

Mary Scott Campbell Soo, M.D.



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**PRIMARY ACADEMIC
APPOINTMENT:**

Associate Professor of Radiology
Department of Radiology
Duke University Medical Center
Durham, N.C. 27710

E-MAIL ADDRESS:

soo00002@mc.duke.edu

**DATE & RANK OF FIRST DUKE
FACULTY APPOINTMENT:**

July 1, 1991
Fellow -- Neuroradiology

MEDICAL LICENSURE:

North Carolina # XXXXX

**SPECIALTY CERTIFICATION
& DATES:**

American Board of Radiology
June 1991

DATE & PLACE OF BIRTH:

November 11, 1961
Richmond, Virginia

CITIZENSHIP:

United States of America

EDUCATION:

High School:

Patrick Henry High
August 1976 -- June 1979
Ashland, Virginia
High School Diploma

College:

Wake Forest University
August 1979 -- May 1983
Winston-Salem, North Carolina
Degree: B.A. in Biology

Graduate or Professional School:

Bowman Gray School of Medicine of
Wake Forest University
Winston-Salem, North Carolina
August 1983 -- May 1987
Degree: M.D.

PROFESSIONAL TRAINING & ACADEMIC CAREER:

1987 -- 1991

Resident, Department of Radiology
Allegheny General Hospital
Pittsburgh, Pennsylvania

1989 -- 1991

Chief Resident, Department of Radiology
Allegheny General Hospital
Pittsburgh, Pennsylvania

1991 -- 1992

Neuroradiology Fellowship, Department of Radiology
Duke University Medical Center
Durham, North Carolina

July 1992 -- January 1993

Pediatric Fellowship, Department of Radiology
Duke University Medical Center
Durham, North Carolina

January 1993 -- June 1993
Breast Imaging Fellowship, Department of Radiology
Duke University Medical Center
Durham, North Carolina

July 1993 -- June 2001
Assistant Professor, Department of Radiology
Duke University Medical Center
Durham, North Carolina

July 2001 -- Present
Associate Professor, Department of Radiology
Duke University Medical Center
Durham, North Carolina

June 1998 -- 2003
Chief, Breast Imaging Division
Department of Radiology
Duke University Medical Center
Durham, North Carolina

PUBLICATIONS:

Refereed Journals

1. Centor RM, Dalton HP, **Campbell MS (Soo)**, Lynch MR, Watlington AT, Garner BK. Rapid diagnosis of streptococcal pharyngitis in adult emergency room patients. **J Gen Intern Med** 1:248-251, 1986.
2. **Campbell MS (Soo)**, Dash N, Lupetin AR. Angiosarcoma of the breast. **Breast Disease** 1:219-224, 1988.
3. Clancy CM, Centor RM, **Campbell MS (Soo)**, Dalton HP. Rational decision making based on history: adult sore throats. **J Gen Intern Med** 3:213-217, 1988.
4. **Soo MSC**, Dash N, Lupetin AR, Beckman I. Intra-aortic counterpulsation balloon: CT appearance. **Clin Imag** 14:225-227, 1990.
5. **Soo MSC**, Adatepe M. Metastatic lesions arising in a Riedel's Lobe - findings from a sulfur colloid liver-spleen scan. **Clin Nucl Med** 15:814-815, 1990.
6. **Soo MSC**, Khoury MB, Lupetin AR. Splenic vein aneurysm: MR appearance. **Angiology** 42:590-593, 1991.
7. Goldberg AL, **Soo MSC**, Deeb ZL, Rothfus WE. Degenerative disease of the lumbar spine - role of CT-myelography in the MR era. **Clin Imag** 15:47-55, 1991.

8. **Soo MSC**, Tien RD, Gray L, Andrews PI, Friedman HS. Mesenrhombencephalitis: MR findings in nine patients. **AJR** 160:1089-1093, 1993.
9. Nashold JRB, Oakes WJ, Friedman HS, Halperin EC, **Soo MSC**, Hockenberger B, Fuller GN, Tien R. Management of pineal non-germinoma germ cell tumor with residual teratoma and normal alpha-fetoprotein. **Med & Ped Oncol** 22(2):137-139, 1994.
10. **Soo MSC**, Williford ME, Walsh R, Bentley RC, Kornguth PJ. Papillary carcinoma of the breast: imaging findings. **AJR** 164:321-326, 1995.
11. **Soo MSC**, Kornguth PJ, Georgiade DS, Sullivan DC. Seromas in residual fibrous capsules after explantation: mammographic and sonographic appearances. **Radiology** 194:863-866, 1995.
12. Walsh R, Kliewer MA, Sullivan DC, Hertzberg B, Paulson EK, **Soo MSC**, Saksouk FA, Kornguth PJ. Periprosthetic mycobacterial infection: CT and mammographic findings. **Clin Imag** 19:193-196, 1995.
13. **Soo MSC**, Williford ME, Elenberger CD. Medullary thyroid carcinoma metastatic to the breast: mammographic appearance. **AJR** 165:65-66, 1995.
14. **Soo MSC**, Williford ME. Seromas in the breast: imaging findings. **Critical Reviews in Diagnostic Imag** 36:385-440, 1995.
15. Floyd C, **Soo MSC**, Tourassi GD, Kornguth PJ. Computer-aided prediction of breast implant rupture based on mammographic findings. **SPIE** 2434:471-476, 1995.
16. Anderson ME, **Soo MSC**, Bentley RC, Trahey GE. Evaluation of ultrasonic detectability of microcalcifications. **IEEE Ultrason Symp** 2(2); 1161-1166, 1995.
17. **Soo MSC**, Sullivan DC, Hooper D, Georgiade GS, Conaway MR, Kornguth PJ. Film screen mammography and sonography in the evaluation of breast prosthesis integrity. **Breast Disease** 9:81-92, 1996.
18. **Soo MSC**, Walsh R, Kornguth PJ, Elenberger CD, Georgiade GS. Complex radial folds versus subtle signs of intracapsular rupture of breast implants: MR findings with surgical correlation. **AJR** 166:1421-1427, 1996.
19. Walsh R, Kornguth PJ, **Soo MSC**, Bentley RC, DeLong DM. Axillary lymph nodes: mammographic, pathologic and clinical correlation. **AJR** 168:33-38, 1997.
20. Anderson ME, **Soo MSC**, Bentley RC, Trahey GE. The detection of breast microcalcifications with medical ultrasound. **J Acoustical Society of Am** 101:29-39, 1997.
21. **Soo MSC**, Walsh R, Kornguth PJ, Elenberger CD, Georgiade GS. Intracapsular implant rupture: MR findings of incomplete shell collapse. **JMRI** 7:724-730, 1997.

22. Scarfone C, Jaszczak RJ, Li J, **Soo MSC**, Smith MF, Greer KL, Coleman RE. Breast tumor imaging using incomplete circular orbit pinhole SPECT: a phantom study. **Nucl Med Communications** 18:1077-1086, 1997.
23. **Soo MSC**, Kornguth PJ, Hertzberg BS. Sonographic features of fat necrosis in the breast. **Radiology** 206(1); 261-269, 1998.
24. **Soo MSC**, Walsh R, Patton J. Prone table stereotactic breast biopsy: facilitating biopsy of posterior lesions using the arm-through-the-hole-technique. **AJR** 171:615-617, 1998.
25. Anderson ME, **Soo MSC**, Trahey GE. Microcalcifications as elastic scatterers under ultrasound. **IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control** 45:925-934, 1998.
26. **Soo MSC**. Imaging-guided core biopsies in the breast. **Southern Med J** 91(11):993-1000, 1998.
27. Baker JA, **Soo MSC**, Mengoni P. Sonographically-guided percutaneous interventions of the breast using a steerable ultrasound beam. **AJR** 172(1):157-159, 1999.
28. Baker JA, Kornguth PJ, **Soo MSC**, Mengoni P, Walsh R, Williford ME. Sonography of solid breast lesions: observer variability of lesion description and assessment. **AJR** 172(6):1621-1625, 1999.
29. Ghate S, **Soo MSC**, Mengoni P. Extended field-of-view two-dimensional ultrasonography of the breast: improvement in lesion documentation. **J Ultras Med** 18:597-601, 1999.
30. Rosen EL, **Soo MSC**. Focal fibrosis: a common diagnosis following imaging-guided breast biopsy. **AJR** 173:1657-1662, 1999.
31. **Soo MSC**, Ghate S, DeLong D. Stereotactic biopsy of noncalcified breast lesions: utility of vacuum-assisted technique compared to multipass automated gun technique. **Clin Imag** 23:347-352, 1999.
32. **Soo MSC**, Dash N, Bentley R, Lee LH, Nathan G. Tubular adenomas of the breast: imaging findings with histologic correlation. **AJR** 174:757-761, 2000.
33. **Soo MSC**, Ghate S. Herpes simplex virus mastitis: clinical and imaging findings. **AJR** 174:1087-1088, 2000.
34. Pisano ED, Cole EB, Major S, **Soo MSC**, et al. Radiologists preferences for digital mammography display: the international digital mammography development group. **Radiology** 216:820-830, 2000.

