Wynn Legon, Ph.D.

Assistant Professor, Fralin Biomedical Institute at VTC
Assistant Professor, School og Neuroscience, College of Science
Virginia Tech

"Low-intensity focused ultrasound for human neuromodulation applications"

Bio:

Wynn Legon is an Assistant Professor at the Fralin Biomedical Research Institute and the School of Neuroscience at Virginia Tech. His work explores low-intensity focused ultrasound (LIFU) for neuromodulation in humans with an emphasis on applications to pain, anxiety and substance use disorder. The lab works to model and characterize ultrasound beam propagation through human tissue, to develop custom ultrasound transducers and coupling media and to determine stimulation parameters to optimize ultrasound for use in humans. The goal of this research is to advance ultrasound technology for non-surgical neuromodulation to assist with global brain mapping efforts and eventual clinical application. This talk will introduce LIFU for human applications, its benefits and limitations and recent research from the lab for applications in pain and anxiety.