Yune Sang Lee, Ph.D.

Department of Speech, Language, and Hearing, School of Behavioral and Brain Sciences
The University of Texas at Dallas
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Education & Training

University of Pennsylvania, Philadelphia, PA **2011 – 2016**
Department of Neurology & Center for Cognitive Neuroscience
Postdoctoral Research Fellow

Dartmouth College, Hanover, NH **2005 – 2010**
Department of Psychological and Brain Sciences
Ph.D. in Cognitive Neuroscience

Yonsei University, Seoul, S. Korea **2001**
Deptartment of System Biology
B.S. in Biology

Employment

The University of Texas at Dallas, Richardson, TX **Aug. 2020 – Present**
Assistant Professor
Department of Speech, Language, and Hearing, School of Behavioral and Brain Sciences
Callier Clinical Research Center & Center for BrainHealth

The Ohio State University, Columbus, OH **Aug. 2016 – July 2020**
Assistant Professor
Department of Speech and Hearing Sciences / Chronic Brain Injury, Discovery Themes

Grant

Extramural Funding

Submitted
SoRhythm: Novel sound therapy for Alzheimer's patients
- Agency: AWARE (https://www.awaredallas.org/)
- Role: PI
- Total cost: $50,000
- Duration: 05/01/2025 – 04/30/2026

Awarded
Impact of rigorous music training on the brain development
- Agency: Dallas Symphony Orchestra
- Role: PI
- Total cost: $30,000
- Duration: 12/01/2023 – 11/30/2024

Dance Therapy in patients with Parkinson's disorders
- Agency: Texas Health Resources Foundation
- Role: co-I (PI: Anna Tseng)

- Total cost: $280,479 (subcontract cost: $118,200)
- Duration: 02/01/2024 – 01/31/2026

TheraBeat: a novel sound therapy for Alzheimer's patients
- Agency: AWARE (https://www.awaredallas.org/)
- Role: PI
- Total cost: $40,000
- Duration: 05/01/2022 – 03/31/2024

SLAM Lab research support
- Agency: Neuroscience Innovation Foundation (https://neurofdn.com/)
- Role: PI
- Total cost: $50,000
- Duration: 05/01/2022 – 4/30/2023

Non-invasive brain stimulation using a novel 3D sound therapy
- Agency: Digisonic (digisonic.com)
- Role: PI
- Total cost: $200,000
- Duration: 01/01/2022 – 12/31/2022

Speech Hero: a rhythm-based speech therapy app for individuals with aphasia
- Agency: NIH Small Business Innovation Research (Grant No: 614362)
- Role: Consortium PI
- Total cost: $50,000
- Duration: 06/01/2020 – 05/31/2021

Investigating the neural mechanisms of language recovery through rhythm gaming therapy in aphasia
- Agency: National Institutes of Health (NIDCD; Grant No: 1R21DC018699-01)
  *No ESI advantage is applied
- Role: PI
- Total cost: $429,000
- Duration: 01/01/2020 – 12/31/2022

TRIPODS + X Project: An MBI TGDA + Neuro Program for Undergraduates
- Agency: National Scientific Foundation (Grant No: NSF-CCF 1839356)
- Role: co-PI (PI: Janet Best)
- Total cost: $200,000
- Duration: 09/01/2018 – 08/31/2023
  *** Featured in the front page of the NSF website*

Drum Dance Rehabilitation: A Novel Parkinson's Disease Therapy Program
- Agency: The Parkinson's Foundation (Grant No: PF-CGP-19163)
- Role: PI
- Total cost: $37,000
- Duration: 09/01/2019 – 8/31/2020

Application of fNIRS to Neuroscience Research of Speech, Language, and Music
- Agency: Shimadzu Scientific Instrument, Japan
- Role: PI
- Total cost: $380,000
- Duration: 12/18/2017 – 12/17/2018

Brain-based evaluation of SoundMind – a Computerized Cognitive Training Program
- Agency: Tech Incubator Program for Startup (TIPS) in Korea (Grant No: S2640193)
- Role: PI (sub-contract)
- Total cost: $6,3000
- Duration: 01/01/2019 – 12/31/2019