35. Baker JA, **Soo MSC**. The evolving role of sonography in evaluating solid breast masses. **Seminars US, CT & MRI** 21(4):286-296, 2000.
36. Brown SL, Middleton MS, Berg WA, **Soo MSC**, Pennello G. Prevalence of MR imaging-depicted silicone gel breast implant rupture. **AJR** 175:1057-1064, 2000.
37. White R, Halperin T, **Soo MSC**, Bentley R, Seigler H. Impact of core needle breast biopsy on the surgical management of mammographic abnormalities. **Annals of Surgery** 233(6):769-777, 2001.
38. Brown SL, Pennello G, Berg WA, **Soo MSC**, Middleton MS. Silicone gel breast implant rupture, extracapsular silicone, and health status in a population of women. **J Rheumatol** 28:996-1000, 2001.
39. Baker JA, **Soo MSC**, Rosen EL. Artifacts and pitfalls in sonographic imaging of the breast. **AJR** 176:1261-1266, 2001.
40. **Soo MSC**, Rosen EL, Baker JA, Vo TT, Boyd BA. The negative predictive value of sonography with mammography in patients with palpable breast lesions. **AJR** 177:1167-1170, 2001.
41. Rosen EL, **Soo MSC**. Tissue harmonic imaging sonography of breast lesions: improved margin analysis, conspicuity and image quality compared to standard ultrasound. **Clin Imag** 25(6):379-384, 2001.
42. Anderson ME, **Soo MSC**, Trahey GE. In vivo breast tissue backscatter measurements with 7.5 and 10 MHz transducers. **Ultrasound Med & Biology** 27(1):75-81, 2001.
43. **Soo MSC**, Baker JA, Rosen EL, Vo TT. Sonography-guided biopsy of suspicious microcalcifications of the breast: a pilot study. **AJR** 178(4):1007-1015, 2002.
44. Rosen EL, Baker JA, **Soo MSC**. Malignant lesions initially subjected to short-term mammographic follow-up. **Radiology** 223(1):221-228, 2002.
45. Berg WA, Nguyen TN, Middleton MS, **Soo MSC**, Pennello G, Brown SL. MR imaging evaluation of extracapsular silicone from breast implants: diagnostic pitfalls. **AJR** 178(2):465-472, 2002.
46. Baker JA, **Soo MSC**. Breast sonography – assessment of technical quality and interpretative accuracy. **Radiology** 223:229-238, 2002.
47. Pisano ED, Cole EB, Kistner ED, Muller KE, Hemminger BM, Brown ML, Johnston RE, Kuzmiak CM, Braeuning MP, Freimanis RI, **Soo MSC**, Baker JA, Walsh R. Interpretation of digital mammograms: a comparison of speed and accuracy of soft-copy versus printed-film display. **Radiology** 223:483-488, 2002.

48. Nightingale K, **Soo MSC**, Nightingale R, Trahey G. Acoustic radiation force impulse imaging: in vivo demonstration of clinical feasibility. **Ultrasound Med & Biology** 28(2):227-235, 2002.
49. Rosen EL, Bentley RC, Baker JA, **Soo MSC**. Imaging-guided core needle biopsy of papillary lesions of the breast. **AJR** 179:1185-1192, 2002.
50. Cole EG, Pisano ED, Kistner EO, Mueller KE, Johnston RE, Yaffe MJ, Brown ML, Conant EF, Fajardo LL, Feig SA, Jong RA, Kopans DB, Maidment ADA, Shumak R, Staiger MJ, Williams MB, Kuzmiak CM, Freimanis RI, Lesko N, Rosen EL, Sanders E, **Soo MSC**, Vo T, Walsh R, Williford M, Braeuning MP. Diagnostic accuracy of digital mammography in patients with dense breasts presenting for problem-solving mammography-image processing and lesion type effects. **Radiology** 226:153-160, 2003.
51. Rosen EL, Baker JA, **Soo MSC**. Accuracy of collagen-plug biopsy site marking device Deployed after stereotactic core needle breast biopsy. **AJR** 181:1295-1299, 2003.
52. Baker JA, Rosen EL, Gimenez EI, Walsh R, **Soo MSC**. Computer-aided detection in Screening mammography: sensitivity of commercial CAD systems for architectural Distortion. **AJR** 181:1083-1088; 2003.
53. Rosen EL, Blackwell KL, Baker JA, **Soo MSC**, Bentley RC, Yu D, Samulski TV, Dewhurst MW. Accuracy of MRI in the detection of residual breast cancer after neoadjuvant chemotherapy. **AJR** 181; 1275-1282, 2003.
54. **Soo MSC**, Baker JA, Rosen EL. Sonographic detection and sonographically-guided biopsy of breast microcalcifications. **AJR** 180:941-948, 2003.
55. Porter LS, Mishel M, Neelon V, Belyea M, Pisano E, **Soo MSC**. Cortisol levels and responses to mammography screening in breast cancer survivors: a pilot study. **Psychosomatic Medicine** 65(5):842-848, 2003.
56. Dahl JJ, **Soo MSC**, Trahey GE. Clinical evaluation of combined spatial compounding and adaptive imaging in breast tissue. **Ultrasonic Imaging** 26(4):203-216, 2004.
57. Rosen EL, Turkington T, **Soo MSC**, Baker JA, Coleman RA. Detection of primary breast carcinoma with a dedicated, large field-of-view FDG positron emission mammography device: initial experience. **Radiology** 234:527-534, 2005.
58. **Soo MSC**, Kliwer MA, Ghatte S, Helsper RS, Rosen EL. Stereotactic breast biopsy of non-calcified lesions: a cost-effectiveness analysis comparing 14-gauge multipass automated core biopsy to 14- and 11-gauge vacuum-assisted biopsy. **Clin Imag** 29(1):26-33, 2005.
59. **Soo MSC**, Rosen EL, Xia JQ, Ghatte SV, Baker JA. Computer-aided detection of amorphous calcifications. **AJR** 184:887-892, 2005.

60. Ghate SV, **Soo MSC**, Baker JA, Walsh R, Gimenez EI, Rosen EL. Comparison of recall rates and cancer detection rates for immediate versus batch interpretation of screening mammography. **Radiology** 235:31-35, 2005.
61. Hong AS, Rosen EL, **Soo MSC**, Baker JA. Breast imaging reporting and data system for breast ultrasound: positive and negative predictive values of sonographic features. **AJR** 184:1260-1265, 2005.
62. Dahl JJ, **Soo MSC**, Trahey GE. Spatial and temporal aberrator stability for real-time adaptive imaging. **IEEE Transactions on Ultrasonic, Ferroelectrics, and Frequency Control** 52(9):1504-1517, 2005.
63. **Soo MSC**, Ghate S, Baker JA, Rosen EL, Walsh R, Warwick B, Nightingale K. Streaming detection for evaluation of indeterminate sonographic masses: a pilot study. **AJR** 186:1335-1341, 2006.
64. Ghate SV, Rosen EL, **Soo MSC**, Baker JA. MRI-guided vacuum-assisted breast biopsy with a hand-held portable biopsy system. **AJR** 186:1733-1736, 2006.
65. Maxwell RW, Ghate SV, Bentley RC, **Soo MSC**. Primary primitive neuroectodermal tumor of the breast. **J Ultras Med** 25:1331-1333, 2006.
66. Dahl J, McAleavey S, Pinton G, **Soo MSC**, Trahey G. Adaptive imaging on a diagnostic ultrasound scanner at Quasi real-time rates. **IEEE Transactions on Ultrasonic, Ferroelectrics, and Frequency Control** 53(10):1832-1843, 2006.
67. Saunders RS, Samei E, Baker JA, Delong D, **Soo MSC**, Walsh R, Pisano E, Kuzmiak C, Pavic D. Comparison of LCD and CRT displays based on Efficacy for digital mammography. **Acad Radiol** 13(11):1317-1326, 2006.
68. Pollard BJ, Samei E, Chawla AS, Baker JA, Ghate SV, Kim C, **Soo MSC**, Hashimoto N. The influence of increased ambient lighting on mass detection in mammograms. **Acad Radiol** 16:299-304, 2009.
69. Wilke LG, Broadwater G, Rabiner S, Owens E, Yoon S, Ghate SV, Scott V, Walsh R, Baker JA, **Soo MSC**, Iberra-Drendall C, Stouder A, Robertson S, Barron A, Seewaldt V. Breast self-examination: defining a cohort still in need. **Am J Surg** 198:575-579, 2009.
70. Samei E, Webb L, Lo J, Baker JA, Ghate SV, Kim C, **Soo MSC**, Walsh R. Comparative performance of multi-view stereoscopic and mammographic display modalities for breast lesion detection. **Med Physics** 38(4):1972-1980, 2011.

