

STRESS TESTING FOR MYOCARDIAL PERFUSION IMAGING PRACTICUM & ECG INTERPRETATION

Objectives:

This practicum session is designed to cover the basics of ECG interpretation and stress testing for JPNM trainees. After completion of this course, the residents should be able to:

1. Review basic resting and stress ECG's
2. Identify serious ST segment changes, arrhythmias and heart blocks
3. Understand the basics of exercise physiology and understand implications of pathological hemodynamic responses to exercise stress.
4. Understand the technical aspects of SPECT myocardial perfusion imaging, including image acquisition, image processing and dealing with challenging cases.

The session includes 8:00 – 9:00 AM didactic sessions followed by practical hands-on training in stress testing in the stress laboratory in a small group format.

Specific session details of planned didactic sessions:

Friday, December 7 th: Basics of stress testing (David Yang, MS):

Location: Abrams Conference Room

This session will cover details of stress testing, including a review of indications, contraindications, reasons for termination and selection of type of stress.

All-day practicum session I

December 12 th: Basics of cardiac SPECT imaging (Melissa Marshall):

Location: Dexter Library, Peter Bent Brigham Building (near cardiology offices)

This session will cover a review of SPECT image protocols, image acquisition techniques, filters and processing.

All-day practicum session II

December 14 th: Basic ECG interpretation I (Sharmila Dorbala, MD):

Location: Dexter library

This didactic session will cover basic ECG interpretation, systematic interpretation of rest ECG, determination of rate rhythm and axis, and will review criteria for various abnormalities.

December 19 th: Basic ECG Interpretation II (Sharmila Dorbala/Kamran Akram, MD):

Location: Dexter Library

Review of ECG tracings interactive session with residents reading ECG tracings provided to them.