

## COLLEGE OF MEDICINE CURRICULUM VITAE

Laurie L. Fajardo, M.D.

May 13, 2010

### I. EDUCATIONAL AND PROFESSIONAL HISTORY

#### A. List of institutions attended (least to most recent)

**Nursing Education:** R.N. Diploma, 1976, Lutheran Hospital School of Nursing, St. Louis, MO  
**Undergraduate:** A.B. 1980, Washington University, St. Louis, Missouri  
**Medical School:** M.D. 1984, University of Chicago, Pritzker School of Medicine, Chicago, Illinois  
**Graduate Studies:** M.B.A. 2005, Johns Hopkins University, Baltimore, MD

#### POSTGRADUATE EDUCATION

**Internship:** University of Illinois, Affiliated Hospitals, Rotating Internship, 1984 - 1985  
**Residency:** University of Arizona, Tucson, Arizona, Diagnostic Radiology, 1985 - 1990  
**Fellowship:** University of Arizona, Tucson, Arizona, Research Fellowship, 1987 - 1988

#### Post-Residency Education:

- MPA Program (12 credit hours; G.P.A. 4.0), University of Arizona, 1990-1992
- Clinical Trials Methodology Course, University of Virginia, Fall 1996
- Statistical Thinking in Biomedical Research, University of Virginia, 1997
- University of Virginia Health Sciences Center *Leadership Program*, Darden Graduate School, Business Administration (1 year certificate program) 1998
- Johns Hopkins University, *The Science of Clinical Investigation*, Johns Hopkins School of Public Hygiene and Medicine (1 year certificate program), 1999-2000
- Johns Hopkins University, *The Business of Medicine Program*, 1999-2001
  - (1999) Accounting for Decision-Making in Medicine
  - (1999) Managed Care: Perspectives and Practices
  - (2000) Financial Management for Medical Sciences
  - (2000) Medical Economics I
  - (2000) Leadership and Organizational Behavior in Medical Settings
  - (2000) Medical Economics II
  - (2001) Clinical Practice Improvement
  - (2001) Medical Informatics
  - (2001) The Evolving System of Health Care Delivery
  - (2001) Legal Issues in Medicine
  - (2002) Finance for Medical Services II
  - (2002) Negotiation
  - (2004) Capstone
- Business and Management Issues in Radiology: A Course for Current and Future Leaders in the Field, Feb. 8-10, 2002, Phoenix, AZ

- Harvard School of Public Health, Department of Health Policy and Management and Center for Continuing Professional Education
  - *Advanced Leadership Strategies for Health Care Executives – Meeting the Challenges* (Oct. 27-Nov. 1, 2002)
  - *Program for Chiefs of Clinical Services* (Jan. 19-31, 2003)
- University of Iowa, Tippie School of Management, MBA Program – *Marketing Management* (Fall 2003)
- UIHC Institutional Leadership Development Program - Fall 2003
- AAMC Executive Development Seminar for Associate Deans and Department Chairs (Oct. 10-15, 2003)
- Iowa City Area Chamber of Commerce Community Leadership Program (2006-2007)
- Certificate of Director Education, NACD Corporate Directors Institute (2007)

**Board Certification:** National Board of Medical Examiners, 1985  
American Board of Radiology 1989

**Licensure:** Iowa Board of Medical Examiners – No. 34654, Expires October 1, 2009  
State of Maryland Department of Health and Mental Hygiene – No. D0054079, Expires September 30, 2008  
Missouri State Board of Registration for the Healing Arts – No. R2J87, Expired January 31, 2007  
Arizona Medical Board – No. 15615, Expired October 20, 2009

B. Professional and academic positions held (least to most recent)

**CURRENT ACADEMIC AND PROFESSIONAL APPOINTMENTS**

- Chair, Department of Radiology, University of Iowa Carver College of Medicine, 2002-present
- Professor of Radiology, University of Iowa Carver College of Medicine, 2002-present
- Associate Member, UIHC Holden Comprehensive Cancer Center

**PREVIOUS ACADEMIC AND PROFESSIONAL APPOINTMENTS**

- Professor of Radiology, The Russell H. Morgan Department of Radiology and Radiological Science, Johns Hopkins Medical Institutions, 2000-2002
- Professor of Oncology (secondary appointment), Johns Hopkins Medical Institutions, 2000-2002
- Member, Johns Hopkins Oncology Center, 2000-2002
- Visiting Professor of Radiology, Johns Hopkins Medical Institutions, 1999-2000.
- Vice Chair of Clinical Research, The Russell H. Morgan Department of Radiology and Radiological Science Johns Hopkins Medical Institutions, 1999-2002
- Attending Physician and Head, Division of Breast Imaging and Intervention, The Russell H. Morgan Department of Radiology and Radiological Science, Johns Hopkins Medical Institutions, 1999-2002
- Professor of Health Evaluation Sciences, University of Virginia, 1997-1999
- Professor of Radiology, University of Virginia, 1996-1999
- Associate Scholar, Virginia Center for Health Policy Research, 1995-1999
- Vice Chair of Research, Department of Radiology, University of Virginia, 1994-1999
- Attending Physician, Dept. of Radiology, University of Virginia, Charlottesville, Virginia, 1994 - 1999
- Associate Professor of Radiology, University of Virginia, 1994-1996
- Associate Professor of Radiology, University of Arizona, 1993-1994
- Assistant Professor of Radiology, University of Arizona, 1990-1993
- Head, Division of Mammography and Breast Imaging, University of Arizona, 1990 – 1994

- Director, Tucson Breast Center, Tucson, Arizona, 1990 - 1994
- Physician-Consultant, Tucson Veterans Administration Medical Center, Tucson, Arizona, 1990 - 1994
- Attending Physician, Kino Community Hospital, Tucson, Arizona, 1990 - 1994

C. Honors, Awards, Recognitions, Outstanding Achievements (least to most recent)

**HONORS, AWARDS AND FELLOWSHIPS**

- American Heart Association, Kerr Fish Fellowship in Cardiology, University of Chicago, 1983
- Association of University Radiologists, Memorial Award for Resident Radiology Research, 1987
- American Roentgen Ray Society, Executive Council Award for Resident Radiology Research, 1988
- GE Radiology Research Academic Award, 1992 - 1994
- Golden Saguaro Award for Outstanding Contribution to Resident Education Award, University of Arizona, Department of Radiology, 1994
- Faculty advisor and primary co-author of American Roentgen Ray Society President's Award paper, "Comparison of blinded and retrospective readings on prior mammograms in women who develop nonpalpable breast cancer", with Jennifer A. Harvey, M.D., 1993
- Faculty advisor and primary co-author of American Roentgen Ray Society President's Award paper, "Mammoscintigraphy in the detection of breast cancer: comparison of thallium-201 and technetium-99m with planar and SPECT imaging", with Kelly A. McAleese, M.D., 1995
- Fellow, The Society of Breast Imaging, 1995
- Fellow, American College of Radiology, 1997
- The University of Virginia, Woman of Academic Achievement Award, 1997
- Johns Hopkins School of Medicine Dean's Lectures 2000-2001: "Advances in Imaging and the Diagnosis of Breast Cancer"
- **Above and Beyond the Call of Duty Recognition, University of Iowa Hospitals and Clinics, 2003**
- Best Doctors in America 2005-2006
- Certificate of Honor for 2<sup>nd</sup> place finish in the Women's Imaging Specialist category for the 2006 Medical Imaging Industry Top 10 Awards
- ACRIN Network Chair's Institutional Achievement Award, September 2006
- HealthCare Hero Award in the "Advancement in Health Care" category, Cedar Rapids-Iowa City Corridor Business Journal, February 2007
- Certificate of Honor "Women's Imaging Specialist" 2007 Medical Imaging Industry Top 10 Awards, April 2007
- Best Doctors in America, 2007-2008
- Gold Medal, Association of University Radiologists, 2008

**II. TEACHING**

A. Teaching assignments on semester by semester basis (least to most recent)

**MENTORING AND TRAINEE SUPERVISION:**

UNIVERSITY OF IOWA (2002- )

Medical Students:

1. Laurent Grignon (Summer, 2003)
2. Lina Arbach, 2005-2007
3. Kai Zeng, 2005-2007

Summer Research Training for Medical Students (UIOWA T32 Grant)

CME COURSES TAUGHT (Practicum in Percutaneous Breast Tissue Acquisition):

1. Kaylan Poruri – September 5, 2003
2. Cornell Overbeeke – September 5, 2003
3. Melissa Morris – January 21, 2004
4. William Chase – January 14, 2005
5. Duane Beckenhauer – January 14, 2005
6. Robert Brimmer – July 14, 2006
7. Craig Nasralla – May 23, 2007
8. Binu Philip – May 23, 2007
9. Thomas Hill – November 13, 2007
10. Archana Laroia – August 2008

JOHNS HOPKINS UNIVERSITY (1999-2002)

Junior Faculty Mentored:

1. Harpreet Pannu, M.D., Clinical Instructor of Radiology, Johns Hopkins Medical Institutions
2. Audrey Nolten, M.D., Clinical Instructor of Radiology, Johns Hopkins Medical Institutions
3. Cheryl Herman, M.D., Assistant Professor of Radiology, Co-Director, Breast Imaging, Vanderbilt University Medical Center, 1161 21st Avenue South, CCC-1106 MCN, Nashville, TN 37232-2675

RESEARCH RESIDENTS MENTORED:

1. Jennifer Harvey, M.D.
2. Reed A. Omary, M.D., Assistant Professor of Radiology, Department of Radiology, Univ. of Wisconsin Hospital, 600 Highland Ave. E3/311, Madison, WI 53792, 608-263-0838  
[U VA Research Resident 1995-96]
3. Erik J. Maurer, M.D., Clinical Assistant Professor, Department of Radiology, Box 170, University of Virginia, Charlottesville, VA, 22908. 804-924-9401  
[U VA Research Resident 1996-97]
4. Jennifer Willmann, M.D.

