The objective of this workshop is to provide attendees an opportunity to observe a demonstration of ultrasound quality assurance procedures and a review of fundamental ultrasound physics. Using a portable ultrasound unit and various ultrasound QC phantoms the instructors will provide a 45-minute demonstration and conduct a ten-minute question and answer session during the workshop. Two separate sessions will be conducted, providing meeting attendees an opportunity to attend one of two sessions. A set of QC test procedures described in AAPM Ultrasound Task Group 1 Report (Medical Physics 1998;Vol 25: 1385-1406) will be presented, including display monitor fidelity, image uniformity, depth of visualization, horizontal and vertical distance accuracy, axial and lateral resolution, slice thickness, dead zone measurement.

Educational Objectives:

1. To learn the effect of scanner parameter settings on various aspects of image and its clinical implications.
2. To review and understand fundamental ultrasound physics.
3. To perform ultrasound quality control test procedures for real-time B-mode units.
4. To be acquainted with various ultrasound QC phantoms.

Instructors:

Zhengfeng Lu, Ph.D.
Columbia Presbyterian Medical Center
New York, NY

Heather L. Miller,
Engineer, CIRS, Inc.
Norfolk, VA

Randell Kruger, Ph.D.
Marshfield Clinic
Marshfield, WI

Participating Manufacturers:

Heather L. Miller, Engineer
CIRS, Inc.

Bill Williams
Imaging Concepts,

Melanie Ignatovic
Gammex RMI