

Buffett Undergraduate Research Fellowship Opportunity

Trauma, Music, and the Breath: The Music for Childhood Wellbeing Initiative

Faculty Mentor: Sarah Bartolome, Associate Professor, Music Studies (Evanston campus)

Project Synopsis: This project will explore the impact of an 8-week group singing and intentional breathwork intervention on elementary school children ages 9-11. Our interdisciplinary team has adopted an innovative research approach, blending biometric, psychological and behavioral methodologies to provide a holistic, biopsychosocial understanding of the impact of group singing and breathwork with children. We ultimately aim to provide evidence of how music making might be used to mitigate the effects of stress and potentially enhance well-being of children globally.

Work to Date and Future Plans: The Music for Childhood Well Being (MCWI) Global Fall 2023 pilot study drew together participant cohorts in the United States (n=7), York, England (n=20), and Mexico City, Mexico (n=10). In the coming months, the MCWI interdisciplinary team will be examining pilot data both within- and cross-cohort and will also look more granularly at each participants' data portfolio across the eight weeks. A second set of four cohorts will launch on April 1, 2024, in the United States and Mexico. A fuller data analysis will be accomplished during the summer of 2024, incorporating data from all 8 pilot cohorts, providing a more robust data set. The MCWI team has secured two external grants to fund the next phase of research: A GRAMMY Foundation Scientific Research Grant is funding a new partnership with the University of Miami, providing support for two cohorts serving Latinx children (one in Miami and one here in the Chicagoland area). A larger grant from a private foundation will support four cohorts in China and four cohorts of Chinese American children here in the Chicagoland area. Each of these new partnerships will require adaptation and piloting of both the musical intervention as well as the research protocols to ensure that all aspects of the project are culturally appropriate within these new contexts and for the children we will serve. Although we have secured funding to support our ongoing research initiative, the data collection procedures are research-intensive, requiring many RAs to be on site weekly to support each cohort. The opportunity to engage additional undergraduate research assistance will not only be critical to running five new cohorts locally next year, but it will also afford undergraduate researchers the remarkable opportunity to be engaged in a truly global research initiative.

Project Term: Summer + academic year, Summer 2024, Fall 2024, Winter 2025, Spring 2025

Project Location: RA(s) will assigned to one cohort of participants, requiring them to be present at the Ryan Center for the Musical Arts once per week for approximately two hours (inclusive of set-up, data collection, and break down). All of the additional work can be accomplished virtually and flexibly.

Ideal Applicant: History of Undergraduate Participation: Since this project's inception, I have been fortunate to engage undergraduate research assistants in a variety of ways. During the 2023-2024 school year, I have had two undergraduates working alongside me and a team of doctoral RAs. Both students have been involved directly in the weekly data collection, applying the sensors to the children, assisting them with the iPad interface as they complete their screeners, and conducting debrief interviews with the children after each session. They are also engaged in setting up and tearing down equipment, assisting with data transfer and archiving, and monitoring all aspects of the data collection during sessions. These RAs have been trained by me and by the psychologist on our

team to complete these duties. I serve as the site coordinator and so I am also supervising and supporting them in real time during every intervention. The undergraduate RAs are also working in tandem with a team of highly skilled doctoral RAs who provide additional guidance as needed. One of the undergraduate RAs is also tasked with managing the global data archive, ensuring that videos of the observations and interview recordings are labelled and uploaded into the appropriate shared folders. This RA also runs all the interview recordings through Otter AI and uploads the resulting transcriptions each week. Again, I trained this RA myself and meet with them weekly to provide ongoing support and answer questions. As our research team moves into more focused analysis, my RAs will be invited to attend all team meetings as their schedule allows. My goal as a supervisor for all of my RAs is to provide them with hands-on research experience, from processing, managing, and archiving data, to collecting data in the field, to participating in data analysis and the writing process.

Buffett Undergraduate Research Fellows will be afforded similar opportunities as those listed above. We have received external funding that will support three cohorts (n=30) in the Fall of 2024 and three cohorts (n=30) in the Spring of 2025. We will also be collaborating with partners in Miami and China, where additional cohorts will also be launching. My intention would be to assign a Buffett Fellow to assist in data collection in the Fall and the Spring, working weekly with one Evanston cohort and managing the resulting data. I would also meet weekly with the RA(s) to debrief, troubleshoot, answer questions, and assign any additional tasks that might be needed. I would prefer the RA(s) beginning during the summer of 2024, as we have a great deal of activity scheduled to prepare for the data collection launch in the Fall. The students would be involved in weekly trainings and pilot activity. At weekly meetings, we will also discuss a limited number of readings related to research methodology and scholarship that informs the study. The ideal candidate will be detail-oriented, curious, and motivated to contribute to our interdisciplinary research team.

Number of Available Positions: One