Music and Language Skills in Korean Children
- Agency: Korea Advanced Institute of Science and Technology
- Role: co-I (PI: Kyung-Myun Lee)
- Total cost: $20,000
- Duration: 09/01/2018 – 08/31/2020

Intramural Funding

Awarded

Investigating the therapeutic mechanisms of binaural beat stimulation in children with developmental language disorder
- Agency: School of Behavioral and Brain Sciences, University of Texas at Dallas
- Role: PI
- Total cost: $12,500
- Duration: 01/01/2022 – 6/30/2022

Mobile EEG System Request
- Agency: School of Behavioral and Brain Sciences, University of Texas at Dallas
- Role: co-PI (PI: Maguire)
- Total cost: $20,785

Investigating Compensatory Language Processes Prompt by Rhythm Video Game Therapy
- Agency: Chronic Brain Injury Discovery Theme, OSU
- Role: PI
- Total cost: $50,000
- Duration: 01/01/2017 – 12/31/2017

A Novel Parkinson's Disease Therapy Program for the Columbus Community
- Agency: Connect & Collaborate Grant Program
- Role: PI
- Total cost: $29,000
- Duration: 09/01/2019 – 8/31/2020

OSU Pilot Neuroimaging Grant
- Agency: College of Arts and Sciences, OSU
- Role: PI

- Total cost: $25,000
- Duration: 06/01/2018 – 05/31/2019

OSU Social and Behavioral Sciences Small Grant Program
- Agency: College of Arts and Sciences, OSU
- Role: PI
- Total cost: $4,000
- Duration: 09/01/2017 – 8/31/2017

OSU Social and Behavioral Sciences Special Grant
- Agency: College of Arts and Sciences, OSU
- Role: PI
- Total cost: $4,000
- Duration: 09/22/2018 – 09/21/2019

Travel Awards
ASHA Lesson for Success
- Agency: American Speech-Language-Hearing Association
- Role: early-career investigator
- Total cost: entire travel expenses including registration fee
- Duration: 04/27/2020 – 04/29/2020

The Humanities and the Arts Travel Grant Program
- Agency: Global Arts and Humanities, Discovery Themes, OSU
- Role: co-I (PI: David Huron)
- Total cost: $10,000
- Duration: 08/01/2017 – 09/01/2017

Consulting Service
Powerless, Wireless, and Nontoxic Bio-telemetry Sensor and Communication System
- Agency: Korea Polytechnic University
- Role: Consultant (PI: Jae-Young Chung)
- Duration: 02/01/2018 – 01/31/2021

Manuscripts

Published Articles (peer-reviewed)
• *Underlined author is the corresponding author*

Kim, H-W, Kovar, J, Bajwa, JS, Miran, Y, Ahmad, A, Moreno, MM, Price. TJ, **Lee, YS.** (2024). Rhythnic motor behavior explains individual differences in grammar skills in adults. *Scientific Reports*. https://doi.org/10.1038/s41598-024-53382-9

Kim, JH, Kim, H-W, Kovar, J, **Lee, YS.** (2024). Neural consequences of binaural beat stimulation on auditory sentence comprehension: an EEG study. *Cerebral Cortex*. https://doi.org/10.1093/cercor/bhad459

Kim, H-W, Kim, McLaren, K, **Lee, YS.** (2024). No influence of regular rhythmic priming on grammaticality judgment and sentence comprehension in English-speaking children. *Journal of Experimental Child*

Psychology, 237, 105760. https://doi.org/10.1016/j.jecp.2023.105760

Kim, H-W., Happe, J., **Lee, YS.** (2023). Beta and gamma binaural beats enhance auditory sentence comprehension. *Psychological Research.* https://doi.org/10.1007/s00426-023-01808-w

Kim, H-W, Lee, K, **Lee, YS.** (2023). Sensorimotor and working memory systems jointly support development of perceptual rhythm processing. *Developmental Science*, 26(1): e13261. https://doi.org/10.1111/desc.13261

Lee, YS, Rogers, C, Min, NE, Wingfield, A, Grossman, M, Peelle, JE. (2022). Neural compensation supporting successful speech comprehension in normal aging. *Aging Brain,* 2: 100051. https://doi.org/10.1016/j.nbas.2022.100051

