Hands On Ultrasound Quality Control Workshop Carolyn Kimme-Smith, Mitchell Goodsitt, Evan Boote, Mark Holland, Jim Zagzebski, Heather Miller, Jim Kofler.

As in previous years, this workshop will provide attendees with an opportunity to refresh their skills in US quality control procedures for real-time gray mode imaging. This will include depth of visualization, uniformity, vertical and horizontal distance accuracy, lateral and axial resolution, ring down, and slice thickness focal range. In addition, a US prostate treatment planning system and prostate phantom will be available. Medical Physicists who have a theoretical knowledge of Ultrasound procedures will be guided by experienced instructors to scan a variety of QC phantoms. In order to provide sufficient equipment for attendees, small portable ultrasound units will be provided. No Doppler or color flow imaging units will be available. Attendees should be familiar with the AAPM Ultrasound Task Group 1 Report; "Real-time B-mode ultrasound quality control test procedures" in Medical Physics 1998; 25: 1385-1406. Copies of appendix A from that report will be available at the workshop. The QC tests will take about an hour to complete, and participants can attend anytime during the scheduled workshop. Objectives:

- 1. To learn US QC test procedures for Real-time B-mode units.
- 2. To become acquainted with new US QC phantoms.
- 3. To learn to calibrate a prostate US treatment planning unit.