71. Ghate SV, Baker JA, Kim C, Johnson KS, Walsh R, **Soo MSC**. Using the BI-RADS Lexicon in a restrictive form of double reading as a strategy for minimizing screening mammography recall rates. **AJR** (Accepted)
72. Holbrook A, Lee S, **Soo MSC**. Mammographic appearance of calcium hydroxylapatite (Radiesse TM) injected into the breast for nipple reconstruction. (Case Report) **The Breast J** (Accepted)
73. Shelby RA, Scipio CD, Somers TJ, **Soo MSC**, Weinfurt KP, Keefe FJ. Prospective study of factors predicting adherence to surveillance mammography in women treated for breast cancer. **J Clin Oncol** (Accepted)
74. Johnson KS, Baker JA, Lee SS, **Soo MSC**. Suspicious breast lesions detected at 3.0 T magnetic resonance imaging: clinical and histological outcomes. **Acad Radiol** (Accepted)
75. Miller LS, Shelby RA, Hayes Balmadrid MA, Yoon S, Baker JA, Wildermann L, **Soo MSC**. Patient anxiety before and during imaging-guided breast biopsy procedures: impact of Radiologist-patient communication. **AJR** (Submitted)

INVITED PUBLICATIONS:

1. **Soo MSC**, Spritzer CE. MR imaging of the breast. **Applied Radiol** 25(9):18-24, 1996.
2. Walsh R, **Soo MSC**. Adenopathy and other axillary abnormalities on mammography. **Contemp Diagnos Radiol** 22(5):1-6, 1999.

LETTER(S) TO THE EDITOR:

1. **Soo MSC**, Rosen EL, Baker JA, Vo TT, Boyd BA. The negative predictive value of sonography with mammography in patients with palpable breast lesions. (Reply to the Editor) **AJR** 2001.
2. **Soo MSC**, Rosen EL, Xia JQ, Ghate SV, Baker JA. Computer-aided detection of amorphous calcifications. (Reply to the Editor) **AJR** 2005.

BOOK REVIEWS:

1. **Soo MSC**, Ghate S. Review of, Breast Imaging Companion. **AJR** 170:1374, 1998.

BOOK CHAPTERS:

1. **Soo MSC**. Intracranial infectious disease, in Ravin CE, Cooper CA, Leder RA (editors), Review of Radiology. 1st Edition, W.B. Saunders, Philadelphia, PA, 1994, pgs. 232-237.

2. Kornguth PJ, **Soo MSC**, Walsh R, Williford ME. Breast imaging in women with plastic surgery of the breasts, in Georgiade GS, Riefkohl R, Levin LS (editors), Georgiade's Plastic, Maxillofacial and Reconstructive Surgery. 3rd Edition, Williams & Wilkins, Media PA.

ABSTRACTS:

1. Centor RM, Garner BK, **Campbell MS(Soo)**, Lynch MR, Dalton HP. The importance of non-group a streptococci in adults complaining of a sore throat. **Clin Res** 33:245A, 1985.
2. Centor RM, Garner BK, **Campbell MS(Soo)**, Lynch MR, Dalton HP. Rapid diagnosis of group a streptococcal throat infection: could the gold standard be fool's gold. **Clin Res** 33:245A, 1985.
3. **Campbell MS(Soo)**, Clancy CM, Centor RM, Dalton HP. Rational clinical decision making by telephone: adult sore throat. **Clin Res** 34:296A, 1986.
4. **Soo MSC**, Kornguth PJ, Sullivan DC, Georgiade GS, Hooper D. Accuracy of film screen mammography and breast ultrasound in a consecutive series of surgically removed breast prosthesis. Radiology RSNA 1993 Scientific Program 189 (P) Supplement:244-245, 1993.
5. **Soo MSC**, Williford M, Kornguth PJ, Bentley RC, Walsh R. Papillary carcinoma of the breast: a spectrum of imaging findings. American College of Radiology - 26th National Conference on Breast Cancer Syllabus. Palm Springs, CA. May 1994, pg. 137.
6. **Soo MSC**, Kornguth PJ, Georgiade DS, Sullivan DC. Seromas in residual fibrous capsules after explantation: mammographic and sonographic appearances. From **Radiology** 194:863-866, 1995. Accepted for publication in the **Year Book of Plastic Reconstructive and Aesthetic Surgery**, 1995.
7. **Soo MSC**, Kornguth PJ, Georgiade DS, Sullivan DC. Seromas in residual fibrous capsules after explantation: mammographic and sonographic appearances. From **Radiology** 194:863-866, 1995. Accepted for publication in the **Year Book of Ultrasound**, 1995.
8. **Soo MSC**, Kornguth PJ, Walsh R, Elenberger C. Intracapsular implant rupture: MR imaging findings of early shell collapse. Radiology RSNA '95 Scientific Program 197(p):371, 1995.
9. **Soo MSC**, Kornguth PJ. Noniatrogenic breast trauma: spectrum of imaging findings. Radiology RSNA '95 Scientific Program 197(p):459-460, 1995.
10. **Soo MSC**, Walsh R, Kornguth PJ, Elenberger C. Complex radial folds in intact silicone implant's: appearance at MR imaging with surgical correlation. Radiology RSNA '95 Scientific Program 197(p):457,1995.
11. Walsh R, **Soo MSC**, Kornguth PJ. Axillary abnormalities detected by mammography. Radiology RSNA '95 Scientific Program 197(p):459, 1995.

12. Floyd C, **Soo MSC**, Tourassi GD, Kornguth PJ. Computer-aided prediction of breast implant rupture based on mammographic findings. In Proceedings of the International Society for Optical Engineering (**SPIE**) 2434:471-476, 1995.
13. Anderson ME, Trahey GE, **Soo MSC**, Bentley RC. Evaluation of the ultrasonic detectability of microcalcifications. **Ultrason Imag** 17(1); 58, 1995.
14. Anderson ME, Gauss R, **Soo MSC**, Trahey GE. Targets of opportunity for aberration measurement in the breast. 21st International Symposium on Ultrasonic Imaging and Tissue Characterization. Rosslyn, VA. June 1996.
15. Anderson ME, **Soo MSC**, Bentley RC, Trahey GE. Microcalcifications as elastic scatterers under ultrasound: implications for medical imaging. 1996 IEEE International Ultrasonics Symposium. San Antonio, TX. November 1996.
16. **Soo MSC**, Kornguth PJ. Breast masses resulting from fat necrosis: sonographic features. **AIUM**. San Diego, CA. 1997.
17. Gauss RC, **Soo MSC**, Trahey GE. Wave front distortion in the human breast. IEEE International Ultrasonics Symposium. San Antonio, TX. October 1997.
18. Anderson ME, **Soo MSC**, Trahey GE. Imaging system performance specification for microcalcification visualization. **Ultrason Imag** 19(1):50-51, 1997.
19. **Soo MSC**. Extended field of view 2-D ultrasound: Applications for breast imaging. American Roentgen Ray Society. 1998 Annual Meeting; 170(4):147, 1998.
20. **Soo MSC**, Kornguth PJ. Stereotactic biopsy of non-calcified breast lesions: Utility of vacuum-assisted core biopsy. American Roentgen Ray Society. 1998 Annual Meeting; 170(4):84, 1998.
21. Gauss RC, **Soo MSC**, Trahey GE. Wave front distortion in the human breast. Program of the 16th ICA/135th ASA Meeting. May 1998, pg. 3059.
22. Anderson ME, **Soo MSC**, Trahey GE. The acoustic properties of microcalcifications in the context of breast ultrasound. **J Acoustical Society of Am** 103:2962, 1998.
23. Anderson ME, Trahey GE, **Soo MSC**. Microcalcifications and high-performance breast ultrasound. **J Acoustical Society of Am** 104(3) Pt. #2:1843, 1998.
24. Pisano ET, Braeuning MP, Burke ET, Conant EF, Fajardo LL, Kornguth PJ, **Soo MSC**, et al. Comparison of the acceptability and performance of image processing algorithms in visualizing known lesions in digital mammograms. Radiology RSNA 98 Scientific Program 209(p):518, 1998.

25. Anderson ME, McKeag MS, **Soo MSC**, Trahey GE. Application of sound speed estimation and mapping to multi-layer media and in vivo data. IEEE International Ultrasonics Symposium; pgs. 1393-1396, 1998.
26. **Soo MSC**, Dash N, Lee LH, Bentley R, Nathan G. Tubular adenomas of the breast: imaging findings with histologic correlation. American Roentgen Ray Society. 1999 Annual Meeting. New Orleans, LA. May 9-14; 172(3):87, 1999.
27. Rosen EL, **Soo MSC**. Focal fibrosis: a commonly biopsied benign abnormality in the breast. American Roentgen Ray Society. 1999 Annual Meeting. New Orleans, LA. May 9-14; 172(3):8, 1999.
28. Rosen EL, **Soo MSC**. Tissue harmonic imaging sonography of breast lesions: improved margin analysis, conspicuity and image quality compared to standard ultrasound. Society of Breast Imaging. 1999 Annual Meeting. Boston, MA. May 26-29, pg. 39, 1999.
29. **Soo MSC**, Rosen EL. The negative predictive value of sonography and mammography in evaluating palpable breast lesions. Radiological Society of North America. 1999 Annual Meeting. Chicago, IL. November 11-December 3; 213(P):199, 1999.
30. **Soo MSC**, Kliewer MA, Rosen EL, Ghate S. Percutaneous breast biopsy: a cost-effective analysis comparing automated large-core biopsy with mammotome biopsy. Radiological Society of North America. 1999 Annual Meeting. Chicago, IL. November 11-December 3; 213(P):106, 1999.
31. Rosen EL, **Soo MSC**. The ability of mammography and sonography to identify breast cancer among women under forty with palpable breast masses. Radiological Society of North America. 1999 Annual Meeting. Chicago, IL. November 11-December 3; 213(P):200, 1999.
32. Rosen EL, **Soo MSC**. Tissue harmonic imaging sonography of breast lesions: improved margin analysis, conspicuity and image quality compared to standard ultrasound. Radiological Society of North America. 1999 Annual Meeting. Chicago, IL. November 28-December 3, 1999; 213(P):198, 1999.
33. **Soo MSC**, Vo TT, Rosen EL. Breast lesions Containing microcalcifications biopsied under sonographic guidance: findings at mammography and sonography. American Roentgen Ray Society. 2000 Annual Meeting. Washington, DC. May 7th - 12th, 2000; 174(S); 49: 2000.
34. Middleton MS, **Soo MSC**, Berg WA, Brown S, Pennello G. Rupture prevalence and MR imaging appearance of the Hartley double-lumen breast implant. Radiological Society of North America. 2000 Annual Meeting. Chicago, IL. November 26-December 1, 2000; 217(P):628, 2000.