Yoon, Y-S, Gutierrez, M, **Lee, YS.** (2021)**.** Effects of the configuration of hearing loss on consonant perception between simulation bimodal and electric acoustic stimulation hearing. *Journal of American Academy of Audiology*, 32(08): 521-527. https://doi.org/10.1055/s-0041-1731699

Heard, MJ, Li, Xiangrui, **Lee, YS.** (2021). Hybrid Auditory fMRI Imaging: in pursuit of increasing data acquisition while decreasing the impact of scanner noise. *Journal of Neuroscience Methods*, 358: 109198. https://doi.org/10.1016/j.jneumeth.2021.109198

Moritz, M, Heard, M, Kim, H-W, **Lee, YS.** (2020). Invariance of edit-distance to tempo in rhythm similarity. *Psychology of Music.* https://doi.org/10.1177/0305735620971030

Lee, YS, Ahn, SH, Holt, RF, Schellenberg, G. (2020). Rhythm and syntax processing in school-age children. *Developmental Psychology.* 56(9): 1632-1641. https://doi.org/10.1037/dev0000969

Heard, MJ & **Lee, YS.** (2020). Shared neural resources of rhythm and grammar: An ALE Meta-Analysis. *Neuropsychologia,* 137: 107284.

Lee, KM & **Lee, YS.** (2019). Beat Synchronization Development of Korean Elementary School Students. *The Korean Society for Music Theory,* 26(2): 251-270.

Lee, YS, Wingfield, A, Min, NE, Kotloff, E, Grossman, M, Peelle, JE. (2018). Differences in hearing acuity among "normal-hearing" young adults modulate the neural basis for speech comprehension. *eNeuro. 0263-17.2018 **Featured in numerous media news including US News & World Report*

Lee, YS. (2018). Impact of subtle hearing loss on the cognition of young adults. *Hearing Journal,* 71(10):30. doi: 10.1097/01.HJ.0000547401.21466.27 **invited*.

Belyk, M, **Lee, YS**, Brown, S. (2018). How does human motor cortex regulate vocal pitch in singers? *Royal Society Open Science,* 5(8): 172208. https://doi.org/10.1098/rsos.172208

Quandt, LC, **Lee, YS**, Chatterjee, A. (2017). Neural bases of action abstraction. *Biological Psychology*, 129(2017): 314-323.

Lee, YS, Zreik, J, Hamilton, RH. (2017). Patterns of neural activity predict picture-naming performance of a patient with chronic aphasia. *Neuropsychologia,* 94:52-60.

Lee, YS, Min, NE, Wingfield, A, Grossman, M, Peelle, JE. (2016). Acoustic richness modulates the neural networks supporting auditory sentence comprehension. *Hearing Research*, 333: 108-117. doi:10.1016/j.heares.2015.12.008

Lee, YS, Peelle, JE, Kraemer, D, Lloyd, S, Granger, RH. (2015). Multivariate sensitivity to voice during auditory categorization. *Journal of Neurophysiology*, 114 (3): 1819-1826. doi: 10.1152/jn.00407.2014

Lee, YS, Janata, P, Frost, C, Martinez, Z, Granger, RH. (2015). Melody recognition revisited: Influence of melodic Gestalt on the encoding of relational pitch information. *Psychonomic Bulletin & Review*, 22(1): 163-9. doi:10.3758/s13423-014-0653-y

Wiener, M, **Lee, YS**, Lohoff, F, Coslett, HB. (2014). Individual differences in the morphometry and activation of time perception networks are influenced by genotype. *NeuroImage*, 89:10-22.

Raizada, RDS & **Lee, YS.** (2013). Smoothness without smoothing: why Naïve Bayses is not naïve for multisubject searchlight studies. *PLOS ONE,* 8(7): e69566.

Lee, YS, Turkeltaub, PE, Granger, RH, Raizada, RDS. (2012). Categorical speech processing in Broca's area. *Journal of Neuroscience*, 32(11): 3942-3948.

Lee, YS, Janata, P, Frost, C, Hanke, M, Granger, RH. (2011). Investigation of melodic contour processing in the brain using pattern-based fMRI. *NeuroImage*, 57(1): 293-300.

Russ, BE, **Lee, YS**, Cohen, YE. (2007). Neural and behavioral correlates of auditory categorization. *Hearing Research*, 229: 204-12.

