



ABR Standards of Clinical Training

Therapeutic Medical Physics

Diagnostic Medical Physics

Nuclear Medical Physics

Therapeutic Medical Physics

Linac QA and QC

- Annual QA, including absolute calibration
- Monthly QA
- Patient-specific QA for IMRT, SRS, SBRT, or IGRT procedures

External beam treatment planning

- Patient treatment plans (variety of cases and beam modalities)
- Monitor unit calculations (computerized and manual)
- Review of treatment plans performed by others
- Review of patient treatment records (weekly chart checks)

CT Simulator

- QA
- Supervision of simulation procedures

Brachytherapy

- Source calibrations, leak tests, and other QC
- Treatment planning (computerized and manual calculations)
- Treatment supervision, QA, and radiation safety
- Therapeutic use of radionuclides

Maintenance of physics equipment

- In-house comparison of ionization chambers
- Calibration and testing of dosimetry systems, such as diodes, TLD/OSLD, scanning water phantom, ion chamber or diode array

Radiation Protection

- Linac shielding design
- Linac protection survey

Diagnostic Medical Physics

Completion of:

- Mammography annual system evaluations
- Stereotactic breast biopsy system performance evaluation
- CT system performance evaluation
- MRI system performance evaluation
- General purpose radiography system performance evaluation
- Fluoroscopy system performance evaluation
- Interventional x-ray system performance evaluation
- Storage phosphor (e.g., computed radiography) or digital detector performance evaluation
- Ultrasound (US) system performance evaluation
- Shielding design for an interventional imaging system or CT scanner
- MR safety evaluation
- Evaluation of a diagnostic workstation
- Bone mineral analyzer evaluation

Nuclear Medical Physics

Completion of:

- Annual survey of a scintillation camera (including SPECT acceptance testing of a scintillation camera [including SPECT])
- Annual survey of a PET or PET/CT imager
- Acceptance testing of a PET or PET/CT imager
- CT system performance evaluation of a CT scanner that is part of a PET/CT imaging device
- Dose calibrator/uptake probe/well counter performance evaluation
- Radiation safety audit of a nuclear medicine facility
- Shielding design for a PET/CT imaging device
- Evaluation of a diagnostic workstation

Participation as a medical physicist in the administration of a therapeutic radionuclide
Participation in radionuclide dose calculations for patients (including fetal dose calculations)
Performance of release calculations for patients receiving radionuclide therapies