AbstractID: 6016 Title: Ultrasound QC Workshop

Quality control testing of ultrasound scanners is gaining importance as the use of diagnostic ultrasound become more quantitative in nature and the systems and probes more complex in design. As evidenced by the rise in popularity of the American College of Radiology's ultrasound accreditation program, the need for comprehensive quality control programs is clear. This workshop is designed to provide attendees an opportunity to learn the impact of scanners and probes on various aspects of image quality and to refresh their skills in ultrasound QA/QC testing. The essential physics of ultrasound imaging and instrumentation will be reviewed. QA/QC testing procedures required by accreditation programs and advisory organizations will be presented. The impact of scanner and probe deficiencies on both B-mode and Doppler performance will be demonstrated. Tools for analyzing probes will also be demonstrated.

Finally, a discussion of quality control of prostate brachytherapy ultrasound will be presented. In the second half of the workshop, attendees will be given the opportunity to use the various tools and phantoms in a hands-on environment. Experienced instructors will be at the ultrasound scanners to guide the exercises.

Two identical sessions will be conducted, one in the morning and the second in the afternoon.

Educational Objectives:

1. To learn the effect of parameter settings and probes on various aspects of ultrasound imaging.
2. To observe the impact of system and probe deficiencies on ultrasound performance and image quality.
3. To become acquainted with various ultrasound QC phantoms and test tools and learn their proper use.