35. Nguyen TK, Middleton MS, **Soo MSC**, Brown S, Pennello G, Berg WA. Consensus evaluation of the MR imaging appearance of soft-tissue extracapsular silicone in the women's health breast implant study for 344 women with 687 single- and double-lumen implants. Radiological Society of North America. 2000 Annual Meeting. Chicago, IL. November 26-December 1, 2000.
36. White R, Halperin T, **Soo MSC**, Bentley R, Seigler H. Impact of core needle biopsy on the surgical management of mammographic abnormalities. Southern Surgical Association Meeting. 112th Annual Meeting. Palm Beach, FL. December 5, 2000; pg. 33-35.
37. **Soo MSC**, Baker JA, Rosen EL. Mammographic features of suspicious microcalcifications detectable at sonography. American Roentgen Ray Society Annual Meeting. Seattle, WA. April 29-May 4, 2001; 176(3):7, 2001.
38. Baker JA, **Soo MSC**. Breast sonography – assessment of technical quality and interpretative accuracy. Radiological Society of North America. 2001 Annual Meeting. Chicago, IL. November 25th-30th, 2001.
39. Porter LS, Mishel M, Neelon V, Pisano E, **Soo MSC**. Cortisol levels and responses to mammography screening. Society of Behavioral Medicine. 2002 Annual Meeting. Washington, DC. April, 2002.
40. Ghate SV, **Soo MSC**, Baker JA, Walsh R, Gimenez EI, Rosen EL. Comparison of recall rates and cancer detection rates for on-line vs. off-line screening mammography. Radiological Society of North America. 2003 Annual Meeting. Chicago, IL. November 30 – December 5, 2003.
41. Hong AS, Rosen EL, **Soo MSC**, Baker JA. Breast imaging reporting and data system for breast ultrasound: positive and negative predictive values of sonographic features. American Roentgen Ray Society. 2004 Annual Meeting. Miami Beach, FL. May 2-7, 2004.
42. Nightingale K, Congdon A, **Soo MSC**, Trahey G. Acoustic radiation force impulse imaging of in vivo breast masses. 2004 IEEE International Ultrasonics Symposium. San Antonio, TX. August 25, 2004.
43. Dahl JJ, **Soo MSC**, Trahey GE. Clinical performance evaluation of combined spatial compounding/adaptive imaging. Ultrasonic Imaging 26(1):54-55, 2004.
44. **Soo MSC**, Ghate S, Baker JA, Rosen EL, Walsh R, Warwick B, Nightingale K. Streaming detection for evaluation of indeterminate sonographic masses: a pilot study. American Roentgen Ray Society. New Orleans, LA. May 15-20, 2005.
45. Ghate SV, Rosen EL, **Soo MSC**, Baker JA. MRI-guided breast biopsies using a novel hand-held portable breast biopsy systems. American Roentgen Ray Society. New Orleans, LA. May 15-20, 2005.

46. Rosen EL, **Soo MSC**, Baker JA. Positron emission mammography (PEM) evaluation of nonpalpable imaging detected breast lesions. Radiologic Society of North America. Chicago, IL. November 26 – December 1, 2006.
47. Shelby RA, Keefe FJ, Bovbjerg DH, **Soo MSC**, Red S, Skinner CS, Stinnett S, Luce MF, Sumkin JH. Negative mood and anxiety in breast cancer survivors and healthy women during routine mammography screening. Society of Behavioral Medicine Annual Meeting. Seattle, WA. April 7-11, 2010.
48. Shelby RA, Keefe FJ, Bovbjerg DH, **Soo MSC**, Red S, Skinner CS, Somers TJ, Stinnett S, Luce MF, Sumkin JH. Perceived risk of breast cancer, beliefs about mammography and psychological distress in breast cancer survivors and healthy women at the time of mammography. International Congress of Behavioral Medicine. Washington, DC. August 4-7, 2010.
49. Shelby RA, Keefe FJ, Red S, Skinner CS, **Soo MSC**, Stinnett S, Luce MF, Sumkin JH, Bovbjerg DH. Heightened mammography pain experienced after breast conserving cancer surgery and more modest pain levels in the unaffected breast show expected correlations with pain catastrophizing and self-efficacy for pain control. International Association for the Study of Pain. Montreal, Quebec, Canada. August 29 – September 2, 2010.
50. Johnson KS, **Soo MSC**, Lee SS, Baker JA. Biopsy cancellation rate of MRI-detected lesions at 3.0 T. Presented at Radiological Society of North America 2010 annual meeting. Chicago, IL.
51. **Soo MSC**, Miller LS, Shelby RA, Hayes M, Yoon S, Baker JA. Impact of radiologist/patient communication on patient anxiety levels before and during imaging guided core breast biopsy. American Roentgen Ray Society 2011 annual meeting. Chicago, IL. May 2, 2011.
52. Hayes MA, **Soo MSC**, Miller LS, Shelby R, Yoon S, Baker JA. Time between breast biopsy recommendation and biopsy procedure: impact of the “waiting game” on patient anxiety. Radiological Society of North America 2011 annual meeting. Chicago, IL.
53. Johnson KS, Baker JA, Lee SS, **Soo MSC**. Suspicious breast lesions detected at 3.0 T magnetic resonance imaging: clinical and histological outcomes. Radiological Society of North America 2011.
54. Wren AA, Shelby RA, **Soo MSC**, Miller L, Hayes M, Pearce M, Yoon S, Keefe FJ. Predictors of anxiety in women with abnormal breast biopsy results: relationship of Positive psychological factors to anxiety. Society of Behavioral Medicine annual meeting. (Accepted)
55. Miller LS, **Soo MSC**, Hayes MA, Shelby R, Yoon SC, Baker JA. Delivering image-guided breast needle biopsy results: effectiveness of radiologist communication on patient anxiety. American Roentgen Ray Society 2012 annual meeting. Vancouver, BC. (Accepted)

56. Ghate SV, Kim C, Baker JA, Bentley R, **Soo MSC**. Ultrasound guided core needle biopsies of the breast: comparison of outcomes using 14 gauge and 18 gauge needles. American Roentgen Ray Society 2012. (Accepted)
57. Miller LS, **Soo MSC**, Hayes MA, Shelby R, Yoon SC, Baker JA. Predictors of pain experienced by women during imaging-guided breast biopsy procedures. American Roentgen Ray Society 2012 annual meeting. Vancouver, BC. (Submitted)

PAPERS PRESENTED:

1. Goldberg AL, Deeb Z, **Soo MSC**, Rothfus WE. Continuing Role of CT Myelography in MR Era. Presented at the XIV Symposium Neuroradiologicum. London, England. June 1990.
2. **Soo MSC**, Tien R, Gray L. MR Appearance in Nine Patients With Mesenrhombencephalitis. Presented at the American Society of Neuroradiology 30th Annual Meeting. St. Louis, Missouri. June 1992.
3. **Soo MSC**, Kornguth PJ, Sullivan DC, Georgiade GS, Hooper D. Accuracy of film screen mammography and breast ultrasound in a consecutive series of surgically removed breast prostheses. Presented at the Radiological Society of North America - 79th Scientific Assembly. Chicago, IL. December 1993.
4. **Soo MSC**, Kornguth PJ, Walsh R, Elenberger CE. Intracapsular implant rupture: MR imaging findings of early shell collapse. Presented at the Radiological Society of North America - 81st Scientific Assembly. Chicago, IL. November, 1995.
5. Anderson ME, Trahey GE, **Soo MSC**, Bentley RC. Evaluation of the ultrasonic detectability of microcalcifications. **Ultrason Imag** 17(1); 58, 1995.
6. Anderson ME, **Soo MSC**, Bentley RC, Trahey GE. Microcalcifications as elastic scatterers under ultrasound: implications for medical imaging. 1996 IEEE International Ultrasonics Symposium. November 1996, San Antonio, TX.
7. **Soo MSC**. Stereotactic biopsy of noncalcified masses: utility of vacuum biopsy. Presented at the American College of Radiology National Conference on Breast Cancer. Washington, DC. May, 1998.
8. **Soo MSC**. Extended field of view 2D ultrasound: applications for breast imaging. Presented at the American Roentgen Ray Society. 1998 Annual Meeting. San Francisco, CA. May, 1998.
9. **Soo MSC**. Stereotactic biopsy of noncalcified masses: utility of vacuum biopsy. Presented at the American Roentgen Ray Society. 1998 Annual Meeting. San Francisco, CA. May, 1998.

