Travis M. Moore February 1, 2021

Research Interests

Binaural/spatial hearing, virtual reality, neuroscience, EEG, listening effort/fatigue

Education

Vanderbilt University, Nashville, Tennessee USA
Ph.D., Hearing Science, 2018
Dissertation Title: "Context-Dependent Trading of Binaural Spatial Cues in Virtual Reality"
Committee: Chris Stecker (chair), Erin Picou, Ben Hornsby, Erick Gallun

Vanderbilt University School of Medicine, Nashville, Tennessee USA
Au.D., Doctor of Audiology, 2012

Northern Illinois University, Dekalb, Illinois USA
B.A., German Language and Literature, 2008

Leuphana Universität Lüneburg, Lüneburg, Germany
Study Abroad Toward B.A., 2007

Certification and Licensure

Alabama State License in Audiology, 2019–present

Certificate of Clinical Competence in Audiology (CCC-A), 2012–present

Positions

Montclair State University, Department of Communication Sciences and Disorders
Montclair, New Jersey USA
Adjunct Professor **2021–present**

Rockredd Solutions, LLC
Birmingham, Alabama USA
Owner and President **2021–present**

Samford University, Department of Communication Sciences and Disorders
Birmingham, Alabama USA
Assistant Professor **2018–2020**

Vanderbilt University, Department of Hearing and Speech Sciences
Nashville, Tennessee USA
Graduate Research Assistant (PhD Student) **2014–2018**

Vanderbilt University Medical Center
Nashville, Tennessee USA
Research Audiologist II **2013–2014**

Hearing Aid Solutions, Inc.
Mount Juliet, Tennessee USA
Lead Audiologist **2012–2013**

Vanderbilt University Medical Center
Nashville, Tennessee USA
Audiology Intern **2011–2012**

Teaching

Montclair State University
Created Courses:
Diagnostic Procedures in Audiology II: Electrophysiology (Au.D.): Spring 2021

Samford University

Created Courses:

Audiologic Assessment Laboratory (Au.D.): Spring 2019
Immittance and Otoacoustic Emissions Measures (Au.D.): Spring 2019, Spring 2020
Electrophysiology (Au.D.): Summer 2019, Summer 2020
Otological Medical Conditions (Au.D.): Summer 2019
Instrumentation and Calibration (Au.D.): Fall 2019
Psychoacoustics (Au.D.): Fall 2019
Vestibular Assessment I (Au.D.): Fall 2019
Vestibular Assessment Lab (Au.D.): Fall 2019
Diversity in the Workplace (Au.D.): Spring 2020
Vestibular Assessment II (Au.D.): Spring 2020
Vestibular Assessment Lab II (Au.D.): Spring 2020
Vestibular Management (Au.D.): Summer 2020

Supplemental Course Website:

AudiologySource.com

Guest Lectures:

Anatomy & Physiology of the Hearing Mechanism (Au.D.): Fall 2019
Neuroscience (SLP): Fall 2019

Clinical Preceptor:

Samford University Audiology Clinic: Fall 2019, Spring 2020

Vanderbilt University

Co-Created Courses:

Pathologies of the Auditory System (Au.D.): Spring 2018

Co-Instructed Courses:

Acoustics, Instrumentation and Calibration (Au.D.): Fall 2016

Guest Lectures:

Practical Electrophysiology (Ph.D.): Summer 2017
Auditory Pathologies: Introduction to Audiology (SLP): Fall 2016, Fall 2017

Peer-Reviewed Publications

1. **Moore, T. M.**, Picou, E. M., Hornsby, B. W., Gallun, F. J., & Stecker, G. C. (2020). Binaural spatial adaptation as a mechanism for asymmetric trading of interaural time and level differences. *Journal of the Acoustical Society of America, 148*(1).
2. **Moore, T. M.**, Picou, E. M. (2018). A potential bias in subjective ratings of mental effort. *Journal of Speech, Language, and Hearing Research, 61*(9), 2405–2421.
3. Stecker, G. C., **Moore, T. M.** (2018). Reverberation enhances onset dominance in sound localization. *Journal of the Acoustical Society of America, 143*(2), 786–793.
4. **Moore, T. M.**, Key, A. P. F., Thelen, A., Hornsby, B. W. Y. (2017). Neural mechanisms of mental fatigue elicited by sustained auditory processing. *Neuropsychologia*, 106, 371–382.
5. Picou, E. M., **Moore, T. M.**, Ricketts, T. A. (2017). The effects of directional processing on objective and subjective listening effort. *Journal of Speech, Language and Hearing Research*, 60, 199–211.
6. **Moore, T. M.**, Hood, L. J., & Hornsby, B. W. (2014). Estimates of cochlear compression using distortion product otoacoustic emissions and growth of forward masking. *Ear and Hearing, 35*(6), 711–714.

Refereed Publications

1. Stecker, G. C., **Moore, T. M.**, Folkerts, M., Zotkin, D., Duraiswami, R. (2018). *Toward objective measures of auditory co-immersion in virtual and augmented reality.* Paper presented at the Audio Engineering Society Conference: 2018 AES International Conference on Audio for Virtual and Augmented Reality.

Scientific Software

1. **Moore, T. M.** (2015). erp.easy: Event- Related Potential (ERP) Data Exploration Made Easy. R package version 1.1.0. https://CRAN.R-project.org/package=erp.easy.