UNIVERSITY OF VIRGINIA (1994-1999)

FACULTY:

1. Barbara Croft, Ph.D., currently with National Cancer Institute, Diagnostic Imaging Program, 6130 Executive Boulevard, EPN-800, Rockville, MD 20852, 301-496-9531
2. Samuel Dwyer, Ph.D., Professor of Radiology, Box 170, University of Virginia, Charlottesville, VA 22908, 804-924-5976
3. Mark B. Williams, Ph.D., Professor of Radiology, Box 170, University of Virginia, Charlottesville, VA 22908, 804-982-4422
4. Hong Liu, Ph.D., Professor – University of Oklahoma, 202 West Boyd, Room 219, Norman, OK 73019
5. Gia A. DeAngelis, M.D., Associate Professor of Radiology, Box 170, University of Virginia, Charlottesville, VA 22908, 804-924-5173
6. Jennifer A. Harvey, M.D., Associate Professor of Radiology, Box 170, University of Virginia, Charlottesville, VA 22908, 804-982-1036

Mammography Fellows Trained

1. Marsha Armstrong, M.D., Columbus Clinic, 610 19th Street, Columbus, GA 31901, [U AZ Fellow, 1993-1994]
2. Cheryl R. Herman, M.D., Co-Director, Breast Imaging, Vanderbilt University Medical Center, 1161 21st Avenue South, CCC-1106 MCN. Nashville, TN 37232-2675 [UVA Fellow 1994-1995]
3. Namrata Hatwal, M.D., Assistant Professor of Radiology, Mt. Sinai Medical Center , 1 Gustave Levy Place, Box 1234, NYC, NY 10029, 212-241-6403, [U VA Fellow 1997-1998]
4. Mary Hamer, M.D., Montgomery Radiology, 2055 Normandie Drive, Suite 108, Montgomery, AL 36111, [U VA Fellow 1996-1997]
5. Beverly A. Dreher, M.D., 200 Medical Center, Suite 106, Webster, TX 77598, 281-338-1684, 281-338-1294 fax (281)-286-6879 home, [U VA Fellow 1995-1996]
6. Audrey Nolten, M.D. [JHU Fellow, 2000-2001]
7. Barbara Blanco, M.D [JHU Fellow, 2000-2001]
8. Laurette Sauter, M.D. [JHU Fellow, 2001-2002]
9. Judy Song, M.D. [JHU Fellow, 2001-2002]
10. Kandace Farmer, M.D. [JHU Fellow, 2001-2002]
11. Kathy Tobin, M.D. [JHU Fellow, 2001]
12. Marie Yanez, M.D. [JHU Fellow, 2001]
13. Edwin H. Kim, M.D. [JHU Fellow, 2002]
14. David Norris, M.D. [JHU Fellow, 2002]
15. Jane Wang, M.D. [UIOWA Visiting Professor, 2003]
16. Ann Schreiber, M.D. [UIOWA Fellow, 2004-2005]
17. Megha Garg, M.D. [UIOWA Fellow, 2005]
18. Baron Adkins, D.O. [UIOWA Fellow, 2007]
19. Maheen Rajput, M.D. [UIOWA Fellow, 2006-2007]

### III. SCHOLARSHIP

#### A. Publications or creative works (least to most recent)

#### ***PEER-REVIEWER FOR EXTRAMURAL GRANT FUNDING AGENCIES:***

##### USAMRDC - Army Breast Cancer Research Program

- Scientific Study Section (Career Awards), Member 1998
- Concept Award Programmatic Review; FY03 Innovator Nominations and Pre-Proposal Screening, Fairfax, VA, Apr. 30-May1, 2003.
- BCRP Programmatic Review and Planning, IP Panel, Nov. 10-11, 2003.
- Reviewer, Breast Cancer Research Program (BCRP), 2008

##### SUSAN G. KOMEN Breast Cancer Foundation:

- Scientific Study Section, Grant Reviewer, 1999
- Scientific Study Section, Chair, Jan. 2008
- Reviewer, Komen's Investigator Initiated Research and Career Catalyst Research, 2008

##### NIH/NCI GRANT REVIEWER:

- Ad Hoc Radiological Imaging Study Section, NIH, October 14-15, 1992
- Special Study Section SSSX-23 - NCI, December 16, 1993
- Multidisciplinary Special Emphasis Panel, Study Section ZRG7 555-X, July 28-29, 1993
- Special Study Section SSSX-41 - NCI, October 2 - 4, 1994
- Special Study Section SSSX-33 - NCI, May 31 - June 2, 1994
- Site Visit Reviewer - NCI, Program Project Grants, 1995
- Outside Grant Reviewer: NIH/NCI, Diagnostic Radiology Study Section, June 1995
- Diagnostic Radiology Study Section; Member 1998-2002
- Diagnostic Radiology Study Section, Chair 2001-2002
- Diagnostic Imaging Special Emphasis Panel, ZRG7-DMG(1) - Feb 2 - 9, 1996
- Special Emphasis Panel: NIH/NCI, June 27, 2007
- In Vivo Cellular and Molecular Imaging Centers (ICMIC), Grant Review Study Section, Nov 15-16, 2007

##### REGIONAL/STATE:

- Advisory Committee to the State of Arizona - Medicare (AETNA) on Approval of Mammography Centers for Medicare Funding of Screening Mammography, 1990-1992
- State of Arizona Mammography Regulation Advisory Committee (Appointed by Jane Dee Hull, Speaker of the House), 1992-1993
- Arizona Association of Chicanos for Higher Education, 1990-1994
- State of Arizona Mammography Study Committee. Advisory Committee to Senator Nancy Hill (Appointed By Governor Symington), 1991-1994
- Professional Education Committee, American Cancer Society, Arizona Chapter, 1990-1994
- State of California Breast Cancer Research Program, Cycle VII, 2001
- RSNA Site Visit: Mayo Clinic, Rochester, NY, Sept. 8-10, 2004
- DMIST Case Review Reader Study: Raleigh, NC, July 20-22, 2006
- Member, Imaging Advisory Committee, Wellmark Blue Cross Blue Shield, 2007

#### **SCIENTIFIC PUBLICATIONS**

1. **Fajardo LL**, Hillman BJ, Capp MP. Clinical experience with the Toshiba computed radiography system, Model 201. Toshiba Medical Review, 1986; 17: 1-9. Reprinted - Products and Technology Abroad.
2. **Fajardo LL**, Mockbee B, Pitt MJ. Applications of computed (digital) radiography to the musculoskeletal system. Syllabus - American College of Radiology Categorical Course on Diagnostic Techniques of the Musculoskeletal System, 1986;495-501.
3. **Fajardo LL**, Hillman BJ, Hunter TB, Claypool HR, Westerman BR, Mockbee B. Excretory urography using a computed radiography system. Radiology, 1987; 162:345-351.
4. Hillman BJ, **Fajardo LL**, Hunter TB, et al. Mammogram interpretation by physicians assistants. AJR, 1987; 149: 907-911.
5. **Fajardo LL**, Hillman BJ, Hunter TB, Bjelland JC. The impact of focused instruction on learning mammography. Invest Radiol, 1987; 22: 990-993.
6. McNeill KM, **Fajardo LL**, Hunter TB. Design and evaluation of digital image workstations. Applied Radiol, 1987; 16(4): 31-39. Reprinted - Journal of the Canadian Association of Medical Radiation Technologists.
7. Hunter TB, **Fajardo LL**. Outline of radiographic contrast agents. Applied Radiol, 1987; 16(11): 137-158.
8. **Fajardo LL**, Yoshino MT, Chernin MC. Squamous cell carcinoma of the pancreas: Diagnosis by percutaneous needle biopsy. Journal of Computed Tomography, 1988;12(2):138.
9. **Fajardo LL**, Standen JR. Radiologic appearance of the Jarvik artificial heart implant and its thoracic complications. AJR, 1988; 151: 667-671.
10. **Fajardo LL**, Hillman BJ. Image quality, diagnostic certainty, and accuracy: Comparison of conventional and digital urograms. Urol Radiol, 1988; 10(3):21-23.
11. **Fajardo LL**, Hillman BJ, Frey C. Correlation between breast parenchymal patterns and mammographers' certainty of diagnosis. Invest Radiol, 1988; 23:505-508.
12. McNeill KM, Seeley GW, Maloney K, **Fajardo LL**, Kozik M. Comparison of digital workstations and conventional reading for evaluation of user interfaces in digital radiology. SPIE Proceedings, 1988; 914(II):872-876.
13. McNeill KM, Seeley GW, Maloney K, **Fajardo LL**, Kozik M. Comparison of a digital workstation and a film alternator. SPIE Proceedings, 1988; 914(II):929-932.
14. **Fajardo LL**, Hillman BJ, Pond GD, et al. Detection of pneumothorax: Comparison of digital and conventional chest imaging. AJR 1989; 152:475-480.
15. Strautman PP, **Fajardo LL**, Hillman BJ, et al. Evaluation of computed excretory urography for contrast dose reduction. European Journal of Radiology, 1989; 9:60-63.
16. Seeley GW, **Fajardo LL**, Ker M, et al. Evaluation of the Dupont Teleradiology System. SPIE Proceedings, 1989;1093:106-107.
17. Hillman BJ, **Fajardo LL**. Scientific assessment of the clinical utility of phosphor plate computed radiography. Medical Imaging III: Image Capture and Display. Schneider RH, Dwyer SJ III, Jost RG, Eds. Bellingham, WA: SPIE Proceedings, 1989;916:245-251.
18. Elam EA, Hunter TB, Hunt KR, **Fajardo LL**. The lack of sonographic image degradation after barium upper gastrointestinal examination. AJR, 1989;153:993-994.
19. **Fajardo LL**, Unger E. Liposomal Gd-DTPA contrast agents for magnetic resonance imaging. Proceedings: 1989 Seminar in Cardiac Technology: Magnetic Resonance Imaging in Cardiology, 1989; pp. 16-23.
20. Hillman BJ, **Fajardo LL**, Witzke DB, et al. Factors influencing the success of academic radiologists in publishing research. Invest Radiol, 1989; 24: 849-854.