10. Anderson ME, McKeag MS, **Soo MSC**, Trahey GE. Application of sound speed estimation and mapping to multi-layer media and in vivo data. IEEE International Ultrasonics Symposium, 1998.
11. **Soo MSC**, Dash N, Lee LH, Bentley R, Nathan G. Tubular adenomas of the breast: imaging findings with histologic correlation. American Roentgen Ray Society. 1999 Annual Meeting. New Orleans, LA. May 9-14, 1999.
12. Rosen EL, **Soo MSC**. Focal fibrosis: a commonly biopsied benign abnormality in the breast. American Roentgen Ray Society. 1999 Annual Meeting. New Orleans, LA. May 9-14, 1999.
13. Rosen EL, **Soo MSC**. Tissue harmonic imaging sonography of breast lesions: improved margin analysis, conspicuity and image quality compared to standard ultrasound. Society of Breast Imaging. 1999 Annual Meeting. Boston, MA. May 26-29, 1999.
14. **Soo MSC**, Rosen EL. The negative predictive value of sonography and mammography in evaluating palpable breast lesions. Radiological Society of North America. 1999 Annual Meeting. Chicago, IL. November 11-December 3, 1999.
15. **Soo MSC**, Kliwer MA, Rosen EL, Ghatge S. Percutaneous breast biopsy: a cost-effective analysis comparing automated large-core biopsy with mammotome biopsy. Radiological Society of North America. 1999 Annual Meeting. Chicago, IL. November 11-December 3, 1999.
16. Rosen EL, **Soo MSC**. Tissue harmonic imaging sonography of breast lesions: improved margin analysis, conspicuity and image quality compared to standard ultrasound. Radiological Society of North America. 1999 Annual Meeting. Chicago, IL. November 11-December 3, 1999.
17. Rosen EL, **Soo MSC**. The ability of mammography and sonography to identify breast cancer among women under forty with palpable breast masses. Radiological Society of North America. 1999 Annual Meeting. Chicago, IL. November 11-December 3, 1999.
18. **Soo MSC**, Vo TT, Rosen EL. Breast lesions containing microcalcifications biopsied under sonographic guidance: findings at mammography and sonography. American Roentgen Ray Society. 2000 Annual Meeting. Washington, DC. May 7th - 12th, 2000.
19. Middleton MS, Berg WA, **Soo MSC**, Brown SL, Pennello G. Consensus of MR imaging readings for 571 single-lumen silicone gel-filled breast implants in the Women's Health Breast Implant Rupture Study. Radiological Society of North America. 2000 Annual Meeting. Chicago, IL. November 26th - 30th, 2000.
20. **Soo MSC**, Baker JA, Rosen EL. Mammographic features of suspicious microcalcifications detectable at sonography. Accepted, American Roentgen Ray Society Annual Meeting. Seattle, WA. April 29th - May 4th, 2001.

21. Baker JA, **Soo MSC**. Breast sonography – assessment of technical quality and interpretative accuracy. Radiological Society of North America. 2001 Annual Meeting. Chicago, IL. November 25th-30th, 2001.
22. Nightingale KR, **Soo MSC**, Nightingale RW, Trahey GE. Investigation of real-time remote palpation imaging. 2001 SPIE Conference on Medical Imaging.
23. Ghate SV, **Soo MSC**, Baker JA, Walsh R, Gimenez EI, Rosen EL. Comparison of recall rates and cancer detection rates for on-line vs. off-line screening mammography. Radiological Society of North America. 2003 Annual Meeting. Chicago, IL. November 30 – December 5, 2003.
24. Hong AS, Rosen EL, **Soo MSC**, Baker JA. Breast imaging reporting and data system for breast ultrasound: positive and negative predictive values of sonographic features. American Roentgen Ray Society. 2004 Annual Meeting. Miami Beach, FL. May 2-7, 2004.
25. Nightingale K, Congdon A, **Soo MSC**, Trahey G. Acoustic radiation force impulse imaging of in vivo breast masses. 2004 IEEE International Ultrasonics Symposium. San Antonio, TX. August 25, 2004.
26. Dahl JJ, **Soo MSC**, Trahey GE. Spatial and temporal stability of tissue induced aberration. 2004 IEEE International UFFC 50th Anniversary Joint Conference Proceedings. (In Press)
27. Ghate SV, Rosen EL, **Soo MSC**, Baker JA. MRI-guided breast biopsies using a novel hand-held portable breast biopsy systems. American Roentgen Ray Society. New Orleans, LA. May 15-20, 2005.
28. **Soo MSC**, Ghate S, Baker JA, Rosen EL, Walsh R, Warwick B, Nightingale K. Streaming detection for evaluation of indeterminate sonographic masses: a pilot study. American Roentgen Ray Society. New Orleans, LA. May 15-20, 2005.
29. Rosen EL, **Soo MSC**, Baker JA. Positron emission mammography (PEM) evaluation of Nonpalpable imaging detected breast lesions. Radiologic Society of North America. Chicago, IL. November 26 – December 1, 2006.
30. Johnson KS, **Soo MSC**, Lee SS, Baker JA. Biopsy cancellation rate of MRI-detected lesions at 3.0 T. Presented at Radiological Society of North America 2010 annual meeting. Chicago, IL.
31. **Soo MSC**, Miller LS, Shelby RA, Hayes M, Yoon S, Baker JA. Impact of radiologist/patient communication on patient anxiety levels before and during imaging guided core breast biopsy. American Roentgen Ray Society 2011 annual meeting. Chicago, IL. May 2, 2011.

32. Hayes MA, **Soo MSC**, Miller LS, Shelby R, Yoon S, Baker JA. Time between breast biopsy recommendation and biopsy procedure: impact of the “waiting game” on patient anxiety. Radiological Society of North America 2011 annual meeting. Chicago, IL.
33. Johnson KS, Baker JA, Lee SS, **Soo MSC**. Suspicious breast lesions detected at 3.0 T magnetic resonance imaging: clinical and histological outcomes. Radiological Society of North America 2011.

SCIENTIFIC EXHIBITS:

1. **Soo MSC**, Williford M, Walsh R, Bentley RC, Kornguth PJ. Papillary carcinoma of the breast: radiographic and pathologic correlation. Displayed at the American College of Radiology -- 26th National Conference on Breast Cancer. Palm Springs, CA. May 1994.
2. **Soo MSC**, Kornguth PJ, Georgiade GS, Sullivan DC. Seromas in residual fibrous capsules after explantation: mammographic and sonographic appearance. Displayed at the Radiological Society of North America -- 80th Scientific Assembly. Chicago, IL. November 1994.
3. **Soo MSC**, Kornguth PJ. Noniatrogenic breast trauma: spectrum of imaging findings. Displayed at the Radiological Society of North America -- 81st Scientific Assembly. Chicago, IL. November 1995.
4. **Soo MSC**, Walsh R, Kornguth PJ, Elenberger CE. Complex radial folds in intact silicone implants: appearance at MR imaging with surgical correlation. Displayed at the Radiological Society of North America -- 81st Scientific Assembly. Chicago, IL. November 1995.
5. Walsh R, **Soo MSC**, Kornguth PJ. Axillary abnormalities detected by mammography. Displayed at the Radiological Society of North America -- 81st Scientific Assembly. Chicago, IL. November 1995.
6. **Soo MSC**. Extended field-of-view 2-D ultrasound: applications for breast imaging. American Roentgen Ray Society. 1998 Annual Meeting. San Francisco, CA. May 1998.
7. **Soo MSC**. Extended field-of-view 2-D ultrasound: applications for breast imaging. American College of Radiology National Conference on Breast Cancer. Washington, DC. May 1998.
8. Middleton MS, **Soo MSC**, Berg WA, Brown SL, Pennello G. Rupture prevalence and MR imaging appearance of the Hartley double-lumen breast implant. Radiological Society of North America. Chicago, Ill. November 26 – December 1, 2000.

AWARDS:

1. Certificate of Merit Award: **Soo MSC**, Kornguth PJ, Georgiade GS, Sullivan DC. Seromas in residual fibrous capsules after explantation: mammographic and sonographic appearances. Scientific exhibit displayed at the Radiological Society of North America -- 80th Scientific Assembly. Chicago, IL. November 1994.
2. Certificate of Merit Award: **Soo MSC**, Walsh R, Kornguth PJ, Elenberger CE. Complex radial folds in intact silicone implants: appearance at MR imaging with surgical correlation. Displayed at the Radiological Society of North America -- 81st Scientific Assembly. Chicago, IL. November 1995.