Book Chapter

Lee, YS, Wilson, M, Howland, KM. (In Press). Ch 6. Music for speech disorders. Music Therapy & Music-Based Interventions in Neurology: Perspectives on Research and Practice. *Springer Nature.*

Lee, YS, Thaut, C, Santoni, C. (2019). Neurological music therapy for speech and language rehabilitation. *Oxford Handbook on Music and the Brain*. *Oxford University Press.*

Under Review

Kim, H-W, Park, MS, **Lee, YS**, C-Y, Kim. (Under review). Prior conscious experience modulates the impact of audiovisual temporal correspondence on visual processing outside of awareness. *Consciousness and Cognition*.

Rashidi, F, Parsaei M, Kiani I, Sadri, A, Aarabi, SR, **Lee, YS**, Moghaddam, HS. (Under review). White matter correlates of impulsive behavior in healthy individuals: A diffucion MRI study. *Journal of Psychiatric Research*.

Schneider, JM, Kim, J, Poudel, S, **Lee, YS,** Maguire, M. (Under major revision). Environmental experiences and cognitive outcomes are predicted by resting-state EEG in school-aged children. *Developmental Cognitive Neuroscience.*

Freeman, E, Kronenberger, K, Suarez, E, Kim, H-W, Qi, S, Thibodeau, L, **Lee, YS.** (Submitted). Exploration of auditory processing beyond speech recognition, *American Journal of Audiology.*

In Preparation

Kim, H-W, Ashah, A, Lim, S-J, **Lee, YS.** Individual differences in rhythm skills relate to developmental language disorder in adults.

Leung, C, Kim, JH, Happe, J, **Lee, YS.** The effect of beta binaural beat stimulation on resting-state brain activity in patients with mild cognitive impairment or Alzheimer's Disease.

Mundayoor, S, Kim, JH, Kovar, J, **Lee, YS**. Increased alpha power of neural activity and emotional arousal driven by immersive 3D sound.

Heard, M & **Lee, YS.** Implicit neural representation of subtle difference in rhythmic tempo and complexity.

Heard, M, McLean KE, Wood, K. **Lee, YS.** Role of the pre-supplementary motor areas in syntax and rhythm: a transcranial alternating current stimulation (tACS) study.

Conference Presentation (2016 – present)

2023 SFN (Society for Neuroscience) **Nov. 2023**

a. The effect of beta binaural beat stimulation on resting-state brain activity in patients with mild cognitive impairment (MCI) or Alzheimer's disease (AD).
Leung, C. Kim J.H., Happe J., Kovar J., **Lee, YS.** (Poster Presentation)

b. Role of the pre-supplementary motor area in syntax: a transcranial alternating current stimulation (tACS) study.
Leung, C., Heard M., McLaren K., Wood K., **Lee, YS.** (Poster Presentation)

2023 CNS (Cognitive Neuroscience Society) **Mar. 2023**

Neural correlates of enhanced auditory sentence comprehension by binaural beat stimultation
Kim J.H., Kim, H-W, Kovar J., **Lee, YS.** (Poster Presentation)

2022 SNL (Society for Neurobiology of Language) **Oct. 2022**

a. The influence of dopamine genotypes on the relationship between rhythm and language processing
Kim, H-W, Kovar, J, Bajwa, J, Mian, Y, Ahmad A, Moreno, MM, Price, TJ, **Lee, YS.** (Poster Presentation)

2022 ACRM (American Congress of Rehabilitation Medicine) **Nov. 2022**

A novel sound therapy combining music and binaural beats for Alzheimer's disease
Lee, YS. (Symposium Talk)

2022 SNL (Society for Neurobiology of Language) **Oct. 2022**

b. The influence of dopamine genotypes on the relationship between rhythm and language processing
Kim, H-W, Kovar, J, Bajwa, J, Mian, Y, Ahmad A, Moreno, MM, Price, TJ, **Lee, YS.** (Poster Presentation)

c. The effects of rhythm priming on syntactic language processing in children
Kim, H-W, Ginter, K, **Lee, YS.** (Poster Presentation)

