

Structured Mentorship in Diagnostic Medical Physics

General Orientation: During the orientation period, the resident will learn basic radiation and biohazard safety and will be exposed to diagnostic imaging. The resident also will meet regularly with core members of the resident committee.

Clinical physics rotations: During the clinical physics service rotations, the resident will be fully trained in all clinical activities of diagnostic medical physics, including clinical applications, protocol development, machine QA, surveys, patient dosimetry, and shielding designs. Training requires independent interaction with the attending physicians and reading room observations as much as possible.

Clinical facilities must, at minimum, include access to the following equipment and capabilities:

1. CT scanners
2. Interventional radiology facilities, including neurointerventional and cardiac catheterization suites
3. MRI, including breast MRI
4. Ultrasound
5. Mammography equipment, including stereotactic biopsy
6. Physics dosimetry equipment, other appropriate test equipment, and appropriate phantoms

If any of the required facilities are not available on site, the program must provide supervised clinical training on such equipment at another institution.

The Structured Mentorship should be divided into a number of structured rotations. Below is a sample rotation schedule:

Sample Rotation Schedule:

Activity	Number Required	Minimum Length
PET/CT	2	3 months
Interventional Radiology	2	3 months
Mammography	2	1 month

MRI	2	2 months
Radiation Protection	2	2 months
Other		2 months

Specific Requirements for each type of activity:

Radiography, Fluoroscopy, IR

- 1 annual testing of a radiography system
- 1 annual testing of a fluoroscopy system
- 1 annual testing of an interventional system
- 1 shielding design for a radiography, fluoroscopy, and IR system
- 1 shielding evaluation for a radiography, fluoroscopy, or IR system

Mammography

- 1 annual testing of a mammography system
- 1 shielding design for a mammography system

CT

- 1 annual testing of a CT system
- 1 shielding design for a CT system

Ultrasound

- 1 annual testing of an Ultrasound system

MRI

- 1 annual testing of an MRI scanner
- 1 safety evaluation of an MRI facility

Other: The candidate and the medical advisor should structure additional rotations to meet the needs of the candidate.

Additional requirements: The candidate must complete one PQI project, and the report must be included in the portfolio.