RESEARCH GRANT AWARDS:

(CURRENT)

12111 (The John Templeton Foundation) 07/01/07 – 01/01/12

Principal Investigator: Harold Koenig, M.D.

Co-Investigator: Mary Scott Soo, M.D.

“Spirituality, Theology and Health: An Initiative for Advancement in Research and Scholarship”;

Pilot Grant (10/15/2010 – 6/15/2011): “Association of Spirituality, Religiosity and Spiritual Needs with Psychologic, Psychosocial and Emotional distress in Women Undergoing Core Needle Breast Biopsy”

Advancing the field of spirituality, theology and health. Promoting scholarships and research.

5R01-CA131148-02 01/01/09 – 11/30/13

Principal Investigator: Francis Keefe, Ph.D.

Co-Investigator: Mary Scott Soo, M.D.

“Pain, Distress and Mammography Use in Breast Cancer Patients”

The proposed research addresses a critical public health issue – does heightened mammography pain in these women impact their adherence to potentially life-saving screening. (NIH)

RESEARCH GRANT AWARDS (Continued):

(NONCURRENT)

NCI-CA-43334 12/1/99 – 11/30/05

Principal Investigator: Gregg E. Trahey, Ph.D.

Co-Investigator: Mary Scott Soo, M.D.

“Adaptive Ultrasonic Imaging.”

The major goals of this project is to evaluate each of the features for the Siemens ultrasound scanner as controlled through the Research Interface for a wide range of operating modes and parameter settings. Also evaluate the RI for at least two settings of each adjustable parameter on one array and for a selection of key parameters. (NIH)

**RESEARCH GRANT AWARDS (Continued):
(NONCURRENT)**

5R29-CA75547-03

7/1/98 – 6/30/03

Principal Investigator: Joseph Y. Lo, Ph.D.

Co-Investigator: Mary Scott Soo, M.D.

“Computer-Aided Diagnosis of Breast Cancer Invasion.”

The long-term goal of this study is to develop a computer-aided diagnosis (CADx) system to predict breast lesion malignancy and invasion based on medical findings. (NIH)

DAMD17-01-1-0515

7/1/01 – 10/31/03

Principal Investigator: Mary Scott Soo, M.D.

“PET Imaging of Breast Cancer using F-18 Labeled Choline Analogs.”

The purpose of this study is to evaluate the potential utility of FCH-PET for detection and localization of breast cancer using a dedicated breast PET device. (Department of Defense)

1R01-CA-92183-01

9/10/01 – 8/31/05

Principal Investigator: Kathy Nightingale, Ph.D.

Co-Investigator: Mary Scott Soo, M.D.

“Remote Palpation Imaging in the Breast.”

The objective of this research is to design and construct a real-time remote palpation imaging system and to clinically evaluate this system in the context of breast imaging. (NIH)

R01-CA095061-01

4/1/02 - 3/30/06

Principal Investigator: Jay A. Baker, M.D.

Co-Investigator: Mary Scott Soo, M.D.

“Reducing benign breast biopsies with computer modeling.” (NIH/NCI)

BCRP99-Concept Awards

1/1/02 – 1/31/03

Principal Investigator: Eric L. Rosen, M.D.

Co-Investigator: Mary Scott Soo, M.D.

“Positron emission mammography: high resolution dedicated PET imaging of the breast.” (Department of the Army)

ACRIN666

2/04 – 1/08

Principal Investigator: Wendie Berg, M.D., Ph.D.

Principal Investigator for Duke University site: Mary Scott Soo, M.D.

“Screening breast ultrasound in high-risk women.”

American College of Radiology Imaging Network in conjunction with the Avon Foundation

5R21CA109681-02

9/1/04 – 8/31/06

Principal Investigator: Mary Scott Soo, M.D.

“FDG-PEM detection – characterization of breast cancer.” 7/1/04 – 6/30/06.

The long-term objective of this project is to improve the preoperative local staging of primary breast cancer by developing imaging techniques that accurately identify, localize and characterize clinically occult disease (malignancy). (NIH/National Cancer Institute)

2R01-CA76006-05A1

4/1/03 – 3/31/07

Breast Cancer Planning Grant. (NIH)

Principal Investigator: Ronald Jaszczak, Ph.D.

Co-Investigator: Mary Scott Soo, M.D.

“The use of fan-beam SPECT imaging of Technetium-99m-Sestamibi update in breast tumors.”
January 1996.

Breast Cancer Planning Grant. January 1996.

Principal Investigator: Phyllis J. Kornguth, M.D., Ph.D.

Co-Investigator: Mary Scott Soo, M.D.

“Comparing mammograms of high-risk patients to age-matched controls: A pilot study.”

CA-76059-03

6/1/98 – 5/31/01

Principal Investigator: Gregg E. Trahey, Ph.D.

Co-Investigator: Mary Scott Soo, M.D.

“Breast microcalcification visualization with ultrasound.”

National Institutes of Health. June 1998.

DAMD17-96-1-6145

1/1/97 – 1/31/00

Principal Investigator: Joseph Y. Lo, Ph.D.

Co Investigator: Mary Scott Soo, M.D.

“Breast ultrasound: computer-aided diagnosis approach to improving specificity and decreasing observer variability.”

U.S. Army Medical Research Grant. January 1999.

DAMD17-98-1-8068

9/1/98 – 8/31/01

Principal Investigator: Gregg E. Trahey, Ph.D.

Co-Investigator: Mary Scott Soo, M.D.

“A novel ultrasonic imaging method for remote palpation of breast tissues.”

Department of Defense Grant. September 1998.

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CASE OF THE WEEK:

1. **Soo MSC**, Williford ME, Elenberger CD. Medullary thyroid carcinoma metastatic to the breast: Mammographic appearance. **AJR (Electronic Version)** September 1996.

FACULTY LECTURER:

1. Breast MRI. Duke Radiology Summer Post-Grad Course. Myrtle Beach, S.C. August, 1994.
2. NC-ACR Breast Imaging Weekend Review Course. Charlotte, N.C. January 6-8, 1995.
3. Update: imaging breast implants. Fayetteville Area Health Education Center. Lecture Series. March 1, 1995.
4. Asymmetric densities and architectural distortion. Duke Radiology Review Course. April, 1995.
5. Breast MRI. Duke Radiology Summer Post-Grad Course. Myrtle Beach, S.C. August, 1995.
6. Breast MRI. Triangle Mammography Club. Duke University Medical Center September 1995.
7. Breast MRI. & Update on implants. NC-ACR Breast Imaging Weekend Review Course. Charlotte, N.C. January 5-7, 1996.
8. Imaging the augmented breast. & Other breast imaging modalities. Duke Radiology Review Course. April, 1996.
9. Imaging evaluation of the augmented breast. Allegheny General Hospital, Department of Radiology. Pittsburgh, PA. April 16, 1996.
10. MR imaging of the breast. Duke Radiology Summer Post-Grad Course. Myrtle Beach, S.C. August, 1996.
11. Update on implants. Case presentation. MR imaging of the breast. & Breast sonography. Duke Fall Symposium of Diagnostic Imaging. Bermuda. October 7-11, 1996.
12. Breast ultrasound. Interventional procedures. & Breast MRI and scintimammography. NC-ACR Breast Imaging Weekend Review Course. Charlotte, N.C. January 10-12, 1997.
13. Breast MR. Breast sonography. Breast intervention. & Mammography case presentations. Duke Radiology-Medicine Symposium. Snowmass, CO. March 3-14, 1997.

14. Imaging the augmented breast. Breast sonography. & Imaging the augmented breast. Duke Radiology Review Course. April 13-18, 1997.
15. Imaging the augmented breast. Fayetteville Area Health Education Center. Lecture Series. April 21, 1997.
16. Imaging-guided core biopsies of the breast. Radiology Grand Rounds. Duke University Medical Center. June 26, 1997.
17. Breast sonography. Duke Radiology Summer Post-Grad Course. Myrtle Beach, S.C. August 4-8, 1997.
18. Asymmetric density/architectural distortion: analysis & management. Breast ultrasound. Breast MRI. & Imaging-guided breast biopsy. NC-ACR Breast Imaging Weekend Review Course. Charlotte, N.C. January 10-12, 1998.
19. Mammography: asymmetric density and architectural distortion. Update on breast Implants. Breast sonography. & Breast core biopsies. Duke Radiology Winter Post-Grad Course. Puerto Rico. February 16-20, 1998.
20. Breast sonography & interventional techniques. Duke Radiology Review Course. April 9-24, 1998.
21. Imaging-guided core biopsies of the breast. Duke Radiology Summer Post-Grad Course. Myrtle Beach, S.C. August 3-5, 1998.
22. Breast MRI. Allegheny General Hospital, Department of Radiology. Pittsburgh, PA. August 27-28, 1998.
23. Update on implants. Allegheny General Hospital, Department of Radiology. Pittsburgh, PA. August 27-28, 1998.
24. Asymmetric density and architectural distortion. Allegheny General Hospital, Department of Radiology. Pittsburgh, PA. August 27-28, 1998.
25. Imaging the young woman's breast. Allegheny General Hospital, Department of Radiology. Pittsburgh, PA. August 27-28, 1998.
26. Review of mammography. Butner-Creedmoor Family Practice. Butner, N.C. 1998.
27. Stereotactic breast biopsy. Imaging the augmented breast: mammography and U/S. & Imaging the augmented breast: MRI. NC-ACR Breast Imaging Weekend Review Course. Charlotte, N.C. January 8-10, 1999.
28. Ultimate frisbee injuries. Radiology Grand Rounds. March 11, 1999.

