

ELIZABETH DAY LAWRENCE

Jyväskylä, Finland ▪ elizabeth.d.lawrence@student.jyu.fi ▪ +1.(443).797.2669 | +358.46.803.8960 ▪ [website](#)

Researcher in auditory neuroscience, focused on investigating the neural underpinnings of rhythm perception and temporal attending. I am specifically driven towards the ways these mechanisms shape language, communication, social synchrony, and neurological development in humans.

EDUCATION

UNIVERSITY OF JYVÄSKYLÄ	Aug 2026 – May 2028
M.A. Music and Science; Fulbright Grantee	
• Summer University of Jyväskylä Finnish Language and Culture Course (80 contact hours; 7 ECTS)	
MIDDLE TENNESSEE STATE UNIVERSITY	Sept 2024 – May 2026
B.S. Psychology, Minors: Neuroscience, Music, Honors GPA: 4.0	
• Honors Thesis: Prosody Perception in Older Adults: Exploring Links with Speech-in-Noise Perception, Musical Rhythm, and Musical Training	
• Appointments: MTSU Honors Ambassador, Honors Council Student Representative, Omicron Delta Kappa (ODK) Secretary, Buchanan Transfer Fellowship Committee	
• Activities: Student Organization for the Advancement of Research (SOAR), Omicron Delta Kappa (ODK), Phi Kappa Phi (PKP), Psi Chi, Psychology Club, Advocacy for Individuals with Disabilities (AID)	
NASHVILLE STATE COMMUNITY COLLEGE	May 2022 – Dec 2023
Associate of Fine Arts in Music, Summa Cum Laude	
• Honors Project: <i>Conceptual Metaphor, Language, and Musicality Across the Lifespan.</i>	

NATIONAL AWARDS AND HONORS

1. Fulbright – University of Jyväskylä Graduate Award Recipient	2026 – 2027
2. Jack Kent Cooke Undergraduate Transfer Scholarship Semi-finalist	2024
3. Coca Cola Academic Team Silver Scholar (\$1,500)	2024
4. All-Tennessee Academic Team	2024
5. All USA Academic Team Nominee	2024

INSTITUTIONAL AWARDS AND HONORS

1. MTSU Provost’s Award Recipient	2026
2. MTSU Outstanding Fourth Year Student Award (\$250)	2026
3. Poster Award: Scholar’s Week, 3 rd Place Undergraduate	2026
4. Phi Kappa Phi Fellowship – Institutional Alternate (\$250)	2026
5. Society for Neuroscience 2025 Access Award (\$100)	2025
6. Osher Re-entry Scholarship Recipient (\$4,000)	2025 – 2026
7. Paul W. Martin Sr. Honors Scholarship Recipient (\$2,000)	2025 – 2026
8. Alton Julian Endowed Scholarship Recipient (\$2,000)	2025 – 2026
9. Buchanan Honors Transfer Fellowship (\$14,000)	2025 – 2026
10. Undergraduate Research Grant (URECA) Recipient (\$1,000)	2025
11. Jones Foundation Honors Scholarship– Conference Travel Award (\$1,473)	2025
12. Phi Theta Kappa Scholarship Recipient (\$2,000)	2024
13. Distinguished Student Leadership in Music	2024

RESEARCH EXPERIENCE

UNDERGRADUATE RESEARCH ASSISTANT AND HONORS THESIS STUDENT	Sept 2024 – May 2026
Middle Tennessee State University (MTSU): Brain and Language Lab	
Psychology Department	
Under the supervision of Dr. Cyrille Magne	
Supported Dr. Magne’s Brain and Language Lab in conducting multiple ongoing studies exploring the neurocognitive connections between rhythm perception and language skills, particularly in the areas of prosodic sensitivity and EEG-based analyses of language processing. Contributed to several aspects of data collection and materials development:	
• Led an interdisciplinary collaboration with the VUMC Music Cognition Lab for an Honors Thesis project, co-mentored by Drs. Magne (MTSU) and Nayak (VUMC)	
• Trained in the use of a portable EEG headset (MUSE) for measuring neural speech envelope tracking and supported experimental procedures and data collection	
• Trained in statistical approaches such as linear regression and mediation analyses in psychology	
RESEARCH COORDINATOR AND UNDERGRADUATE HONORS THESIS STUDENT	Apr 2024 – May 2026
Vanderbilt University Medical Center (VUMC): Music Cognition Lab	
Department of Otolaryngology	

Under the supervision of Drs. Srishti Nayak and Miriam Lense

Supported Dr. Nayak's NIH-funded study on Musicality, Hearing, and Genetics (MyHearinG): investigating musicality as a resilience factor in age-related hearing loss. Contributed to several aspects of study coordination, data collection, and analysis:

- Played a key role in launching the study by restructuring IRB submissions, designing REDCap instruments, contributing to protocol development, and optimizing recruitment and scheduling workflows
- Built a comprehensive Notion database to streamline team communication, trainings, and study operations
- Served as a primary liaison for internal communications, journal clubs, and lab meetings
- Led team recruitment and scheduling efforts (N=84) and initiated a follow-up study (N=75) to implement new data collection
- Gained applied experience using R for data cleaning, statistical analysis, and creating plots to support research activities

Assisted and supported on multiple studies in Dr. Lense's Music and Social-Emotional Development (MSED) group: cross-sectional and longitudinal studies investigating the impact of musical behavior on social-emotional development and musical priming in child/caregiver interactions.