21. Hillman BJ, **Fajardo LL**. Clinical assessment of phosphor plate computed radiography: Equipment, strategy and methods. J of Digital Imaging, 1989; 2(4): 220-227.
22. Hillman BJ, **Fajardo LL**, Witzke DB, et al. Factors influencing radiologists to choose research careers. Invest Radiol, 1989; 24:842-848.
23. Tilcock C, Unger E, **Fajardo LL**, Cardenas D. The effect of lipid composition on the relativity of Gd-DTPA entrapped in lipid vesicles of defined size. Biochemica Biophysica Acta, 1990; 1022: 181-186.
24. Hillman BJ, **Fajardo LL**, Witzke DB, et al. Influences affecting radiologists' choices to enter academic or private practice careers. Radiology, 1990;174:561-564.
25. Hunter TB, **Fajardo LL**, Jarvis JL. Altered gastric and duodenal motility in intestinal obstruction. Gastrointestinal Radiol, 1990;15:193-196.
26. **Fajardo LL**. Association of spontaneous pneumomediastinum with substance abuse. Report of four cases and radiographic findings. Western J of Med, 1990;152:301-304.
27. **Fajardo LL**, Hillman BJ, Donovan JM, Weber C, Drach WG. Microvascular changes in rabbit kidneys following extracorporeal shock wave treatment. Invest Radiol, 1990; 25: 664-669.
28. Unger E, Cardenas D, Zerella A, **Fajardo LL**, Tilcock C. Biodistribution and clearance of liposomal Gadolinium DTPA. Invest Radiol, 1990; 25:638-644.
29. Hillman BJ, Witzke DB, **Fajardo LL**, Fulginiti JV. Research and research training in academic radiology departments: A survey of department chairmen. Invest Radiol, 1990; 25:587-590.
30. **Fajardo LL**, Yoshino MT, Seeley GW, Hunt KR, Hunter TB. Detection of mammographic abnormalities on teleradiology transmitted images. Invest Radiol, 1990; 25:1111-1115.
31. **Fajardo LL**, Westerman BR. Choosing mammography equipment: Technical requirements and practical considerations for the radiologist. Applied Radiol, 1990; 19(5):12-15.
32. **Fajardo LL**, Davis JR. Mammography-guided fine needle aspiration cytology of nonpalpable breast lesions: Prospective comparison with surgical biopsy results. AJR, 1990; 155: 977-981.
33. Sacks EM, **Fajardo LL**, Hillman BJ, et al. Prospective comparison of plain abdominal radiography with conventional and digital renal tomography in assessing renal ESWL patients. J Urol, 1990; 144:1341-1346.
34. Hunter TB, **Fajardo LL**, Hunt KR, Boren WL, Bjelland JC. Comprehensive breast cancer detection in an academic environment. Invest Radiol, 1991; 26:598-603.
35. **Fajardo LL**, David JR. Fine-needle aspiration breast biopsy using stereotactic mammography. In: Breast Diseases: A Year Book Quarterly, Gerald M. Dodd (ed). Mosby Year Book, Chicago, IL, June 1991.
36. Elam EA, Rhem K, **Fajardo LL**, Maloney K, McKneil K. Efficacy of digital radiography for the detection of pneumothorax: Comparison with conventional chest radiography. AJR, 1992; 158: 509-514.
37. **Fajardo LL**, Jackson VP, Hunter TB. Interventional procedures in diseases of the breast: needle biopsy, pneumocystography, and galactography. AJR, 1992; 158:1231-1238.
38. **Fajardo LL**, Saint-Germain M, Meakem TJ, Rose C. Factors influencing women to undergo screening mammography. Radiology 1992;184: 59-63.
39. Yoshino MT, Carmody R, **Fajardo LL**, Seeger FJ, Jones K. Diagnostic performance of teleradiology in cervical spine fracture detection. Invest Radiol, 1992; 27:55-59.
40. Roberts CL, **Fajardo LL**, Hunter TB, Hunt KR. Fibroadenomas in postmenopausal women. Clinical Research 1992; 40(1):1-4.

41. **Fajardo LL**, Bessen SC. Epidermal inclusion cyst after reduction mammoplasty: mammographic appearance and diagnosis by stereotaxic needle biopsy. Radiology 1993;186:103-106.
42. **Fajardo LL**, Roberts CC, Hunt KR. Mammographic surveillance of breast cancer patients: Lack of benefit in imaging the post-mastectomy site. AJR 1993;161:953-955.
43. **Fajardo LL**, Chan KM. Evaluation of medical students in radiology: Written testing using uncued multiple choice questions. Invest Radiol 1993; 28: 964-968.
44. Harvey JA, **Fajardo LL**, Innis CA. Comparison of blinded and retrospective readings on prior mammograms in women who develop nonpalpable breast carcinoma. AJR 1993; 161:1167-1172.  
\*1993 President's Award - The American Roentgen Ray Society.
45. Roberts CL, **Fajardo LL**. Mammographic imaging of women following mastectomy. Clinical Research 1993; 41(2):21-22.
46. Friedman DL, Hunter TB, Hunt KH, **Fajardo LL**. Sonographic image degradation after barium enema. Invest Radiol 1993; 28:295-296.
47. Logan CM, **Fajardo LL**. A better test: Bringing digital imaging to mammography. Science News 1993;143:392-393.
48. Logan CM, Hernandez JM, Masciol, Boroff R, **Fajardo LL**. Digitally enhanced mammography. Biology and Biotechnology - LLNL Research and Development 1993; (1):160-161.
49. Roehrig H, **Fajardo LL**. Digital x-ray camera for real-time stereotactic needle localization. SPIE Proceedings 1993;1896:213-224.
50. Roehrig H, **Fajardo LL**, Tong Y. Performance of x-ray imaging systems with optical coupling for demagnification between scintillator and CCD read-out. SPIE Proceedings 1994;2279:160-168.
51. Roehrig H, **Fajardo LL**, Tong Y, Schemp WV. Signal, noise and detective quantum efficiency in CCD based x-ray imaging systems for use in mammography. SPIE Proceedings 1994;2163:320-329.
52. Sarfati MR, Fox KA, Warneke JA, **Fajardo LL**, Hunter GC, Rappaport WD. Stereotactic fine-needle aspiration cytology of non-palpable breast lesions: An analysis of 258 consecutive aspirates. American Journal of Surgery 1994;168:529-532.
53. **Fajardo LL**, Harvey J, McAleese K, Roberts CC, Granstrom P. Breast cancer diagnosis in women with subglandular silicone-filled augmentation implants. Radiology 1995;194:859-862.
54. Bassett LW, Hendrick RE, Bassford TL, Butler P, Carter D, et al. High-quality mammography: Information for referring providers. Mammography Today: The Journal of Breast Imaging 1995; 1(5):81-84.
55. **Fajardo LL**, Feig SA, Shtern F. Mammography in clinical practice. Internal Medicine 1995; 16(8):36-44.
56. Williams MB, **Fajardo LL**. Digital mammography. Mammography Today: The Journal of Breast Imaging 1995;1(6):216-220.
57. Bassett LW, Hendrick RE, Bassford TL, Butler P, Carter D, et al. High-quality mammography: Information for referring providers (Part 2). Mammography Today: The Journal of Breast Imaging 1995;1(6):121-126.
58. **Fajardo LL**. Imaging of the breast. Academic Radiology 1995;2:S152-154.
59. Brenner RJ, **Fajardo LL**, Fisher PR, Dershaw DP, Evans WP, et al. Percutaneous core biopsy of the breast: Effect of operator experience and number of samples on diagnostic accuracy. AJR 1996;166:341-346.
60. Williams MB, **Fajardo LL**. Digital mammography: Performance considerations and current detector designs. Academic Radiology 1996;3:429-437.

