Imaging the World
Authors: MW, KD, KF

When a natural disaster takes place it can be difficult to get emergency treatment to the people injured during the event. Often people suffer from bone fractures not easy to diagnose without imaging. Devices such as an X Ray machine are expensive and not easily portable. Ultrasound machines are less expensive than X Ray machines and are easily transported. Ultrasound may be used to triage people with potential bone fractures after a natural disaster. We sought to answer the research question, can ultrasound images suitable for diagnosis of long bone fractures be obtained by minimally trained personnel using surface landmarks?. Research students minimally trained in ultrasound scanning are obtaining ultrasound images in an Emergency Department from people with suspected long bone or hip fractures. These images are then being read by trained radiologists to see if diagnosis of bone fractures is possible. This study will assess the reliability and reproducibility of an untrained person following a written protocol for an ultrasound machine to produce an image that can be read by trained radiologists to identify long bone fractures. If diagnosis is possible small portable ultrasound devices could be used in disaster settings to greatly increase the efficiency of emergency treatment.