

## **Volume Imaging with the Verasonics Research Systems**

Methods and techniques for volume imaging with one or multiple Verasonics research systems will be presented. Transducer options, including 2-D matrix and row/column arrays will be discussed, along with multiplexing vs. direct element-to-channel acquisition techniques. Different scanning methods will be considered, including use of sparse apertures for reducing active channels and increasing frame rate. Methodologies for data transfer, distributed image reconstruction and 3D image display will be covered, along with considerations for assembling, synchronizing and programming multiple acquisition systems.