61. Hillner BE, Bear HD, **Fajardo LL**. Estimating the cost-effectiveness of stereotactic biopsy for nonpalpable breast abnormalities: A decision analysis model. Academic Radiology 1996;3:351-360.
62. **Fajardo LL**. Cost-effectiveness of stereotaxic breast core needle biopsy. Academic Radiology 1996;3(1):S21-S23.
63. Hunter TB, Roberts CC, Hunt KR, **Fajardo LL**. Occurrence of fibroadenomas in postmenopausal women referred for breast biopsy. Journal of the American Geriatrics Society 1996;44(1):61-64.
64. Liu H, **Fajardo LL**, Baxter R. A theoretical model for contrast-detail detectability prediction in digital radiography. SPIE Proceedings 1996; 2676:116-121.
65. Liu H, **Fajardo LL**, Penny B. Signal-to-noise ratio, noise power spectrum and detective quantum efficiency analysis of optically coupled CCD mammography imaging systems. Academic Radiology 1996; 3:799-805.
66. Visweswaran A, Liu H, **Fajardo LL**, DeAngelis GA. Technical report: comparison of contrast detail curves of full field of view digital and screen film breast images. Frontiers in Bioscience (<http://www.bioscience.org>)1996; 1(b): 5-7.
67. **Fajardo LL**, Williams MB. The clinical potential of digital mammography. Proc. 3rd Int. Workshop on Digital Mammography. 1996; 43-53.
68. **Fajardo LL**, Parker SH. Complete removal of breast microcalcifications during stereotaxic biopsy. AJR 1996;167:529-530.
69. Liu H, **Fajardo LL**, Baxter R, McAdoo J, Halama G, Jalink A. Full-size high spatial resolution digital mammography using CCD scanning technique. Proc. 3rd Int. Workshop on Digital Mammography 1996;145-150.
70. **Fajardo LL**. New detectors boost mammographic accuracy. Diagnostic Imaging (Suppl) Nov. 1996; pD7-D9 .
71. Adams CN, Aiyer A, Cosman PC, Williams MB, **Fajardo LL**, Birdwell R, Daniel BL, Olshen RA, Gray RM. Evaluating quality and utility of digital mammograms and lossy compressed digital mammograms. Proc. 3rd Int. Workshop on Digital Mammography 1996;169-176.
72. Williams MB, **Fajardo LL**, Otto GP, Tran JM. Evaluation of a Prototype Detector for full breast digital mammography with CCDs and modified Schmidt camera optics. RSNA Electronic Journal 1; 1996 (<http://ej.rsna.org/EJ-0-96/0020-96.fin/abst.htm>).
73. Xie J, Williams MB, Stanton M, Rosen R, **Fajardo LL**. Application of x-ray crystallographic detector to whole breast digital mammography. Proc. 3rd Int. Workshop on Digital Mammography 1996;139-144.
74. Handy RB, **Fajardo LL**, Innis CA, Witzke DB, Hunter TB. Patient perceptions of stereotaxic large core breast biopsy. Academic Radiology 1996; 3:1007-1011.
75. DeAngelis GA, Dempsey B, Berr S, **Fajardo LL**, Sublett J, et al. Diagnostic efficacy of compressed digitized real-time sonography of uterine fibroids. Academic Radiology 1997; 4: 83-89.
76. Liu H, **Fajardo LL**, Barrett JR, Williams MB, Baxter RA. Contrast-detail detectability analysis: Comparison of a digital spot mammography system and an analog screen-film mammography system. Academic Radiology 1997;4:197-203.
77. Bassett LW, Winchester DP, Dershaw DD, **Fajardo LL**, Morrow M, Singletary SE, et al. Stereotactic core-needle biopsy of the breast: A report of the joint task force of the American College of Radiology, American College of Surgeons and College of American Pathologists. Cancer 1997;47:171-190.
78. Perlmutter SM, Cosman PC, Gray RM, Olshen RA, Ikeda D, Adams CN, Betts BJ, Williams MB, Perlmutter J, **Fajardo LL**, Birdwell R, Daniel BL. Image quality in lossy compressed digital mammograms. Signal Processing 1997;59(2):189-210.

79. **Fajardo LL**, Williams MB. The clinical potential of digital mammography. Advance for Administrators in Radiology and Radiation Oncology 1997;7(4):24-38.
80. Moore M, Hargett CW, Hanks JB, **Fajardo LL** et al. Association of breast cancer with the finding of atypical ductal hyperplasia at core breast biopsy. Annals of Surgery 1997; 225:726-731.
81. **Fajardo LL**, DeAngelis GA. The role of imaging guided core breast biopsy in the evaluation of mammographically detected abnormalities. In: Management of Mammographically Detected Breast Cancer. B. Cady, Ed. Surgical Oncology Clinics of North America 1997;6(2):285-299.
82. **Fajardo LL**, Bird RE, Herman CR, DeAngelis GA. Marking the location of breast lesions removed during stereotaxic core biopsy using embolization coils. Radiology 1998;206:275-278.
83. Williams MB, Pisano ED, Schnall MD, **Fajardo LL**. Future directions in imaging of breast diseases. Radiology 1998;206:297-300.
84. Pisano ED, **Fajardo LL**, Tsimikas J, Sneige N, Frable WJ, et al. Rate of insufficient samples for fine needle aspiration for nonpalpable breast lesions in a multicenter clinical trial: The Radiologic Diagnostic Oncology Group 5 Study. Cancer 1998;82:679-688.
85. **Fajardo LL**. The future of breast imaging. Emergency Medicine 1998;30(7):52-58.
86. DeAngelis GA, **Fajardo LL**, Harvey JA, Hatwell N, Moran RE. Percutaneous breast biopsy Breast Diseases 1998;10(3,4):67-81.
87. Hillman BJ, Nash KD, Witzke DB, **Fajardo LL**, Davis D. The RSNA-AUR-ARRS introduction to research program for second year radiology residents: impact on career choice and early academic performance. Radiology 1998;209(2):323-326.
88. Liu H, Wang G., Xu F, **Fajardo LL**. Adaptive interpolation for digital mammography systems using multiple detectors. Applied Optics 1999;38(1):253-257.
89. **Fajardo LL**. Measuring and incorporating patient preferences and utilities in the assessment of diagnostic technology. Academic Radiology 1999;6(suppl):S113-S114.
90. Liu H, Xu F, **Fajardo LL**. Optical processing architecture for analog and digital radiography. : Medical Physics 1999;26(4):648-652.
91. Hong Liu, Wang G, Chen J, **Fajardo LL**. Interpolation algorithms for digital mammography systems using multiple detectors. Academic Radiology 1999;6:170-175.
92. Shi M, Liu H, Tao G, **Fajardo LL**. Stereo fluoroscopic image-guided robotic biopsy system. SPIE Proceedings 1999;3595:193-200.
93. Jiang H, Liu H, Chen WR, **Fajardo LL**. Positional accuracy and sensitivity in x-ray stereo-image guidance. SPIE Proceedings 1999;3595:178-185.
94. Jung W, Liu H, **Fajardo LL**. Contrast detail detectability of a full field digital mammography system. SPIE Proceedings 1999;3595:186-192.
95. Jiang H, Liu H, Wang G, **Fajardo LL**. A Localization algorithm and error analysis in x-ray stereo image guidance. Medical Physics 2000;27(5):885-893.
96. Liu H, Jiang H, Chen W, **Fajardo LL**. Lens distortion in optically coupled digital x-ray imaging. Medical Physics 2000;27(5):906-912.
97. **Fajardo LL**, Seltzer SE. Academic radiology in the new millenium. Academic Radiology 2000;7:1-2.
98. Pisano ED, Cole EB, Major S, Zong S, Hemminger BM, et al. Radiologists' preferences for digital mammography display: The international digital mammography development group. Radiology 2000;216(3):820-830.
99. Pisano ED, Cole EB, Hemminger BM, Yaffe MJ, Johnston RE, et al. Image processing algorithms for digital mammography: A pictorial essay. RadioGraphics 2000;20:1479-1491.
100. DeAngelis GA, Moran RE, **Fajardo LL**, Mugler JP, Christopher JM, et al. MRI-guided needle localization: technique. Seminars in Ultrasound, CT, and MRI 2000;21(5):337-350.

