

\$1,000 IQCB Scholarly Research Award

Presented to Norah Hill, Francisco Cortez-Thomas, Alyssa Scraper

EEG-based source localization (ESL) of epilepsy spikes onset zone using interictal activity in pediatric case series

Supervisor: Estate (Tato) Sokhadze, PhD, Ian Mutchnick, MD, Cemal Karakas, MD



Norah Hill

Norah is a Neuroscience and Biology Honors Scholar at the University of Louisville. She works at Norton Healthcare as a Student Healthcare Assistant (SHA) and has different types of research experience, from basic spinal cord injury lab work in the Kentucky Spinal Cord Injury Research Center (KSCIRC) to writing reviews on neuropathy for the Department of Neurosurgery at UofL Health. Currently, she is volunteering as a student researcher in the Norton Neuroscience Institute Pediatric Neurosurgery Lab.



Francisco Cortez-Thomas

Francisco has recently graduated with a MEng in Bioengineering at the University of Louisville and is enrolled medical school, starting this Fall. His project interest has been focus in neuroscience with projects at the KY Spinal Coord Injury Research Center and more recently in EEG analysis using machine learning.



Alyssa Scraper

Alyssa is currently a full-time student at the University of Louisville specializing in neuroscience. She is a full-time surgery coordinator for Pediatric Neurosurgery unit at Norton Neuroscience unit. Currently, she is also a student researcher at Norton Neuroscience Institute Pediatric Neurosurgery Lab.



\$1,000 IQCB Scholarly Research Award

Presented to Jaden Murray

The Efficacy of Neurofeedback for Anxiety

Supervisor: Dr. Larry Charles Stevens, PhD



Jaden Murray

Jaden Murray i s currently a senior student at Northern Arizona University and pursuing a Bachelor of Science in neuropsychology and a Bachelor of Science in Data Science. She is currently working on a research study involving the use of neurofeedback and its efficacy for treating anxiety disorders, specifically focusing on arachnophobia. While working as a registered behavioral tech (RBT) for the past 5 years.



\$1,000 Jay Gunkelman Scholarly Research Award Presented to Charlotte Parrish, Stephanie Park Neurofeedback Training of the Mirror Neuron System: Enhancing Empathy and Reducing Arachnophobia

Supervisor: Dr. Larry Charles Stevens, PhD



Charlotte Parrish

I'm a psychology student passionate about understanding how the brain regulates anxiety and behavior. With a background in psychology and biology, and years of experience working with children on the autism spectrum, I'm dedicated to helping people improve their mental health. I'm especially interested in becoming a neuroscientist to explore innovative treatments like neurofeedback and apply them in ways that truly make a difference. This project reflects my commitment to supporting individuals struggling with anxiety and other behavioral challenges, and my desire to help in any way I can.



Stephanie Park

I'm a student at Northern Arizona dedicated to earning a degree in Psychology with an emphasis in the study of medicine. In the future, I hope to become a psychiatrist and continue researching in the fields of psychology and neuroscience. As of now, I am contributing to the future of the psychopathology of the brain and defining my career goals.



\$1,000 Jay Gunkelman Scholarly Research AwardPresented to Skylar Wilcoxson, Cassandra Williams

The Anxious Brain: qEEG-Guided Neurofeedback and Targeted Treatment

Supervisor: Dr. Larry Charles Stevens, PhD



Skylar Wilcoxson

Skylar Wilcoxson, a U.S. Navy Veteran, was born and raised in Phoenix, Arizona. Early in his young naval career he deployed Kandahar, Afghanistan with a Multinational Medical Unit. Now pursuing his Master of Arts in Psychological Sciences through Northern Arizona University's competitive 3+2 program. He is the Co-Pl and lab manager for an arachnophobia study driven by a deep passion for advancing neuromodulation through neurofeedback.



Cassandra Williams

Cassandra Williams is a recent graduate from Northern Arizona University, earning a Bachelor of Science in Psychology with a minor in Biology. Her academic and research experiences center on neuropsychology, with a particular focus on non-pharmaceutical interventions for mental health. She has contributed to a neurofeedback study targeting anxiety, completed an independent capstone research project about exploring the pain network using qEEG, and presented findings at NAU's Undergraduate Research Symposium. Cassie currently serves as a research lab manager and First Year Experience program assistant, where she supports student success through mentorship and academic engagement. Passionate about neuroscience-informed approaches to wellness, she aims to advance the use of neurofeedback as a clinical tool for treating anxiety and related conditions.