Grants and Sponsored Projects

Moore, T. M. (PI) CTSA Award No. UL1TR000445 from NCATS - The influence of adaptive effects on trades of interaural time and intensity during egocentric localization. $1823

Moore, T. M. (PI) CTSA Award No. UL1TR000445 from NCATS - Assessment of mental fatigue with ERPs. $853

Hood, L. J. (PI). NIH NIDCD T35 DC 008763 - Developing research careers in the hearing sciences. $2,500

Honors and Awards

Virtual reality proposal chosen for computer science students' senior project, 2019

Freeman McConnell Academic Scholarship, Vanderbilt University, 2014–2018

Fourth-Year Intern Honors Placement, Vanderbilt School of Medicine, 2012

Capstone Research Award, Vanderbilt School of Medicine, 2012
Title: Comparison of Compression Estimates between DPOAE Input/Output Functions with Continuously Sweeping Primaries and Growth of Forward Masking
Mentor: Ben Hornsby

Graduate Training Tuition Scholarship, Vanderbilt School of Medicine, 2008–2012

Graduated Summa Cum Laude, Northern Illinois University, 2008

Invited Talks

Moore, T. M. (2020, September). Binaural Spatial Adaptation as a Mechanism for Asymmetric Trading of Interaural time and level differences. Presentation given as part of the P&P Virtual Journal Club for the Acoustical Society of America.

Conference Presentations

Moore, T. M. and Stecker, G. C. (2019, May). Context-Dependent Trading of Binaural Spatial Cues in Virtual Reality. Poster presented at the 177th Meeting of the Acoustical Society of America, Louisville, KY.

Moore, T. and Picou, E. (2018, April). Impact of an Online Learning Module on Student Confidence. Poster presented at the American Academy of Audiology annual convention, Nashville, TN.

Hornsby, B. and Moore, T. (2015, March). Hearing Loss, Mental Effort and Fatigue. Poster presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.

Moore, T., Hornsby, B. and Hood, L. (2013, March). Psychophysical and Otoacoustic Emission Estimates of Cochlear Compression. Poster presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.

Moore, T., Hornsby, B. (2011, March). Predicting Hearing Aid Benefit from Speech Recognition Measures. Poster presented at the American Auditory Society Annual Meeting, Scottsdale, AZ.

Moore, T., Hornsby, B. (2011, March). Predicting Hearing Aid Benefit from Speech Recognition Measures. Poster presented at the Vanderbilt University Medical Center Open House Research Gala, Nashville, TN.

Moore, T. (2010). Aural Atresia. Grand rounds presentation to Division of Audiology, Vanderbilt University, Nashville, TN.

Moore, T. (2009). Glomus Tumors. Grand rounds presentation to Division of Audiology, Vanderbilt University, Nashville, TN.

Service

Samford University, Department of Communication Sciences and Disorders
- Faculty Search Committee (2019–2020)
- Interprofessional Education Committee (2019–2020)
- Website Committee (2019–2020)
- Established balance function assessment clinic (2019–2020)
- Coded a tablet-based electronic check-in system for audiology clinic (2019)

Samford University, Faculty Senate
- Committee on Diversity (2019–2020)

Samford University
- Hull Fund Selection Committee (2019–2020)

Vanderbilt University, Department of Hearing and Speech Sciences
- Audiology lecture for 9th-grade STEM students (2018)
- Poster Session Judge (2016)
- Station Leader for Vanderbilt Hands-On Hearing Aid Workshop, (2011)

Editorial Board Member
- American Journal of Audiology (2020-present)

Ad Hoc Reviewer
- American Journal of Audiology
- Ear & Hearing
- Experimental Brain Research
- International Journal of Audiology
- Journal of the Acoustical Society of America
- Journal of the American Academy of Audiology
- Trends in Hearing

Professional Experience

Professional Development

Leader, Spatial Hearing Journal Club
Vanderbilt University, 2020

Coded and launched an educational website for students using the Python Flask framework
Samford University, 2019–2020

Mini Conference on Teaching
Samford University, 2019

Practitioner Level Trainee, Center for the Integration of Research, Teaching and Learning
Vanderbilt University, 2016

Blended and Online Learning Design (BOLD) Fellow, Center for Teaching
Vanderbilt University, 2016

Associate Level Trainee, Center for the Integration of Research, Teaching and Learning
Vanderbilt University, 2015

Intermediate Trainee, Interdisciplinary Instruction in Neurodevelopmental Disabilities
Vanderbilt University, 2008–2009

Laboratory Experience
Stecker, G. C. (PI). Temporal Weighting of Auditory Spatial Cues
Vanderbilt University, 2016–2018

Hornsby, B. W. Y. (PI). Quantifying the "Fatigue Factor"
Vanderbilt University, 2014 - 2016

Ricketts, T. A. (PI). Development of the Spatial Test Requiring Effortful Speech Recognition,
Vanderbilt University, 2008–2010

Ricketts, T. A. (PI). Hearing Aid Directional Microphone Switching Accuracy in the Classroom
Vanderbilt University, 2008–2010

Clinical Training
Bill Wilkerson Center, Vanderbilt Medical Center, 2008–2012

National Center for Childhood Deafness and Vanderbilt Children's Hospital, 2008–2012

Odess Otolaryngology Head & Neck Surgery Clinic, Vanderbilt Medical Center, 2008–2012

St. Thomas Hospital, Nashville, 2008–2011

Veteran's Health Administration, Tennessee Valley Healthcare System, 2008–2011

Professional Skills

Programming and Markup Languages: C#, CSS, HTML, Javascript, LaTeX, MATLAB, Python, R, Visual Basic

Web Frameworks: Bootstrap, Django

Applications: Cartool, E-Prime, EEGLAB, Net Station, PsychToolbox, PsychoPy, REDCap, Unity

Operating Systems: macOS, Linux (Ubuntu), Windows

Languages: German (S-5), French (S-3), Spanish (S-3), Chinese (Mandarin; S-1), Japanese (S-1)