Research Practicum Project: Neural Mechanisms of Sensorimotor Learning in the Speech Production System.	

Undergraduate Independent Study/ Research Project Mentorship

Bryson Bowman (PUBH) – Primary Advisor: Roozbeh Behroozmand	2020
Independent Study Project: Neuroscience of Speech Production in Neurotypical Adults and Individuals with Parkinson’s Disease.	
Lauren Ritson (BIOL) – Primary Advisor: Roozbeh Behroozmand	2019-present
Research Project: Neurofeedback Training for Speech Sensorimotor Enhancement in Post-stroke Aphasia	
Emily Virag (BIOL) – Primary Advisor: Roozbeh Behroozmand	2018-present
Research Project: EEG-based Neurofeedback Training for Enhancing Motor Function in Neurotypical Adults. <i>(Funded Magellan Grant Project)</i>	
Claire Sturgill (CSE) – Primary Advisor: Roozbeh Behroozmand	2018-present
Research Project: EEG-based Neurofeedback Training for Improving Speech and Hand Motor Reaction Time in Parkinson’s Disease.	
Michaela Selinga (BMEN) – Primary Advisor: Roozbeh Behroozmand	2018-2019
Research Project: Sensorimotor Impairment of Speech Auditory Feedback Processing in Post-Stroke Aphasia.	
Nathan Stofik (CSE) – Primary Advisor: Pooyan Jamshidi	2018-2019
Research Project: Neurofeedback-based reinforcement learning game design for improving speech and limb motor function.	
Maggie Fitzpatrick (EXSC) – Primary Advisor: Roozbeh Behroozmand	2017-2018
Research Project: Speech and Hand Movement Rehabilitation through HD-tCDS Neurostimulation. <i>(Funded Magellan Grant Project)</i>	
Elizabeth Thompson (BIOL) – Primary Advisor: Roozbeh Behroozmand	2015-2018
Research Project: Speech and Hand Movement Rehabilitation through HD-tCDS Neurostimulation. <i>(Funded Magellan Grant Project)</i>	
Caroline Hayden (BIOL) – Primary Advisor: Roozbeh Behroozmand	2015-2017
Research Project: Modulating Vocal Pitch Motor Control through Neurostimulation. <i>(Funded Magellan Grant Project)</i>	
Keiko Bridwell (BIOL) – Primary Advisor: Dirk den Ouden	2015-2017
Research Project: Modulating Vocal Pitch Motor Control through Neurostimulation. <i>(Funded Magellan Grant Project)</i>	

SERVICE & PROFESSIONAL DEVELOPMENT

National Level

NIH Study Section Reviewer

Motor Function Speech and Rehabilitation (MFSR) Study Section, Center for Scientific Review, National Institute of Health 2020

Editorial Board Member

Journal of Speech, Language and Hearing Research (JSLHR) 2017-present

Invited Reviewer

ASHA Foundation Grant Review and Reviewer Training Panel (GRRT) 2018 & 2019

Committee Member

Topic Committee for Motor Speech Conference 2017

Ad-hoc Reviewer

Journal of Neuroscience	Neurobiology of Aging
Journal of Cognitive Neuroscience	Psychophysiology
Cortex	Psychonomic Bulletin and Review
Cerebral Cortex	Frontiers in Human Neuroscience
Neuroimage	European Journal of Neuroscience
Human Brain Mapping	Journal of Behavior Research Methods
Transactions on Biomedical Engineering	Journal of Speech, Language and Hearing Research
Nature Scientific Reports	International Journal of Speech-Language Pathology
Brain and Language	Journal of the Association for Research in Otolaryngology
Experimental Brain Research	
Cognitive, Affective and Behavioral Neuroscience	
Neuroscience and Behavioral Reviews	

University of South Carolina

Committee Member

USC Faculty Welfare Committee 2015-2018

Invited reviewer

USC ASPIRE-I Grant Review Panel 2018

USC SPARC Graduate Research Grant Review Panel 2018

Reviewer/Judge

USC Discovery Day Conference 2015-present

Arnold School of Public Health

Committee Member

ASPH Search Committee for the Assoc. Dean of Diversity, Equity, and Inclusion 2018

ASPH Diversity, Equity, and Inclusion Committee 2017-present

ASPH Student Awards Committee 2015-2016

COMD Department

Committee Member

COMD Graduate Admissions Committee 2015-2016, 2019-2020

COMD Doctoral Program Committee 2014-present

COMD Conference Organizing Committee 2018

COMD Employer Survey Committee 2018

COMD Graduate Admissions Committee 2015-2018

Faculty Evaluator

COMD Master Students Summative Assessment Exam (Part B) 2016-2019

Organizer/Coordinator

COMD student presentations at Discover USC Conference 2018-present

Reviewer/Judge

COMD MCD Students Research Festival 2015-present

PUBLIC MEDIA

C-STAR Lecture Series: Behavioral and Neural Bases of Speech Sensorimotor Impairment in Aphasia (Sep.14.2017) [Link](#)

COMD's Roozbeh Behroozmand receives \$700K from NIH to study how brain damage causes speech impairment in stroke survivors with aphasia. University of South Carolina Arnold School of Public Health (July.24.2017) [Link](#)

South Carolina Improves Parkinson's Symptoms with Therapy and Research. Association of Schools and Programs of Public Health (ASPPH). *Members Research and Reports* (January.21.2016) [Link](#)

South Carolina Finds Brain Activity Varies for Active vs Passive Listening. Association of Schools and Programs of Public Health (ASPPH). *Members Research and Reports* (February.5.2015) [Link](#)

Study finds increased brain activity when listening to live speech sounds compared to playback sounds. USC Arnold School of Public Health News (January.26.2015) [Link](#)

PROFESSIONAL RESEARCH SKILLS

Electrophysiological Measurement of Human Brain Activity (EEG, ERP, ECoG)

Functional and Anatomical Imaging of the Human Brain (fMRI)

Programming in MATLAB, SPSS, Max-Msp, Igor, C++, Assembly

Digital Electronic Circuit Design and Analysis