## AbstractID: 14421 Title: Breast Specific Gamma Imaging

Molecular Breast Imaging is a new modality for diagnosing breast cancer. Screening Mammography has vastly improved over the last 30 years, but radiologists still miss 10% of breast cancers especially in women with dense breast tissue. The use of breast ultrasound and breast MRI has definitely helped radiologists to detect additional cases of breast cancer and to evaluate the extent of breast cancer.

There now is a new different test that can be used to solve difficult or confusing cases. It also is an excellent test when MRI is not feasible or available. It is a nuclear medicine test that analyzes cellular activity. Since cancer cells are usually more active than normal cells, they usually will absorb more of the radioactive isotope producing a black (hot spot) on the image.

This lecture will explain the underlying physics of the procedure and the technique in using the machine. Examples of real cases will be used to demonstrate how this new test fits in with the more traditional methods of breast cancer detection.

## Learning Objectives:

- 1. Understanding the physics behind Molecular Breast Imaging.
- 2. Understanding the clinical applications of this test.
- 3. Understanding how this test fits in with Mammography, Breast Ultrasound and Breast MRI.