29. Imaging of the augmented breast. & Breast sonography and interventional techniques. Duke Radiology Review Course. April 11-16, 1999
30. Imaging-guided core biopsies in the breast. Duke Radiology Summer Post-Grad Course. Myrtle Beach, S.C. August 2-6, 1999.
31. Breast interventional procedures. & Breast ultrasound. NC-ACR Breast Imaging Weekend Review Course. Charlotte, N.C. January 14-16. 2000.
32. Breast ultrasound update. Imaging of implants. Breast interventional procedures. & Breast imaging in the next millennium. Duke Radiology Current Concepts in Women's Imaging. Las Croabas, Puerto Rico. February 14-18, 2000.
33. Imaging the augmented breast. & Breast sonography and interventional procedures. Duke Radiology Review Course. April 9-14, 2000.
34. Breast ultrasound. Duke Radiology Summer Post-graduate Course. Myrtle Beach, S.C. July 31-August 4, 2000.
35. Stereotatic vacuum assisted breast biopsy. Wake AHEC Lecture Series. Franklin Regional Medical Center. Louisburg, NC. September 19, 2000.
36. Cutting edge breast ultrasound. 6th Annual Multidisciplinary Symposium on Breast Disease. Amelia Island, Florida. February 16, 2001.
37. Imaging the augmented breast. & Breast sonography and interventional procedures. Duke Radiology Review Course. April 22-27, 2001.
38. Cutting edge breast ultrasound. Duke Radiology Summer Post-Graduate Course. Myrtle Beach, S.C. July 30-August 3, 2001.
39. Emerging modalities in breast imaging. & Breast interventional procedures. NC-ACR Breast Imaging Weekend Review Course. Charlotte, N.C. February 8-12, 2002.
40. Breast ultrasound update. Breast interventional procedures. Breast imaging in the next millennium. & Imaging of implants. Women's Imaging & Contrast Media Update (Duke Radiology CME Course). St. Thomas, Virgin Islands. February 18-22, 2002.
41. New cancer imaging for breast cancer. Emerging Issues in Thoracic, Breast & Ovarian Oncology Conference. White Sulphur Springs, West Virginia. April 12-13, 2002.
42. Imaging of the augmented breast. & Breast sonography & interventional techniques. Duke Radiology Review Course. April 13-19, 2002.
43. Mammography. Lincoln Community Health Center Breast Education Workshop. Durham, N.C. October 11, 2002.

44. Breast ultrasound. Hands on workshop: prone table stereotactic biopsy. MRI – the gold standard for evaluating breast implants. Ultrasound-guided interventional procedures. & Hands on workshop. Duke Radiology Breast Imaging Course. October 28-29, 2002.
45. Interventional procedures. & Breast calcifications. Invited lecturer for the NC-ACR Breast Imaging Weekend Review Course. January 10-12, 2003.
46. Imaging of the augmented breast and breast sonography. Invited lecturer for the Duke Radiology Review Course. April 5-10, 2003.
47. Imaging and diagnosis of breast calcifications. Invited lecturer for refresher course at Society of Breast Imaging Meeting. Hollywood, FL. 2003.
48. After the biopsy: imaging-histologic review. Invited lecturer for the Duke Radiology Summer Post-graduate Course. Myrtle Beach, SC. July 28 - August 1, 2003.
49. Computer-aided diagnosis in mammography. Imaging guided needle core biopsies of the breast. Controversies in ultrasound and MRI screening of the breast. & After the biopsy: imaging-histologic review. Invited lecturer for the Duke Radiology Advanced Imaging Techniques & Screening Meeting. Palm Beach, FL. October 6 - 10, 2003.
50. Mammography. Invited lecturer for the Lincoln Community Health Center Breast Education Workshop. Durham, NC. October 10, 2003.
51. Imaging of the augmented breast and breast sonography. Invited lecturer for the Duke Radiology Review Course. Research Triangle Park, NC. April 19-22, 2004.
52. Management of unusual lesions after core breast biopsy. Invited lecturer for 10th Annual Meeting of the American Roentgen Ray Society. Miami Beach, FL. May 6, 2004.
53. Imaging and diagnosis of breast microcalcifications. & After the biopsy imaging-histologic review. Invited lecturer for Mayo Clinic Department of Radiology. Rochester, MN. May 17-19, 2004.
54. Management of unusual lesions after core breast biopsy. Invited lecturer for the Duke Radiology Beach Course. Myrtle Beach, SC. July 26-30, 2004.
55. Imaging and diagnosis of breast microcalcifications. & Computer-aided diagnosis in mammography. Invited lecturer for the NC-ACR Breast Imaging Weekend Review Course. Charlotte, NC. January 14-16, 2005.
56. Tissue is the issue: cutting edge needle core biopsies of the breast. After the breast biopsy: imaging and histologic correlation of concordant lesions. What do I do now? Management of problematic lesions after core biopsy. & They're back! Update on imaging of breast implants. Invited lecturer for the Duke Radiology Breast & Bone

- Update Course. Durham, NC. March 12-15, 2005.
57. Breast sonography. Breast interventional procedures. Imaging the augmented breast. & Breast MRI. Invited lecturer for the Duke Radiology Review Course. Research Triangle Park, NC. April 10-15, 2005.
 58. Update on biopsy technology. Invited lecturer for the Society of Breast Imaging Post-Graduate Course. Vancouver, BC (Canada). May 25-28, 2005.
 59. New and current breast biopsy devices. Invited lecturer for the Duke Radiology Beach Course. Myrtle Beach, SC. July 25-29, 2005.
 60. Imaging & diagnosis of breast microcalcifications. & Update on breast biopsy technology. Invited lecturer for the NC-ACR Breast Imaging 12th Annual Weekend Review Course. Charlotte, NC. January 13-15, 2006.
 61. Breast sonography. Breast interventional procedures. & Imaging the augmented breast. Invited lecturer for the Duke Radiology Review Course. Research Triangle Park, NC. April 23-28, 2006.
 62. Advanced techniques in breast ultrasound - 2006. Invited lecturer for the New York Metropolitan Mammography Society. New York, NY. May 10-13, 2006.
 63. MRI breast interventions. Invited lecturer for the Duke Radiology Summer Post-Grad Course. Myrtle Beach, SC. July 31 – August 4, 2006.
 64. Diagnosis of breast microcalcifications. & Update on image-guided percutaneous breast biopsy. Invited lecturer for the 1st Annual Breast Imaging & Interventional Review Course. Lexington, KY. October 19-20, 2006.
 65. Advances in breast ultrasound. Invited lecturer for the American Institute of Ultrasound in Medicine. New York, New York. March 15-18, 2007.
 66. Ultrasound, MRI and interventions of the breasts. Invited lecturer for the Duke Radiology Review Course. Research Triangle Park, NC. April 15-20, 2007.
 67. Microcalcifications. Teaching cases. & Advances in breast ultrasound. Invited Grand Rounds Lecturer in the Radiology Department at New York Presbyterian Hospital. New York, New York. May 8-10, 2007.
 68. Breast sonography, core biopsies, implants and MRI. Invited lecturer for the Duke Radiology Summer Post-Grad Course. Myrtle Beach, SC. July 30 – August 3, 2007.
 69. Tomosynthesis. Invited lecturer for the 2nd Annual Breast Imaging Review Course. Lexington, KY. October 5-6, 2007.

70. Tomosynthesis. Breast MRI: the basics. Breast interventional procedures. Advances in breast ultrasound. & Mammographic/pathologic correlation – benign breast lesions. Invited lecturer for the 19th Annual Conference on Mammography: Interpretation and Technique. Long Island, NY. October 13, 2007.
71. Tomosynthesis. Invited lecturer for Breast Cancer Awareness Month. Duke Medical Center. Durham, NC. October 19, 2007.
72. Tomosynthesis. & Case conference. Invited lecturer for the Digital Mammography Saturday Seminars at the Ellen Shaw de Paredes Institute for Women's Imaging. Glen Allen, VA. January 26, 2008.
73. Ultrasound, MRI and interventions of the breast. Invited lecturer for the Duke Radiology Review Course. Research Triangle Park, NC. April 13-18, 2008.
74. Breast sonography, core biopsies, implants and MRI. Invited lecturer for the Duke Radiology Summer Post-Grad Course. Myrtle Beach, SC. July 28 – August 1, 2008.
75. Breast tomosynthesis. Invited lecturer for the Radiology Department Grand Rounds at SUNY Downstate. Brooklyn, NY. October 21, 2008.
76. Tomosynthesis. Invited lecturer for Updates in Imaging (Medical Alumni Weekend 2008). Duke Medical Center. Durham, NC. October 25, 2008.
77. Stress reduction in mammography. Invited lecturer for the Radiology Department Mammography Technologist CEU Accreditation Program. Duke Medical Center. Durham, NC. January 7 & 12, 2009.
78. Breast MRI cases. MRI Q/A. Imaging implants. Advanced techniques in ultrasound-compound, THI, elastography. Breast MRI interventional techniques. Rad/path correlation. Interventional Q/A. New biopsy devices. Tomosynthesis. New techniques Q/A. New biopsy devices. MRI Q/A. & Imaging implants. Mammograms to MRI: Breast Imaging and Interventions. Westin Buckhead, Atlanta, GA. March 20-22, 2009.
79. Breast sonography, implants, MRI & interventional. Invited lecturer for the Duke Radiology Review Course. Research Triangle Park, NC. April 18-24, 2009.
80. Update on implants. Faculty lecturer for the Society of Breast Imaging Post-Graduate Course. Colorado Springs, CO. April 24-30, 2009.
81. Breast MRI cases. MRI Q/A. Imaging implants. Advanced techniques in ultrasound-compound, THI, elastography. Breast MRI interventional techniques. Rad/path correlation. Interventional Q/A. New biopsy devices. Tomosynthesis. New techniques Q/A. New biopsy devices. MRI Q/A. & Imaging implants. Mammograms to MRI: Breast Imaging and Interventions. Kiawah Island, SC. June 15-18, 2009.