2022 SMPC (Society for Music Perception & Cognition) **Aug. 2022**

a. Sensorimotor synchronization and auditory working memory jointly predicts

Rhythm perception in children
Kim, H-W, Lee, KM, **Lee, YS.** (Podium Talk)

b. Prior listening to binaural beats facilitates grammar processing during auditory Speech tasks
Happe, J, Kim, H-W, **Lee, YS.** (Poster Presentation)

c. Beat synchronization and Korean reading fluency of elementary school children
Lee, KM, Kim, H-W, **Lee, YS.** (Poster Presentation)

2019 ACRM (American Congress of Rehabilitation Medicine) **Nov. 2019**
Home-based rhythm video gaming therapy for Aphasia
Lee, YS. (Symposium Talk)

2019 SMPC (Society for Music Perception and Cognition) **Aug. 2019**
Influence of rhythm and beat priming on receptive grammar task
Yen, S, Bendoly, D, Heard, H, **Lee, YS.** (Poster Presentation)

Human perception of rhythm similarity: A multidimensional scaling evaluation
Moritz, M, Heard, M, **Lee, YS.** (Poster Presentation)

2019 Organization of Human Brain Mapping Conference **June 2019**
Exploring a hybrid auditory fMRI protocol combining ISSS and multiband sequences
Heard, M, Li, X, Wolfe, T, **Lee, YS.** (Poster Presentation)

International Conference of Music Perception and Cognition, Montreal, CA **July 2018**
Spontaneous rhythm tapping predicts ability of working memory in children
Lee, YS, Corbeil, K, Ahn, SH. (Symposium Talk)

International Conference of Music Perception and Cognition, Montreal, CA **July 2018**
Shared neural resources of rhythm and grammar: An ALE meta-analysis
Heard, MJ & **Lee, YS.** (Symposium Talk)

Society for Neurobiology of Language, Baltimore, MD **Nov. 2017**
Differences in hearing acuity among young adults modulate the neural basis for speech communication (Poster Presentation)
Lee, YS, Wingfield, A, Min, NE, Jester, C, Kotlofovf, E, Grossman, M, Peelle, JE.

Society for Neurobiology of Language, Baltimore, MD **Nov. 2017**
Rhythm sensitivity assists in overcoming acoustic and syntactic challenges during speech listening (Poster Presentation)
Ahn, S, Golthwaite, I, Corbeil K, Byrer A, Perry K, Polakampalli A, Miller K, Holt, RF, **Lee, YS.**

Invited Talks

2024
Neuroscience Forum on Alzheimer's Disease (upcoming), S. Korea **Feb. 2024**

New frontiers of digital sound therapy for neurorehabilitation

Dallas Symphony Orchestra Guild, Dallas, TX **Jan. 2024**
How does musical training impact the brain development of school-age children

2023
Feel Good Dallas Wellness Fest, Dallas, TX **Oct. 2023**

CHI Memorial Hospital, Chattanooga, TN **Sept. 2023**
None-invasive brain stimulation using binaural beat combined with music

Vanderbilt University, Medical Center, Nashville, TN **Sept. 2023**
The Brain, Music, and Wellbeing

BrainHealth Summer Intern Program **June 2022**
The power of music

Neuroscience Innovation Foundation, St. Louis, MO **Apr. 2023**
A novel sound therapy for Alzheimer's disease

The Dallas Symphony Orchestra, Dallas, TX **Feb. 2023**
The brain, music, and well-being

2022
Invited Seminar Seoul National University Hospital, Bundang, S. Korea **Nov. 2022**
The brain, music, and well-being

Keynote lecture at the AWARE membership Kick-off event **Aug. 2022**
A novel sound therapy for Alzheimer's disease

Invited seminar at the Laboratory for Cognition and Neurostimulation, University of Pennsylvania, Philadelphia, PA **June 2022**
The brain, music, and well-being

BrainHealth Summer Intern Program **June 2022**
The brain, music, and well-being

Special Lecture at the department of Brain & Cognitive Sciences, Seoul National University, Seoul, S. Korea **May 2022**
The brain, music, and well-being

Dartmouth Symposium on Music and Medicine in Cross-Cultural Perspective **Apr. 2022**
The brain, music, and well-being

Frontiers talk series at Center for BrainHealth **Mar. 2022**
The brain, music, and well-being

2021

BrainHealth Summer Intern Program **June 2021**
The neural basis of speech, language, and music