101. Deans A, Liu H, Jung W, Li D, Song X, Fajardo LL. Digital fluorescence technique for biomedical applications. *AIPR* 2000: 158.
102. Brenner RJ, Bassett LW, **Fajardo LL**, Dershaw DD, Evans WP, et al. Stereotactic core needle breast biopsy: A multi-institutional prospective trial. *Radiology* 2001;218(3):866-972.
103. Pisano ED, **Fajardo LL**, Caudry D, Sniege N, Frable WJ, et al. Fine needle aspiration of nonpalpable breast lesions in a multicenter clinical trial: Results from the Radiologic Diagnostic Oncology Group V. *Radiology* 2001;219:785-792.
104. Liu H, Jiang H, Fajardo LL, Karellas A, Chen WR. Characteristics of lens distortion and methods to correct geometrical distortion caused by lenses in optically coupled digital x-ray imaging. *Medical Physics*, 2001: 28(6);1139-1140.
105. **Fajardo LL**, Seltzer SE, Dunnick NR. Academic Radiology: The *real* good news. *Academic Radiology* 2001;8:512-513.
106. Jiang H, Xu Y, Iftimia H, Eggert J, **Fajardo LL**, Baron L, Klove K. Three-dimensional optical tomographic imaging of breast in a human subject. *IEEE Transactions on Medical Imaging* 2001;30(12):1334-1340.
107. Jiang H, Iftimia H, Xu Y, Eggert J, **Fajardo LL**, Baron L, Klove K. Near-infrared optical imaging of breast with model-based reconstruction. *Academic Radiology* Feb 2002;9(2):186-194.
108. Herman CA, Gill H, **Fajardo LL**. Screening for pre-clinical disease: Test and disease considerations. *AJR* Oct 2002; 179(4):825-832. \*\* Abstracted for publication in Year Book of Diagnostic Radiology, 2003 Year Book, Elsevier (Mosby, Inc., St. Louis, Mo.).
109. Cole EB, Pisano ED, Kistner EO, Muller KE, 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 MS, 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* 2003;226:153-160.
110. Shah AJ, Wang J, Yamada T, **Fajardo LL**. Digital Mammography: A Review of the Technical Development and Clinical Applications. *Clinical Breast Cancer* Apr 2003;4(1):63-70.
111. Bartlett ES, Maley J, **Fajardo LL**. Radiology Residency “eCurriculum” Program Developed In-House: Evaluation of Benefits and Weaknesses. *Academic Radiology* Jun 2003;10(6):657-663.
112. Xu Y, Gu X, **Fajardo LL**, Jiang H. *In vivo* Breast Imaging With Diffuse Optical Tomography Based on Higher-Order Diffusion Equations. *Feature Issue: Topics in Biomedical Optics, Applied Optics* Jun 2003;42(16):3163-3169.
113. **Fajardo LL**. Screening Mammography, Sonography of Dense Fibrocystic Breast Tissue. *Am J Roentgenol* Dec 2003; 181(6): 1715.
114. Gu X, Zhang Q, Bartlett M, Schutz L, **Fajardo LL**, Jiang H. Differentiation of Cysts from Solid Tumors in the Breast with Diffuse Optical Imaging. *Academic Radiology* Jan 2004; 11(1):53-60.
115. Collins LC, Connolly JL, Page DL, Goulart RA, Pisano ED, **Fajardo LL**, Berg WA, Caudry DJ, McNeil BJ, Schnitt SJ. Diagnostic agreement in the evaluation of image-guided breast core needle biopsies: results from a randomized clinical trial. [Clinical Trial. Journal Article. Multicenter Study. Randomized Controlled Trial]. *American Journal of Surgical Pathology* Jan 2004; 28(1):126-131.
116. Liu H, **Fajardo LL**, McAdoo J, Halama G, Jalink A. A detector-scanning, radiation-shielding technique for full-size, high spatial resolution digital x-ray mammography. *Academic Radiology* 2004.
117. **Fajardo LL**, Pisano ED, Caudry DJ, Gatsonis CA, Berg WA, et al. Stereotactic and

- Sonographic Large-Core Biopsy of Nonpalpable Breast Lesions: Results of the Radiologic Diagnostic Oncology Group V Study. *Academic Radiology* Mar 2004;11(3): 293-308.
118. Graham MM, **Fajardo LL**. RADIOLOGY AND NUCLEAR MEDICINE: Building a Stronger Partnership. *Journal of the American College of Radiology* 2004;1(4):237-238.
  119. Ishigami K, Sun S, Berst MJ, Heery SD, **Fajardo LL**. Portain Vein Occlusion with Aberrant Left Gastric Vein Functioning as a Hepatopetal Collateral Pathway. *J Vasc Interv Radiol* May 2004; 15(5):501-504.
  120. Ishigami K, Peterson JJ, Stolpen AH, Dahmouh L, **Fajardo LL**. Diffuse infiltrating neuroendocrine tumor of the uterus: MRI appearance. *Journal of Women's Imaging* 2004;6(2):85-88.
  121. Ishigami K, Stolpen AH, Sato Y, Dahmouh L, Winfield HN, **Fajardo LL**. Adrenal adenoma with organizing hematoma: Diagnostic dilemma at MR imaging. *Journal of Magnetic Resonance Imaging* Oct 2004; 22(8):1157-1159
  122. Wang J, **Fajardo LL**, Dahmouh L, Vannier M. Lobular carcinoma in situ presenting as architectural distortion on mammograms: A case report and review of the literature. *European Journal of Radiology Extra* May 2004; 50(2):63-66.
  123. Jiang H, Li C, Pearlstone D, **Fajardo LL**. Ultrasound-Guided Microwave Imaging of Breast Cancer: Tissue Phantom and Pilot Clinical Experiments. *Med Phys* Aug 2005; 32(8): 2528-2535.
  124. Inaoka T, Takahashi K, Iwata K, **Fajardo LL**, van Beek E, Sato Y, Yamada T, Nagasawa K, Shuke N, Aburano T. Evaluation of Normal Fatty Replacement of the Thymus with Chemical-Shift MR Imaging for Identification of the Normal Thymus. *J Magn Reson Imaging* Sep 2005; 22(3): 341-346.
  125. Zhou Y, Pew H, Rong J, Chen W, **Fajardo LL**, Wu X, Liu H. Phantom Imaging with a Prototype Phase Contrast Radiography System. *Proceedings of SPIE*. Vol. 6163, 2005.
  126. Pisano ED, Gatsonis C, Hendrick E, Yaffe M, Baum JK, Acharyya S, Conant EF, **Fajardo LL**, Bassett L, D'Orsi C, Jong R. Diagnostic Performance of Digital Versus Film Mammography for Breast Cancer Screening – The Results of the American College of Radiology Imaging Network (ACRIN) Digital Mammographic Imaging Screening Trial (DMIST). *NEJM* Oct 2005;353(17):1773-1783.
  127. Penedo M, Souto M, Tahoces P, Carreira JM, Villalon J, Porto G, Seoane C, Paerlmann WA, Vidal JJ, **Fajardo LL**. Free-Response Receiver Operating Characteristic Evaluation of Lossy JPEG2000 and Object-based Set Partitioning in Hierarchical Trees Compression of Digitized Mammograms. *Radiology* Nov 2005; 237(2): 450-457.
  128. Pisano E, Hendrick E, Gatsonis C, Yaffe M, Baum J, **Fajardo LL**, Bassett L, Conant E, D'Orsi C, Rebner M, Jong R, Masood S. Methods Paper for DMIST. *Radiology* 2005
  129. Park JM, Garg M, Grignon L, **Fajardo LL**. Breast Imaging: Entering the Electronic Era. *Journal of Imaging Technology Management* Dec. 2005; 18(12): 29-34.
  130. **Fajardo LL**, Hurley JP, Brown BO, Summers RW, McDaniel RD. Business plan to establish a CT colonography service. *J Am Coll Radiol* 2006; 3:175-186.
  131. Yaffe MF, Bloomquist AK, Mawdsley GE, Pisano ED, Hendrick RE, **Fajardo LL**, Boone JM, Kanal K, Mahesh M, Fleischman RC, Och J, Williams MB, Beideck DJ, Maidment AD. Quality Control for Digital Mammography: Part B. Recommendations from the ACRIN DMIST Trial. *Med Phys* Mar 2006; 33(3):737-752.
  132. Zeng K, Yu H, **Fajardo LL**, Wang G. Geometrical study on two tilting arcs based exact cone-beam CT for breast imaging. *Proceedings of SPIE*. 6318:2006.
  133. Zeng K, Yu H, **Fajardo LL**, Wang G. Cone-Beam Mammo-Computed Tomography From Data Along Two Tilting Arcs. *Med Phys* October 2006; 33(10):3621-3633.
  134. ZG Wang, Y Liu, G Wang, LL Fajardo, Boone J, Kanal K, Mahesh M, et al. Establishing QA and QC Procedures for Digital Mammography. *Medical Physics* 2006; 33(3); 737-752.

