Breast ultrasound is used to evaluate breast problems that are found during a screening or diagnostic mammogram or on physical exam, or as an adjunct to screening mammograms.

A handheld instrument placed on the skin transmits the sound waves through the breast. Echoes from the sound waves are picked up and translated by a computer into a black and white picture that is displayed on a computer screen. This test is painless and does not expose you to radiation.

Breast MRI

MRI scans use magnets and radio waves instead of x-rays to produce very detailed, cross-sectional pictures of the breasts. MRI exams for breast imaging use a contrast material (called gadolinium) that is injected into a vein in the arm before or during the exam. This improves the ability of the MRI to clearly show breast tissue details.

Biopsies

A breast biopsy is performed to remove some cells from a suspicious area in the breast and examine them under a microscope to determine a diagnosis. Image-guided needle biopsy is not designed to remove the entire lesion, but of a very small lesion may be removed in the process of biopsy.
• In **ultrasound-guided breast biopsy**, ultrasound imaging is used to help guide the radiologist’s instruments to the site of the abnormal growth.

• In **MRI-guided breast biopsy**, magnetic resonance imaging is used to help guide the interventional radiologist’s instruments to the site of the abnormal growth.

• In **stereotactic breast biopsy**, a special mammography machine uses ionizing radiation to help guide the radiologist’s instruments to the site of the abnormal growth.

• **Wire localization** is a procedure your surgeon may use to find an area of concern. A hollow needle is placed in the breast. X-rays are used to guide the needle to the suspicious area. A thin wire is then slid through the center of the needle. A small hook at the end of the wire keeps it in place. The hollow needle is then removed. The surgeon uses the wire as a guide to find the abnormal area that needs to be removed.

**LAURIE MARGOLIES, MD, FACR**

“One of my first professors of radiology was a woman who had breast cancer. I learned much from her, but perhaps most important were her lessons about what it means to be a patient. To this day I can hear her saying, ‘Time stops for a patient waiting for a result be it a toe, breast or anything else. For the patient whose toe may be broken, it is the world.’ I carry her passion and commitment to patient care on my shoulder each day and strive to relieve the anxiety surrounding breast imaging and make the breast imaging experience as pleasant as possible.”

Dr. Margolies is a graduate of Brown University where she majored in bio-ethics and the Yale University School of Medicine. After training in Radiology at Columbia and Yale, she was in practice in Connecticut where she was Chairman of The Department of Radiology at Griffin Hospital - a patient focused Planetree Hospital. Dr. Margolies is now the director of breast imaging at Mount Sinai, a fellow of the American College of Radiology, President of the New York Breast Imaging Society and was the worldwide chair of the Brown Alumni Schools Committee.

**GEORGE HERMANN, MD, FACR**

Dr. Hermann has published countless articles in major medical journals and has authored several textbook chapters. He has often been awarded “Teacher of the Year.” His expertise and compassion have made him a much sought after clinician at MSMC.

**JANET SZABO, MD**

Dr. Szabo, a native New Yorker, is a Duke, University of North Carolina trained radiologist with a strong commitment to imaging excellence, and patient focused care. She is committed to excellence in patient care.

**NEESHA PATEL, MD**

Dr. Patel is a graduate of Brown University and completed her radiology and breast imaging training at Mount Sinai. She has an interest in international medicine and strives to provide a comfortable environment for all patients.

**JOAN SAUNDERS, BS, LRT, (R) (M)**

Joan Saunders is the manager for the breast-imaging program in Radiology Associates. She has 26 years of experience and has been at Mount Sinai for 9years. Her expertise in mammography and interpersonal skills and kindness are a value asset to everyone.