



**Overview:** The Photoacoustic & Ultrasonic Systems Engineering (PULSE) Lab at Johns Hopkins University, directed by Dr. Muyinatu Bell, is seeking a postdoctoral fellow to join our lab and work on cutting-edge projects that apply state-of-the-art strain imaging techniques to ultrasound muscle data. The PULSE Lab is known for its pioneering research in the broad area of medical imaging technology, specifically ultrasound and photoacoustic imaging, photoacoustic-guided surgery, robot-assisted imaging, machine learning for image formation, and other cutting-edge techniques created to significantly advance healthcare interventions and diagnosis. Visit <https://pulselab.jhu.edu/> for more details.

**Project Description:** Chronic shoulder pain is a common experience among many adults, and it is particularly common after stroke. We are exploring ultrasound methods to elucidate physiological parameters surrounding this type of pain. The successful postdoctoral candidate will acquire radiofrequency (RF) ultrasound data that will be used to develop novel algorithms which analyze shear motion in patients with muscle stiffness and pain. This project will be completed in collaboration with physicians at the Johns Hopkins Hospital, enabling access to a strong cohort of patient data on which follow-up analyses will be performed. Opportunities to engage in additional projects of mutual interest and relevance to the broader research mission of the PULSE Lab will also be available.

**Required Background, Skills, & Qualifications:** PhD degree in biomedical engineering, electrical engineering, mechanical engineering, computer science, physics, or a related field; programming experience in MATLAB; familiarity with ultrasound imaging; verbal and written communication skills; desire and motivation to make an impact.

**Funding:** This position is available immediately for a term of one year, with an option to renew depending on progress and performance.

**To Apply:** Email your CV, research interests, and links to two representative papers to [mledijubell@jhu.edu](mailto:mledijubell@jhu.edu) & cc: [pulselab@jhu.edu](mailto:pulselab@jhu.edu). Place the text "PULSE Lab Postdoc Candidate" in the subject line of your email.