Contributed to several aspects of study coordination and data collection.

- Coordinated longitudinal data collection involving LENA audio recorders, REDCap survey deployment, and study visit scheduling
- Managed participant communications from enrollment to study compensation, maintaining engagement and supporting a high-quality research experience for families
- Organized and prepared study visit materials, processed LENA audio recordings, conducted real-time behavioral coding, and contributed to double data entry of behavioral coding and ADOS assessments
- Provided administrative and logistical support for research operations, including preparation of visit documentation, IRB compliance, and participant compensation
- Administered naturalistic music- and play-based intervention protocols focused on musical interaction, social development, executive function, and caregiver-child social engagement

CONFERENCE POSTER PRESENTATIONS

1. **Lawrence, E.**, Eum, J., Hiser, W., Wilson, S., Tamati, T., Magne, C., Nayak, S. *Musical Rhythm and speech rhythm in older adults: Exploring links with speech-in-noise (SIN) perception and musical training*. Poster presented at the Society for Music Perception and Cognition (SMPC) Conference, July 22–24, 2026, Northwestern University, Evanston, IL.
2. **Lawrence, E.**, Eum J., Kunnath, A., Hiser, W., Tamati, T., Magne, C., Nayak, S. (April 2026) *Musical rhythm discrimination and speech-in-noise recognition in older adults: exploring the role of lexical stress sensitivity*. Poster presented at the National Conference for Undergraduate Research (NCUR), Richmond, VA.
3. Eum, J., Hiser, W., Kunnath, A., **Lawrence, E.**, Tamati, T., & Nayak, S. (Feb 2026) *Music Perception Abilities, Cognition, and Auditory Function in Older Adults*. Poster presented at the Annual Scientific and Technology Conference of the American Auditory Society, Scottsdale, Arizona.
4. **Lawrence, E.**, Kunnath, A., Hiser, W., Eum, J., Rosenberg, J., Faulkner, B., Sevich, V., Tamati, T., Magne, C., Nayak, S. (September 2025) *Characterizing relationships between musical rhythm discrimination, prosody (speech rhythm), and speech-in-noise recognition in older adults*. Poster presented at the 17th Annual Meeting of the Society for the Neurobiology of Language, Gallaudet University, Washington, D.C.
5. Hiser, W., Eum, J., Kunnath, A., Rosenberg, J., Faulkner, B., **Lawrence E.**, Sevich, V., Tamati, T., Nayak, S., (April 2025). *Investigating the relationship between lifetime musical engagement and speech in noise proficiency in older adults*. Poster presented at the 2025 Annual Vanderbilt International Researchers Alliance (VIRAL) Symposium, Nashville, TN.
6. Eum, J., Rosenberg J., Kunnath, A., Hiser, W., **Lawrence, E.**, Schlicht, G., Tamati, T., Nayak, S., (February 2025). *Associations between music engagement and hearing abilities in older adults*. Poster presented at the Vanderbilt University Translational Research Forum, Nashville, TN. Also presented at the Vanderbilt Undergraduate Researchers Symposium, Nashville, TN.

PUBLICATIONS AND MANUSCRIPTS

1. Lawrence, E. (2026) Temporal hierarchies and neural timing: An exploratory review. *Scientia et Humanitas*, 16, 28–37. Note: the published version contains a number of production errors. A corrected version is in progress. [Original manuscript PDF](#)
2. **Lawrence, E.** (2026). *Prosody perception in older adults: Exploring links with speech-in-noise perception, musical rhythm, and musical training* [Honors thesis, Middle Tennessee State University] JEWLScholar. <https://jewlscholar.mtsu.edu/handle/mtsu/8671>
3. Eum, J., Hiser, W., Kunnath, A., **Lawrence, E.**, . . . Nayak, S (in preparation). Music perception is a behavioral correlate of hearing outcomes in older adults.

INVITED TALKS & OUTREACH

Spoken Paper Presentation – Middle Tennessee Psychological Association

April 2026

Rhythms in Syllable Emphasis: Exploring Lexical Stress Sensitivity in Older Adults with Links to Speech-in-Noise Perception, Rhythm Skills, and Musical Training

Guest Lecturer – Department of Psychology, Randolph University

Aug 2025

Presented original research on music and language skills in older adults, engaging students in discussions on experimental design, stimuli, and preliminary findings to Dr. Sara Beck's PSYC-3325A (Psychology of Music) class.

PROFESSIONAL MEMBERSHIPS

- Society for Music Perception and Cognition (SMPC) Trainee Member 2023 – *present*
- Society for the Neurobiology of Language (SNL) 2025 – *present*
- Graduate Women in Science, Nashville TN, USA Chapter (GWIS) 2024 – *present*