135. Pisano E, Gatsonsis C, Hendrick E, Yaffe M, Baum J, **Fajardo LL**, Bassett L, Rebner M, D'Orsi C, Jong R, Conant E, Tosteson A. Diagnostic Accuracy of Digital versus Film Mammography in Population Subgroups, in the Digital Mammographic Imaging Screening Trial (DMIST). Radiology, In Press.
136. Meinel LA, Stolpen AH, Berbaum KS, **Fajardo LL**, Reinhardt JM. Breast MRI Lesion Classification: Improved Performance of Human Readers with a Backpropagation Neural Network Computer-Aided Diagnosis (CAD) System. J Magn Reson Imaging Jan 2007; 25(1): 89-95.
137. Park JM, Franken EA, Garg M, **Fajardo LL**, Niklason L. Breast Tomosynthesis: Present Considerations and Future Applications. Radiographics Oct 2007; 27:S231-S240.
138. Zeng K, Yu H, Zhao S, **Fajardo LL**, Ruth C, Jing Z, Wang G. Digital tomosynthesis aided by low-resolution exact computed tomography. J Comput Assist Tomogr. Nov-Dec 2007; 31(6):976-83.
139. Li C, Grobmyer SR, Chen L, Zhang Q, **Fajardo LL**, Jiang H. Multispectral Diffuse Optical Tomography with Absorption and Scattering Constraints. Appl Opt. Dec 2007; 1:46(34):8229-36.
140. Liang X, Zhang Q, Li C, Grobmyer S, **Fajardo LL**, Jiang, H. Breast Cancer detection using phase contrast diffuse optical tomography, Optical Tomography and Spectroscopy of Tissue VII. Proceedings of SPIE. 6434:2007.
141. Liang X, Zhang Q, Li C, Grobmyer S, **Fajardo LL**, Jiang H. Phase-Contrast Diffuse Optical Tomography: Pilot Results in the Breast. Academic Radiology, In review.
142. Hendrick. Comparison of the Diagnostic Accuracy of Each Individual Digital Mammography Unit vs. Screen Film Mammography. Radiology. In Press.
143. Tosteson. Cost-Effectiveness of Digital Mammography Breast Cancer Screening: Results from ACRIN DMIST. Annals of Internal Medicine. In Press.
144. Pisano. Diagnostic Accuracy of Digital Versus Film Mammography in Population Subgroups, in the Digital Mammographic Imaging Screening Trial (DMIST). Radiology. In Press.
145. Zhang D, Donovan M, **Fajardo LL**, Archer A, Wu X, Liu H. Preliminary feasibility study of an in-line phase contrast X-ray imaging prototype. Trans Biomed Eng, Sept 2008;55(9):2249-57
146. Li C, Grobmyer SR, Massol N, Liang X, Zhang Q, Chen L, **Fajardo LL**, Jiang H. Noninvasive in vivo tomographic optical imaging of cellular morphology in the breast possible convergence of microscopic pathology and macroscopic radiology.
147. Williams MB, Raghunathan P, More MJ, Siebert JA, Kwan A, Lo YU, Samei E, Ranger NT, **Fajardo LL**, McGruder A, McGruder SM, Maidment AD, Yaffe MJ, Bloomquist A, Mawdsley GE. Optimization of exposure parameters in full field digital mammography.

#### **PUBLICATIONS RELATED TO HEALTH CARE DELIVERY/MEDICAL CARE PRACTICE GUIDELINES**

1. AHCPR Clinical Practice Guideline No. 13 – “Quality Determinants of Mammography”. U.S Department of Health and Human Services, publication no. 95-0632, October 1994.
2. NIH Consensus Development Conference Statement: Breast Cancer Screening for Women Ages 40-49. NIH Consensus Statement 1997, January 21-23; 15 (1).
3. Center for Clinical Decision Support – “Key Clinical Decision: Determining the Method of Diagnostic Breast Biopsy for Nonpalpable Abnormalities in Women”.

#### **CRITICAL REVIEWS AND EDITORIALS**

1. Abdominal Ultrasound by CA Mittlestadt. Churchill Livingstone, Inc., New York, New York, 1987, for The Western Journal of Medicine, 1987.
2. Fajardo LL, Pond GD. Critical Review: Detection of colonic polyps on single-contrast barium enema study: Emphasis on the elderly. Invest Radiol, 1988; 23(5): 409-410.
3. Fajardo LL. Does preoperative needle localization lead to an increase in local breast cancer recurrence? Letter to the Editor, Radiology, 1988; 169(2): 580-581.
4. Fajardo LL. Critical Review: Contrast nephrotoxicity: A randomized controlled trial of a nonionic and an ionic radiographic contrast agent. Survey of Anesth, 1989; 33(3): 182-184.
5. Fajardo LL. Critical Review: Contrast material-induced renal failure in patients with diabetes mellitus, renal insufficiency, or both. Survey of Anesth, 1989; 33(3): 181-182.
6. Fajardo LL, Sacks EM. Critical Review: Contrast media adversely affect oxyhemoglobin dissociation. Survey of Anesth, 1991; 35(1): 52-53.
7. Fajardo LL, Lund PJ. Critical Review: Lumbar disk herniation and canal stenosis: Value of intraoperative sonography in diagnosis and surgical management. Invest Radiol, 1991; 26: 696-697.
8. Hunter TB, Fajardo LL, Hunt KR. Critical Review: Comparison of MRI and US in staging early prostate cancer. Results of a multi-institutional cooperative trial. Invest Radiol 1991; 26(11): 1024-1025.
9. Fajardo LL. Critical Review: Guidelines for the screening and treatment of early breast cancer. Cost-Effective Medicine Reports 1995; 1(2): 1-2.
10. Fajardo LL. Guidelines for screening mammography. Cost-Effective Medicine Reports 1995; 1(2): 3-4.
11. Fajardo LL. Clinical guidelines can reduce costs, but are not perfect. Cost-Effective Medicine Reports 1995; 1(3): 22-23.
12. Fajardo LL. Critical Review: Specialized neurology ward provides better results than a medical ward for stroke patients. Cost-Effective Medicine Reports 1995; 1(3): 28-29.
13. Fajardo LL. Lower concentration of contrast medium may be satisfactory in neck CT studies. Cost-Effective Medicine Reports 1995; 1(4): 31.
14. Fajardo LL. MR Angiography may be a cost-effective substitute for standard angiography in PVD. Cost-Effective Medicine Reports 1995; 1(4): 2.
15. Fajardo LL. Orthopedists correctly interpret selected trauma films: Radiology reading may be unnecessary. Cost-Effective Medicine Reports 1995; 1(5): 39.
16. Cost-Effective Diagnostic Imaging: The Clinician's Guide, by Grossman ZD, Katy DS, Santelli ED, et al. St. Louis, MO, Mosby, 1995. Cost-Effective Medicine Reports 1995; 1(6): 48.
17. Fajardo LL. Impact of stereotaxic core breast biopsy on cost of diagnosis. Cost-Effective Medicine Reports 1995; 1(7): 55-56.
18. Fajardo LL. Stereotactic core biopsy can reduce diagnostic costs for nonpalpable breast lesions. Cost-Effective Medicine Reports 1995; 1(8): 58-59.
19. Fajardo LL. Stereotactic breast biopsy is a reliable alternative to open. Cost-Effective Medicine Reports 1995; 1(8): 59-60.
20. Fajardo LL. Which mammography screening strategy is most cost-effective? Cost-Effective Medicine Reports 1995; 1(11): 81-82.
21. Fajardo LL, Kallmes D. What is the role of noninvasive perioperative imaging strategies before carotid endarterectomy. Cost-Effective Medicine Reports 1995; 1(11): 82-83
22. Fajardo LL. Question and Answer: "Core Needle Breast Biopsy". AJR 1996;167:524-530.
23. Fajardo LL. Question and Answer: "Should Screening Breast Sonography Be Performed

on Patients with Dense Breast Tissue on Mammography?" AJR 2003;181:1715.

#### **BOOKS WRITTEN/EDITED**

1. A Practical Approach to Stereotactic Breast Biopsy. Fajardo LL, Pizzutiello RJ, Willison KM (Editors). Blackwell Science, Cambridge, MA 1996.

#### **BOOK CHAPTERS**

1. **Fajardo LL**, Hunter TB. Digital Uroradiology and Mammography. In: DIGITAL RADIOLOGY, Newell JD, Kelsey CA (eds). Churchill Livingstone, Inc., New York, New York, 1990.
2. **Fajardo LL**. Evaluation of Palpable and Nonpalpable Breast Masses. In: DECISION MAKING IN INTERNAL MEDICINE, Greene HL, Johnson WP, Maricic MJ (eds). C.V. Mosby, St. Louis, Missouri, 1993, pp 211-214.
3. **Fajardo LL**. Medical Devices and Artifacts Related to Breast Imaging. In: RADIOLOGIC GUIDE TO MEDICAL DEVICES AND FOREIGN BODIES, Hunter TB, Bragg D. (eds). Mosby Year Book, New York, New York, 1992, pp 216-238.
4. **Fajardo LL**. Breast Interventional Procedures: Experience With "Add-On" Stereotactic Devices and Digital Breast Imaging. In: PERCUTANEOUS BREAST BIOPSY. Parker SH, Jobe WE (eds). Churchill Livingstone, Inc., New York, New York, 1992, pp 81-89.
5. Roehrig H, **Fajardo LL**, Hunter TB. Technology Requirements for Digital Mammography. In: TECHNOLOGY REQUIREMENTS FOR BIOMEDICAL IMAGING. Mun SK, Hanwehr RV, Gerity P (eds). IEEE Computer Society Press, pp 48-54, 1992.
6. **Fajardo LL**. Percutaneous Breast Needle Biopsy with Stereotactic Mammographic Guidance. In: PERCUTANEOUS BREAST BIOPSY. Parker SH, Jobe WE (eds). Churchill Livingstone, Inc., New York, New York, 1993, pp 49-61.
7. **Fajardo LL**. Stereotactic Fine-Needle Aspiration Biopsy. In: PERCUTANEOUS BREAST BIOPSY. Parker SH, Jobe WE (eds). Churchill Livingstone, Inc., New York, New York, 1993, pp 89-95.
8. **Fajardo LL**. Equipment Considerations: Stereotactic and Digital Systems. In: INTERVENTIONAL BREAST PROCEDURES. D.D. Dershaw, (ed), Churchill Livingstone, Inc., New York, New York, 1995, pp 45-53.
9. **Fajardo LL**, DeAngelis GA, Harvey JA. Quality Assurance: The Mammography Practice Audit. In: A COMPREHENSIVE APPROACH TO STEREOTACTIC BREAST BIOPSY. Fajardo LL, Pizzutiello RJ, Willison KM (eds). Blackwell Science, Cambridge, MA, 1996, pp 251-257.
10. **Fajardo LL**, Evans WP. Establishing a Successful Breast Needle Biopsy Program. In: A COMPREHENSIVE APPROACH TO STEREOTACTIC BREAST BIOPSY. Fajardo LL, Pizzutiello RJ, Willison KM (eds). Blackwell Science, Cambridge, MA, 1996, pp 177-185.
11. **Fajardo LL**. Cost-Effectiveness of Stereotactic Breast Biopsy. In: A COMPREHENSIVE APPROACH TO STEREOTACTIC BREAST BIOPSY. Fajardo LL, Pizzutiello RJ, Willison KM (eds). Blackwell Science, Cambridge, MA, 1996, pp 267-275.
12. **Fajardo LL**, Williams MB, Harvey JA. Future Innovations in Breast Imaging. In: A COMPREHENSIVE APPROACH TO STEREOTACTIC BREAST BIOPSY. Fajardo LL, Pizzutiello RJ, Willison KM (eds). Blackwell Science, Cambridge, MA 1996, pp 277-283.
13. **Fajardo LL**, Williams MB. Clinical Potential of Digital Mammography. In: DIGITAL MAMMOGRAPHY. Do K, Giger ML, Nishikawa RM, Schmidt RA (eds). Elsevier Science B.V., Amsterdam, The Netherlands, 1996, pp 43-52.

