

Structured Mentorship in Nuclear Medical Physics

General Orientation: During the orientation period, the resident will learn basic clinical aspects of nuclear medicine and 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 nuclear medical physics, including imaging, therapeutic applications, radionuclide technique, radiopharmaceutical technique, radioprotection, and patient dosimetry. Training requires independent interaction with the attending physicians and reading room observations as much as possible.

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

1. PET/CT
2. a nuclear pharmacy
3. radionuclide therapy services for the treatment of benign and malignant conditions
4. conventional SPECT imaging
5. 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 several structured rotations. Below is a sample rotation schedule:

Sample Rotation Schedule

Activity	No. of Rotations Required	Duration of Each Rotation
PET/CT	2	3 months
Scintillation Camera Imaging	2	3 months
Radiopharmacy	1	1 month
Therapeutic Use of Radionuclides	2	1 month
MRI	1	1 months

Specific requirements for each type of activity:

PET/CT

- 1 Self-Assessment Module (SAM)
- 1 Self-Directed Educational Project (SDEP) as per the ABR website
- 1 annual testing of a PET/CT scanner as per the *ACR Standards Guidelines*
- 1 testing of a CT scanner as per the *ACR Accreditation Guidelines*

- 1 testing of a PET scanner as per the *ACR Accreditation Guidelines*
- 1 shielding design for a PET/CT facility
- 1 shielding evaluation for a PET/CT facility
- 3 hours of CAMPEP-approved continuing education

Scintillation Camera Imaging

- 1 SAM
- 1 SDEP as per the ABR website
- 1 annual testing of a scintillation camera per the *ACR Standards Guidelines*
- 1 testing of the scintillation camera as per the *ACR Accreditation Guidelines*
- 3 hours of CAMPEP-approved continuing education

Radiopharmacy

- 1 SDEP as per the ABR website
- 1 testing of a dose calibrator
- Experience with a licensed radiopharmacist eluting a radionuclide generator, preparation of radiopharmaceuticals, and safe handling of radiopharmaceuticals
- Therapeutic use of radiopharmaceutical

Because of the limitations on the availability of patients, this rotation can be taken in small segments rather than as a continuous time block.

- 1 SDEP as per the ABR website
- 1 testing of uptake probe/well counter
- experience with NRC requirements for safe release of patients
- experience instructing patients on post-release precautions
- evaluation of the radiation protection practices associated with radionuclide administration
- participation in 5 treatments for hyperthyroidism
- participation in 3 treatments for thyroid cancer
- participation in three treatments for other conditions – bone pain, lymphoma, etc.

MRI

- 1 SAM
- 1 SDEP as per the ABR website
- 1 testing of an MRI scanner as per the *ACR Accreditation Guidelines*
- 1 safety evaluation of an MRI facility
- 3 hours of CAMPEP-approved continuing education

Other: The candidate and the medical advisor should structure additional rotations to meet the needs of the candidate. Up to 6 months may be spent in research.

Additional requirements: The candidate must complete three PQI projects, and reports must be included in the portfolio.

Exams

Approved candidates follow the same exam schedule as candidates for the standard MP certification pathway.

Recognition of Successful Candidates

Successful candidates are awarded a continuous ABR specialty certificate in nuclear medical physics.

Board Eligibility

See [Board Eligibility Policy](#) for details.