Center for Vital Longevity Virtual Science Series **Apr. 2021**
The brain, music, and well-being

NIH Music & Health Investigator Meeting **Mar. 2021**
Investigation the neural mechanisms underlying language recovery through rhythm therapy in aphasia

2020

Therapy Insights (Continuing Education Course) **Dec. 2020**
Beat the beat: Rhythm-based intervention for communication disorders

Colloquium Series, Music and Health Science Research Collaboratory, University of Toronto, Toronto, Canada **Feb. 2020**
New frontiers in neurologic music therapy

Colloquium, the Cognitive and Behavioral Science, Neuroscience and Music Department, Washington and Lee University, VA **Feb. 2020**
The brain, music, and well-being

2019

CCBS Undergraduate Summer Institute, OSU **July 2019**
Music matters?

Otolaryngology Department Seminar, Washington University in St. Louis, MO **May 2019**
The neural and genetic mechanisms underlying connection between music and language

CBI Research Day, OSU **Mar. 2019**
Where is neuroimaging going?

Topology, Geography, and Data Seminar, OSU **Jan. 2019**
The connection between speech, language, and music

2018

The Philadelphia Korean Scholar Association (PKSA) Symposium, Philadelphia, PA **Dec. 2018**
The connection between speech, language, and music (keynote speech)

HAMIC (Humanities and Music Interdisciplinary Colloquium), OSU **Nov. 2018**
The connection between speech, language, and music

NGP (Neuroscience Graduate Program) Fall retreat, OSU **Sep. 2018**
The connection between speech, language, and music

MBI-CBI Mini-symposium on Quantitative Neuroscience, OSU **Sep. 2018**
Behavioral and neural connection between speech, language, and music

CCBS (Center for Cognitive and Brain Sciences) Fall retreat, OSU **Sep. 2018**
Spontaneous rhythm tapping predicts working memory ability in children

OSU Electrical & Computer Engineering Research Group Meeting **Aug. 2018**
The new frontiers in neurorehabilitation of communication disorders

OSU HumCog Summer Institute **Aug. 2018**
The brain, music, and well-being

OSU Joint Oto-SHS meeting **June 2018**
Differences in hearing acuity among "Normal-Hearing" young adults
Modulate the neural basis for speech communication

Korea Society for Music Perception and Cognition (KSMPC) **May 2018**
The connection between speech, language, and music (*keynote speech*)

Annual Brain Health & Performance Summit, Columbus, OH **Mar. 2018**
Rhythm-based rehabilitation for communication disorders

Annual TBI Summit, Columbus, OH **Mar. 2018**
The brain, music, and well-being

Cognitive Proseminar, Dept. of Psychology, OSU **Jan. 2018**
The connection between speech, language, and music

2017
KSEA SW Ohio Chapter Seminar, University of Cincinnati, Cincinnati, OH **Dec. 2017**
The brain, music, and well-being

Panelist at 2017 Brain Health and Performance Summit, Columbus, OH **Dec. 2017**
Arts-based rehabilitation

"Aging in Community" International Standardization Symposium, S. Korea **Dec. 2017**
Neural compensation supporting successful communication in normal aging

KSEA Ohio Chapter Seminar, The Ohio State University, Columbus, OH **Apr. 2017**
Mind decoding: New frontiers in neuroImaging

2016
Eye and Ear Institute, The Ohio State University, Columbus, OH **Dec. 2016**
Predicting CI outcome using novel neuroimaging techniques

OSU music cognition group, The Ohio State University, Columbus, OH **Sep. 2016**
Rhythm-based rehabilitation for communication disorders

The Haskins Laboratories, New Haven, CT **May 2016**
New frontiers in brain-based rehabilitation for communication disorders

Adhoc Reviewer

American Journal of Speech-Language Pathology
Brain & Language, Cerebral Cortex
Clinical Archives of Communication Disorders
Cortex
European Journal of Neuroscience
Experimental Brain Research
Frontiers in Human Neuroscience
Human Brain Mapping
Hearing Research
International Journal of Psychophysiology
International Journal of Imaging Systems and Technology
Journal of Alzhiemer's disease
Journal of Cognitive Neuroscie
Journal of Cognitive Science
Journal of Neuroscience
Journal of Neurophysiology
Journal of Neurology
NeuroImage
NeuroImage Clinical
Neurocase
Psychomusicology
Magnetic Resonance Imaging Music Perception
Open Nursing
Scientific Reports