14. Liu H, **Fajardo LL**, McAdoo J. Full-size, High Spatial Resolution Digital Mammography Using CCD Scanning Technique. In: DIGITAL MAMMOGRAPHY. Do K, Giger ML, Nishikawa RM, Schmidt RA (eds). Elsevier Science B.V., Amsterdam, The Netherlands, 1996, pp 145-150.
15. **Fajardo LL**. Breast Masses. In: CLINICAL DECISION MAKING IN MEDICINE (2nd Ed). Green HL, Johnson WP, Maricic MJ (eds.). Mosby-Year Book, Inc., St. Louis, MO.
16. Pisano ED, Cole E, Hemminger BM, Muller K, Yaffe M, et al. Accuracy of digital mammography vs. screen-film mammography in a diagnostic mammography population. In: PROC. INTERNATIONAL WORKSHOP ON DIGITAL MAMMOGRAPHY 2000. MJ Yaffe, Editor. Medical Physics Publishing, Madison, WI, 2001 pp 504-511.
17. Williams MB, **Fajardo, LL**. Breast Imaging Systems: Design Challenges for Engineers. In: THE BIOMEDICAL ENGINEERS HANDBOOK. M.Kutz , Editor. McGraw Hill, pp 200.
18. Shah AJ, Wang J, Yamada T, **Fajardo LL**. Digital Mammography: A Review of Technical Development and Clinical Applications. Clin Breast Cancer Apr 2003; 4(1): 63-70.
19. Erkonen WE, **Fajardo LL**, Boardman JW. Mammography. In: RADIOLOGY101: THE BASICS AND FUNDAMENTALS OF IMAGING. Erkonen WE, Smith WL, Editors. Lippincott Williams & Wilkins, 2004, pp 352.
20. **Fajardo LL**. Screening Mammography: Imaging Decisions MRI Blackwell Publishers, June 2005; 9(2):23-34., 2005
21. **Fajardo LL**, Berg WA, Smith RA. Breast Imaging. In: EVIDENCE-BASED IMAGING: OPTIMIZING IMAGING IN PATIENT CARE. Medina LS, Blackmore CC, Editors. Springer Science and Business Media, Inc., 2006, pp 581.

#### **SCHOLARLY PRESENTATIONS/ABSTRACTS (Since 1995)**

54. McAleese K, Williams W, Fajardo L. Mammoscintigraphy in the detection of breast cancer: Comparison of thallium-201 and technetium-99m Sestamibi with planar and SPECT. American Roentgen Ray Society, May 1995. **\*1995 President's Award - The American Roentgen Ray Society.**
55. Frierson HF, Fajardo LL, Cavell JL. Comparison of imaging directed fine needle aspiration to core needle biopsy for nonpalpable noncystic mammary abnormalities. 43rd Annual Meeting of the American Society of Cytopathology, 1995.
56. Liu H, Fajardo LL, Buchanan ML, et al. CCD scanning technique for full-size digital mammography. 81st Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, Illinois, November 26 - December 1, 1995. [Radiology Vol. 197(p), p.328].
57. Buchanan ML, Liu H, Fajardo LL. Analytical characterization and performance optimization for digital CCD mammography systems. 81st Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, Illinois, November 26 - December 1, 1995.
58. Liu H, Fajardo LL, Buchanan ML. Lesion detectability: Analysis of CCD x-ray imaging systems. 81st Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, Illinois, November 26 - December 1, 1995. 59.
59. Dwyer SJ, Paredes ES, Harvey JA, Fajardo LL, Huynh P. Wavelet image compression of digitized mammograms. 81st Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, Illinois, November 26 - December 1, 1995.
60. Kimme-Smith C, Fajardo LL, Pisano E, McNeill BJ. Breast core biopsy stereotactic equipment quality assurance for RDOG V. 81st Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, Illinois, November 26 - December 1, 1995

61. Fajardo LL. Cost and efficacy trade-offs of stereotaxic core vs. surgical biopsy for nonpalpable breast lesions. 81st Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, Illinois, November 26 - December 1, 1995.
62. Fajardo LL. Clinical evaluation of a digital mammographic system: Comparison with conventional mammography. 81st Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, Illinois, November 26-December 1, 1995.
63. Williams MB, Liu H, Fajardo LL. Imaging properties of a prototype digital detector for full breast mammography. 81st Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, Illinois, November 26 - December 1, 1995.[ Radiology Vol. 197(p), p.328].
64. Dwyer SJ, Fajardo LL, Brookeman JR, Pi J. Radiology Department - Year 2000 (INFORAD Exhibit). 81st Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, Illinois, November 26 - December 1, 1995.
65. Fajardo LL. Clinical potential of digital mammography. 3rd International Workshop on Digital Mammography, Chicago, Illinois, June 9-12, 1996.
66. Williams MB, Fajardo LL. Comparison of two developmental CCD based detectors for whole breast mammography. 3rd International Workshop on Digital Mammography, Chicago, Illinois, June 9-12, 1996.
67. Liu H, Fajardo LL, Baxter R. Full-size, high spatial resolution digital mammography using CCD scanning technique. 3rd International Workshop on Digital Mammography, Chicago, Illinois, June 9-12, 1996.
68. Gray R, Olshen RA, Ikeda D, Fajardo LL, Williams MB. Evaluating quality and utility of digital mammograms and lossy compressed digital mammograms. 3rd International Workshop on Digital Mammography, Chicago, Illinois, June 9-12, 1996.
69. Dwyer SJ III, Williams MB, Fajardo LL. Full breast digital mammography and PACS requirements. 3rd International Workshop on Digital Mammography, Chicago, Illinois, June 9-12, 1996.
70. Liu H, Fajardo LL, McAdoo J, Halama G, Jalink A, Baxter R. CCD-scanning radiation-shielding technique for large-field digital mammography. 82nd Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, Illinois, December 1-6, 1996. Radiology, Vol.201(p), p.190.
71. Liu H, Fajardo LL, Chen J, Baxter R. Theoretic model for contrast-detail detectability prediction in digital mammography. 82nd Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, Illinois, December 1-6, 1996. [Radiology Vol. 197(p), p.328]
72. Liu H, Fajardo LL. Binary optical technique and its application in digital radiography. 82nd Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, Illinois, December 1-6, 1996. [Radiology, Vol.201(p), p.327]
73. Kimme-Smith CM, Williams MB, Terwilliger RA, Fajardo LL, Bassett LW. Clinical quality control for whole-breast digital mammography: preliminary techniques. 82nd Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, Illinois, December 1-6, 1996.
74. Fajardo LL, Liu H, Williams MB, Baxter R. Contrast-detail detectability of a prototype charge-coupled device full-breast digital mammography system for imaging thick breasts. 82nd Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, Illinois, December 1-6, 1996. [Radiology, Vol.201(p):369].
75. Dwyer SJ, Fajardo LL, Mulvaney J, Shaw de Paredes ES, Exely KA. Gray-scale displays for digital mammography. 82nd Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, Illinois, December 1-6, 1996.

