

Date: _____

Certification Board of Nuclear Cardiology
1401 Rockville Pike, Suite 600
Rockville, MD 20852

To Whom It May Concern:

I am responsible for oversight of the Nuclear Cardiology rotation at _____. This program is affiliated with _____ which is an ACGME or AOA accredited institution. I am an authorized user under U.S. Nuclear Regulatory Commission (NRC) 10 CFR 35.200 uses or Agreement State equivalent.

The program at our institution includes the following COCATS Level 2 Nuclear Cardiology Training that meets the NRC requirements outlined in 10 CFR 35.290 Training, or Agreement State equivalent:

Lectures and Self Study

- The didactic training should include in-depth details of all aspects of the procedures listed in Table 1 (see below). This program may be scheduled over a 12- to 36-month period concurrent and integrated with other fellowship assignments.

Classroom and Laboratory Training (CLT) (Check Box if this is part of your Training Curriculum)

- Classroom and laboratory training needs to include extensive review of radiation physics and instrumentation, radiation protection, mathematics pertaining to the use and measurement of radioactivity, chemistry of byproduct material for medical use, radiation biology, the effects of ionizing radiation and radiopharmaceuticals. There should be a thorough review of regulations dealing with radiation safety for the use of radiopharmaceuticals and ionizing radiation. This experience should total a minimum of 80 hours and be clearly documented.

These CLT hours are obtained as follows (Check the Appropriate Box)

- Internally within the Fellowship/Residency (conducted in house by personnel from our institution); OR
 Externally to the Fellowship (conducted externally or in house by contracted personnel); OR
 A combination of Internal/External and may differ by individual trainee

Interpretation of Clinical Cases

- Fellows should participate in the interpretation of all nuclear cardiology imaging data for the 4-6 month training period. It is imperative that the fellows have experience in correlating catheterization or CT angiographic data with radionuclide-derived data in a minimum of 30 patients. A teaching conference in which the fellow presents the clinical material and nuclear cardiology results is an appropriate forum for such an experience. A total of 300 cases should be interpreted under preceptor supervision, from direct patient studies.

Hands-on Experience

- Clinical Cases: Hands-on supervised experience in a minimum of 30 patients: 25 patients with myocardial perfusion imaging and 5 patients with radionuclide angiography. Such experience should include pretest patient evaluation, radiopharmaceutical preparation (including experience with relevant radionuclide generators and CT systems), performance of studies with and without attenuation correction, administration of the dosage, calibration and setup of the gamma camera and CT system, setup of the imaging computer, processing the data for display, interpretation of the studies and generating clinical reports.

- Clinical and Work Experience: a minimum of 620 hours acquired continuously during training in the clinical environment where radioactive materials are being used and under the supervision of an authorized user who meets the NRC requirements of 10 CFR Part 35.290 or Part 35.290(c)(ii)(G) and 35.390 or the equivalent Agreement State requirements, including each of the experiences listed in a, b, c, d, e, f, g as follows:

- (A) Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys;
- (B) Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters;
- (C) Calculating, measuring, and safely preparing patient or human research subject dosages;
- (D) Using administrative controls to prevent a medical event involving the use of unsealed byproduct material;
- (E) Using procedures to safely contain spilled radioactive material and using proper decontamination procedures;
- (F) Administering dosages of radioactive drugs to patients or human research subjects; and
- (G) Eluting generator systems appropriate for preparation of radioactive drugs for imaging and localization studies, measuring and testing the eluate for radionuclidic purity, and processing the eluate with reagent kits to prepare labeled radioactive drugs

Additional Experience

The training program for Level 2 training must also provide experience in computer methods for analysis. This should include perfusion and functional data derived from thallium or technetium agents and ejection fraction and regional wall motion measurements from radionuclide angiographic studies.

Table 1 Classification of Nuclear Cardiology Procedures

- A. Procedures in which competency should be achieved during Level 2 training
 - 1. Myocardial perfusion imaging
 - a. SPECT, with or without attenuation correction
 - b. ECG gating of perfusion images
 - c. Stress protocols (exercise and pharmacologic)
 - d. Viability assessment using SPECT and/or PET
 - 2. Radionuclide angiography
 - 3. Use of methods for acquisition, reconstruction, and quantitative analysis of images
 - 4. Appropriate radiation safety and quality improvement programs
 - 5. Use of radiation monitoring instruments
- B. Procedures in which medical knowledge should be demonstrated and achievement of competency may be accomplished during or after fellowship
 - 1. PET Myocardial perfusion imaging
 - 2. Myocardial blood flow quantification
 - 3. Cardiac planar imaging
 - 4. Hybrid PET/CT and SPECT/CT
 - 5. Myocardial innervation
 - 6. Myocardial metabolism

I attest that trainees at our institution must complete hands-on laboratory activities and that documentation on the dates and specific activities the whole of their nuclear cardiology training are maintained as part of each trainee's data record, and available for audit.

Sincerely,

Name: _____ Title: _____

Radioactive Materials (RAM) License Number

Certified by:

CBNC ABNM ABR AOBNM AOB Other: _____