82. Update on implants. Invited lecturer for the Duke Radiology Summer Post-Grad Course. Myrtle Beach, SC. July 29 - August 2, 2009.
83. Breast tomosynthesis, CAD and teleradiology. & Case conference. Invited lecturer for the Digital Mammography Saturday Seminar at the Ellen Shaw de Parades Institute for Women's Imaging. Glen Allen, VA. September 12, 2009.
84. Viewing breast cancer from the body, mind and spirit: empowering patients to heal in 2009. Invited lecturer for National Mammography Day 2009. Duke University Medical Center. October 16, 2009.
85. Managing stress: a timeless approach. Invited lecturer for the Duke Home Care and Hospice Volunteer Workshop. October 24, 2009.
86. Communicating with patients about breast cancer. Radiology Resident Conference. Duke University Medical Center. October 28, 2009.
87. Breast cancer 2009: a scientific review from the body, mind and spirit perspective. Invited lecturer for the Radiologic Technologist Lecture Week Series. Duke University Medical Center. November 12, 2009.
88. Breast sonography, implants, MRI & interventional. Invited lecturer for the Duke Radiology Review Course. Research Triangle Park, NC. April 10-16, 2010.
89. Tomosynthesis. & Case conference. Invited lecturer for the Digital Mammography Breast Imaging Seminar Series at the Ellen Shaw de Paredes Institute for Women's Imaging. Glen Allen, VA. April 17, 2010.
90. MRI-guided biopsy procedures. Breast MRI cases. MRI Q/A. Update on implants. Handling stress in mammography: a timeless approach to patient care. Talking with patients: fear, denial and acceptance. Tomosynthesis. New techniques Q/A. Update on imaging guided percutaneous breast biopsy. After the biopsy: imaging-histologic review. & Interventional Q/A. Mammograms to MRI: Breast Imaging and Interventions 2010. Kiawah Island, SC. June 13-16, 2010.
91. Update on implants. Radiology Summer Post-Grad Course. Myrtle Beach, SC. July 26-30, 2010
92. Update on implant evaluation. BIRADS for ultrasound. Communicating results to patients. Tomosynthesis. & MRI unknown cases. 23rd Annual Update in Breast Imaging at the Ellen Shaw de Paredes Foundation. Williamsburg, VA. September 30 October 3, 2010.
93. Breast sonography, implants, MRI & interventional". Invited lecturer for the Duke Radiology Review Course. Research Triangle Park, NC. April 9-15, 2011.

94. Stereo and ultrasound biopsies: tricks of the trade. Breast MRI cases. Breast implants: they're baaaack. How to talk to patients: a panel discussion on what we say and how we say it. After the biopsy: do the results make sense. & Improving patient care and your practice: feeling at ease talking with patients. Mammograms to MRI: Breast Imaging and Interventions 2011. Kiawah Island, SC. June 19-22, 2011.
95. Breast biopsy devices. & Unknown cases in breast imaging. Invited lecturer for the breast Interventional Procedures Seminar Series at the Ellen Shaw de Paredes Institute for Women's Imaging. Glen Allen, VA. July 23, 2011.
96. Breast MRI – challenging cases. Radiology Summer Post-Grad Course. Myrtle Beach, SC. July 25-29, 2011.
97. Update on implants. MRI unknown cases. Communicating with patients in breast imaging. & Tomosynthesis. Invited lecturer for the 24th Annual Update in Breast Imaging. Williamsburg, VA. September 22-23, 2011.
98. Factors relating to patient anxiety in the imaging-guided breast biopsy setting. Invited lecturer for the Department of Radiology Continuing Education Conference. Duke Medical Center. January 10, 2012 & January 17, 2012.
99. Spirituality, religiosity, gratitude and spiritual needs in patients undergoing imaging-guided core needle breast biopsy: impact on patient anxiety and physiological distress. Center for Spirituality, Theology and Health Research Seminar. Duke University Medical Center. February 22, 2012.

ORGANIZATIONS & PARTICIPATION:

1984 -- 1985	American Medical Women's Association
1987 -- Present	American Roentgen Ray Society
1987 -- Present	Radiological Society of North America
1987 -- 1991	Pittsburgh Roentgen Society
1988 -- 1989	Secretary-Treasurer, Resident Section, Pittsburgh Roentgen Society
1987 -- 1990	American Medical Association
1989 -- 1995	American Physicians Art Association
1992 -- 1994	American Society of Neuroradiology, Junior Member

10/7/93	Panelist for the American Cancer Society Breast Cancer Symposium (Durham, NC)
1993 -- Present	Society of Breast Imaging
1995 -- 2009	Advisory Committees for Biomedical Engineering Ph.D. Candidates
1993 -- Present	Member, American College of Radiology
1993 -- Present	Member, North Carolina Chapter, American College of Radiology
1998 -- 2006	Member, American Institute of Ultrasound in Medicine
1998 -- 2006	Peer Reviewer, Manuscripts for <u>American Journal of Roentgenology</u>
1998 -- 2006	Film Reviewer, Mammographic Accreditation for American College of Radiology
6/98 -- 10/98	Consultant for FDA, Reviewing 350 MRI images for breast implant rupture
3/00	Peer Reviewer, Manuscripts for <u>Southern Medical Journal</u>
8/00 -- 2002	Radiology Advisory Consultant for Naples Community Hospital
2000 -- Present	Cancer Prevention, Detection & Control Research Committee
4/01 -- Present	Fellow, Society of Breast Imaging
8/01 -- 2003	Oncology Clinical Services Unit Executive Committee of Surgeons
11/30/01	Presiding Officer of the Scientific Session -- "Breast Ultrasound", 87 th Scientific Assembly and Annual Meeting of the Radiological Society of North America
10/28/02 -- 10/29/02	Program Director, "Problem Solving and Procedures in Breast Imaging" (Duke Breast Imaging Course)
10/20/03 -- 10/21/03	Principle Investigator for, ACRIN 6666 Protocol Meeting in Arlington, Virginia
5/6/04	Moderator for Scientific Session, "Breast: Diagnostic

	MRI’ – 2004 American Roentgen Ray Society Meeting In Miami Beach, FL (5/2/04 - 5/7/04)
7/96 -- 9/99	Ad Hoc Committee on Academic Time
9/98 -- 9/99	Breast Ultrasound Scientific Abstract Review Committee, AIUM for 1999 Meeting, San Antonio, TX
9/08	Facilitator Training for Attitudinal Healing Support Groups
10/08 – Present	Facilitator, Monthly Attitudinal Healing Support Group
8/08 -- 7/2010	Duke Hospice Volunteer
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6/09	Ordained, Interfaith Minister, All Faiths Seminary International, New York City, NY
4/10 – 12/10	Co-facilitator, Body Mind Skills Group Program for Breast cancer survivors, CAARE, Durham, NC
5/15/11 - Present	Fellow, American College of Radiology
5/18/11	Faculty Panel Member, Q& A Round Table with the Experts on Imaging Challenges, Society of Breast Imaging Annual Meeting, San Antonio, TX (5/18/11 – 5/21/11)
8/22/11 – 12/9/11	Chaplain Intern, Pastoral Care Services
2/20/2012 – Present	Faculty Scholar, Center for Spirituality, Theology & Health. Duke University Medical Center.
COMMITTEES:	
9/99	Breast Ultrasound Scientific Abstract Review Committee, AIUM for 2000 Meeting, San Francisco, CA
1999	Physicians Executive Leadership Program (PELP) Advisory Committee
1999	Women’s Services Business Development Steering Comm.
2000	Mammography Quality Action Team
2003	American College of Radiology Subcommittee on Clinical Image Review (Committee on Mammography Accreditation)

2004

Duke Oncology Clinical Services Unit Executive
Committee of Surgeons

1/19/2012 – Present

Pastoral Services Advisory Council Member
Duke University Medical Center