Course Taught

Neural basis of Speech, Language, and Music (undergraduate seminar) **Spring, 2021 – present**

Neural basis of Speech, Language, and Music (graduate seminar) **Fall, 2020 – present**

Student Advising

Graduate students advised

Matthew Heard, Ph.D. student **May 2018 – Dec. 2023**

Hyun-Woong Kim, Ph.D. student **Aug. 2019 – present**

Carole Leung, Ph.D. student **Aug. 2022 – present**

Saranya Mundayoor, Ph.D. student **Aug. 2023 – present**

University / Community / Academic Services (2016 – present)

Callier postdoc hiring committee **Jan. 2024**

BBS Committee for Cluster Hire in Lifespan Initiative **Sep. 2022- present**

Panelist National Youth Leadership Forum: Explore STEM Program **June 2022**

UTD Intellectual Property Committee **Sep. 2021 – present**

SLHS Ph.D. Program Admission Committee **Nov. 2021 – present**

ASHA (American Speech-Hearing Association) 2021 Convention Topic Committee **Feb. 2021 – Nov. 2021**

BBS Website Renovation Committee	**Apr. 2021 – Dec. 2022**
BBS Delegate for Blackstone Launchpad Stewardship Council	**Aug. 2020 – present**
Doctoral Dissertation Thesis Committee for Christina Dugas	**Aug. 2020 – present**
Doctoral Dissertation Thesis Committee for Kathryn Kriedler	**Dec. 2020 – present**
BBS Scholar Day Lecture	**Nov. 2021**
Faculty Three Minutes Thesis (3MT) Competition	**Oct. 2021**
Maintaining Operation of Callier Center EEG Suite	**Aug. 2021**
Panelist National Youth Leadership Forum: Explore STEM Program	**July 2021**
External Reviewer for Swiss National Scientific Foundation	**May 2021**
Judge for the Three Minute Thesis (3MT) Competition	**Apr. 2021**
External Reviewer for Clinical and Translational Science Awards Auburn University	**Feb. 2020**
Session Chair of a Mini-Symposium Session American Congress of Rehab. & Medicine (ACRM)	**Nov. 2019**
President of KSEA (Korean-American Scientists and Engineering Association) Ohio Chapter	**July 2019 – July 2020**
External Reviewer for Clinical and Translational Science Awards University of Washington	**Oct. 2018**
The STEP (Second-year Transformational Education Program) Faculty Mentor at OSU	**Sep. 2017 – Apr. 2019**
CBI-Sponsored Monthly fNIRS Seminar Series	**Sep. 2017 – present**
Department's of Speech & Hearing Science Facilities Committee	**Oct. 2017 – Sep. 2018**
Department's Speech & Hearing Science Facilities Chair	**Sep. 2018 – Aug. 2019**
Department's Speech & Hearing Science Event Committee	**Fall 2017 – Spring 2018**
Department's Speech & Hearing Science Hooding Ceremony Event Committee	**Fall 2019 – Present**
Department's Undergraduate Course Curriculum Committee	**Fall 2019 – Present**

Session Chair, International Conference of Music Perception and Cognition	**July 2018**
Public Seminar at the Ohio Living Nursing Home	**Aug. 2017**
Public Seminar at the Arlington Court Nursing Home	**July 2017**
Reviewer for STEAM Powered Project Grants	**July 2017**

Media Coverage

Binaural beats boost language skills	**Dec. 2023**
Neural Nourishment: How discovering new music may garner some serious brain regions	**Sep. 2022**
Music: a Brain enhancer?	**Mar. 2022**
NSF featuring our fMRI study investigating rhythm and grammar	**Sep. 2018**
Podcast interview with Parsing Neuroscience	**Aug. 2018**
US News & World Report: How subtle hearing loss while young changes brain function	**June 2018**
Healthline: A minor hearing loss now can mean major dementia risk later	**July 2018**
Medical News Today: Early hearing loss could pave the way for dementia	**May 2018**
Neurosciencenews.com: Subtle hearing loss while young alters brain function	**May 2018**