76. Liu H, Fajardo LL, McAdoo J, Halama G, Jalink MS, Baxter R, et al. Large-field high-spatial resolution digital mammography using a CCD-scanning technique. 82nd Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, Illinois, December 1-6, 1996. [Radiology, Vol.201(p), p.554].
77. Kimme-Smith CM, Williams MB, Fajardo LL, Bassett LW, Valentino DJ. Correspondence of quality control test failures and clinical image failures in digital mammography. 82nd Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, Illinois, December 1-6, 1996.
78. Barnes GT, Fajardo, LL. Cost of digital mammography. 82nd Scientific Assembly and Annual Meeting of the Radiological Society of North America, Chicago, Illinois, December 1-6, 1996.
79. Liu H, Fajardo LL, McAdoo J, Halama G, Jalink A. Development of a detector-scanning, radiation-shielding technique for large field digital mammography: Technical characteristics of the system. 83<sup>rd</sup> Scientific Assembly & Annual Meeting of the Radiological Society of North America, Chicago, IL. November 30- December 5, 1997. [Radiology, Vol.205 (p), p.302].
80. Liu H, Wang G, Fajardo LL, Chen J, Thompson S. Interpolation algorithms for digital mammography. 83<sup>rd</sup> Scientific Assembly & Annual Meeting of the Radiological Society of North America, Chicago, IL. November 30- December 5, 1997.[Radiology, Vol.205 (p), p.523].
81. Liu H, Xu J, Fajardo LL. Optical processing architecture for analog and digital mammography. 83<sup>rd</sup> Scientific Assembly & Annual Meeting of the Radiological Society of North America, Chicago, IL. November 30- December 5, 1997. [Radiology, Vol.205 (p), p.394].
82. Liu H, Fajardo LL, McAdoo J, Halama G, Jalink A. A novel technique for large - field digital mammography. 83<sup>rd</sup> Scientific Assembly & Annual Meeting of the Radiological Society of North America, Chicago, IL. November 30- December 5, 1997.[ Radiology, Vol.205 (p), p.741].
83. Liu H, Fajardo LL, Xu J. Optical Processing and its Applications in Mammography. 84<sup>th</sup> Scientific Assembly & Annual Meeting of the Radiological Society of North America, Chicago, IL. November 29 - December 4, 1998.[ Radiology, Vol.209 (p), p.315]
84. Pisano ET, Braeuning MP, Burke ET, Conant EF, Fajardo LL, Kornguth PJ. Comparison of the Acceptability and Performance of Image Processing Algorithms in Visualizing Known Lesions in Digital Mammograms. 84<sup>th</sup> Scientific Assembly & Annual Meeting of the Radiological Society of North America, Chicago, IL. November 29 - December 4, 1998.
85. Liu H, Fajardo LL, McAdoo J, Halama G, Jalink A, Jung W. Technical Characteristics; Development of a Novel Imaging Technique for Large Field Digital Mammography. 84<sup>th</sup> Scientific Assembly & Annual Meeting of the Radiological Society of North America, Chicago, IL. November 29 - December 4, 1998.[ Radiology, Vol.209 (p), p.689].
86. Liu H, Fajardo LL, Jiang H, Karellas A. Lens Distortion in Optically Coupled X-ray Digital Imaging. 85<sup>th</sup> Scientific Assembly & Annual Meeting of the Radiological Society of North America, Chicago, IL. November 28-December 3, 1999.
87. Berg WA, Fajardo LL, Pisano ED, Gatsonis C, McNeil BJ. Correlation of Sonographic Features with Risk of Malignancy: The RDOG5 Experience. 85<sup>th</sup> Scientific Assembly & Annual Meeting of the Radiological Society of North America, Chicago, IL. November 28-December 3, 1999.
88. Pisano, ED, Fajardo LL, Sneige N, Frable WJ, Gatsonis C, McNeil BJ. RDOG5: A Multicenter Study of the Diagnostic Accuracy of Sonographically and Stereotactically-guided Fine Needle Aspiration for Nonpalpable Breast Lesions. 85<sup>th</sup> Scientific Assembly &

- Annual Meeting of the Radiological Society of North America, Chicago, IL. November 28-December 3, 1999.
89. Liu H, Qian W, Fajardo LL. Optical processing and its applications in medical imaging. (abstract and *invited* poster) NIH-BECON meeting, Washington DC, June 1999.
  90. Shi M, Liu H, Tao G, Fajardo LL. Stereo fluoroscopic image-guided robotic biopsy system. SPIE Biomedical Optics, San Jose, CA, 1999.
  91. Jiang HY, Liu H, Fajardo LL. Positional accuracy and sensitivity in x-ray stereo-image guidance. SPIE Biomedical Optics, San Jose, CA, 1999.
  92. Jung W, Liu H, Fajardo LL. Contrast detail detectability of a full-field digital mammography system. SPIE Biomedical Optics, San Jose, CA, 1999.
  93. Williams MB, More M, Venkatakrishnan V, Niklason L, Yaffe MJ, Mawdsley G, Bloomquist A, Maidment A, Chakraborty D, Kimme-Smith C, Fajardo LL. Beam optimization for digital mammography. International Workshop on Digital Mammography, Toronto, Canada, June, 2000.
  94. Pisano ED, Cole E, Hemminger BM, Muller K, Yaffe M, et al. Accuracy of digital mammography in a diagnostic mammography population. International Workshop on Digital Mammography, Toronto, Canada, June, 2000.
  95. Fajardo LL. Breast cancer screening: lessons learned. 2000 Annual Meeting – Society for Health Services Research in Radiology, October 16, 2000, Washington, DC.
  96. Liu H, Yang X, Deans A, Li D, Fajardo LL. Development of a digital fluorescence technique for molecular imaging. 86<sup>th</sup> Scientific Assembly & Annual Meeting of the Radiological Society of North America, Chicago, IL. November 26-December 1, 2000.
  97. Zou KH, Pisano ED, Fajardo LL, Caudry DJ, Gatsonis C, McNeil BJ. Agreement and accuracy in BIRADS descriptors and probability of malignancy for 2061 breast lesions recommended for biopsy: The RDOGV experience. 86<sup>th</sup> Scientific Assembly & Annual Meeting of the Radiological Society of North America, Chicago, IL. November 26-December 1, 2000.
  98. Fajardo LL, Ravin CE, Maynard CD, Seltzer SE, Zagoria R, Capp MP. Manpower issues in Radiology. The 49<sup>th</sup> Annual Meeting of the Association of University Radiologists. Toronto, CA, May 16-20, 2001.
  99. Jacobs MA, Ouwerkerk R, Bottomley PA, Barker P, Bhujwala Z, Fajardo LL, Bluemke D. Multiparametric Proton, Sodium, and Spectroscopic Magnetic Resonance Imaging of Human Breast Cancer. New Horizons in Molecular Imaging: Genes, Probes, and Disease. Cold Springs Harbor Laboratory, NY, March 14-17, 2002.
  100. Baum J, Rosenberg R, Fajardo LL, Berg W, Khouri N, Hoffmeister R, Brem R. Prospective evaluation of computer-aided detection (CAD) in screening mammography- Impact of CAD on mammographic interpretation time and work-up rate. European Congress of Radiology, 2002. Vienna, Austria, March 1-5, 2002.
  101. Gray JE, Zing J, Fajardo LL, Kopans DB, Levit B, Moore RH. Comparison of charge-coupled device (CCD) and amorphous selenium (aSe) full-field digital mammography (FFDM) systems: laboratory and clinical results. International Workshop on Digital Mammography. Bremen, Germany. June, 2002.
  102. DOD Breast Cancer Research Program Era of Hope Meeting. 2 scientific papers. Orlando, FL, MD, Sept. 25-28, 2002.
  103. Workshop on the Radiology of Breast Cancer. 1 scientific presentation. State of the Art in Breast Imaging: Methods and Pitfalls. Norfolk, VA, Nov. 17, 2002.
  104. Pisano ED, Gatsonis C, Hendrick E, Yaffe M, Baum JK, Acharyya S, Conant EF, Fajardo LF, Bassett L, D'Orsi C, Jong R. The Digital Mammographic Imaging Screening Trial (DMIST). International Working Group on Digital Mammography, 2004.
  105. Wang J, Fajardo LL, Shih TT. Stable breast carcinoma in asymptomatic screening patients:

- mammographic features. The 90<sup>th</sup> Scientific Assembly and Annual Meeting of the Radiological Society of North America, Nov 28-Dec 3, 2004.
106. Arbash-Meinell L, Stolpen A, Berbaum K, Fajardo LL, Reinhardt J. Human Reader Improvement in Breast MRI classification with CAD Assistance. ISMRC 2006
  107. Park JM, Franken EA, Garg M, Fajardo LL. Breast Tomosynthesis: Preliminary Results and Future Applications. 93<sup>rd</sup> Annual Meeting Radiological Society of North America, 2007.
  108. Qiang B, Ni J, Fajardo LL. Parallel Monte Carlo Algorithm for Simulation of Photon Migration Inside Biological Tissues. 93<sup>rd</sup> Annual Meeting Radiological Society of North America, 2007.
  109. Park JM, Franken EA, Fajardo LL. Minimally Invasive Percutaneous Surgical Device for Breast Lesions. 108<sup>th</sup> Annual Meeting of the American Roentgen Ray Society, April 13-18, 2008.
  110. Jeong D, Park JM, Adkins B, Menda Y, Franken EA, Fajardo LL. PET/CT Findings in Breast Cancer; Correlation with Mammography and Ultrasound. 108<sup>th</sup> Annual Meeting of the American Roentgen Ray Society, April 13-18, 2008.
  111. Pisano ED, Acharyya, S, Cole E, Marques H, Blevins M, Yaffe M, Conant Em Hendrick RE, Baum J, Fajardo LL, Jong R, Koomen M, Kuzmiak C, Lee Y, Wittaya P, Pavic D, Yoon S, Gatsonis C. Radiologist Analysis of ACRIN Digital Mammographic Imaging Screening Trial (DMIST) Cancer Cases: A Logistic Regression Model, RSNA 94<sup>th</sup> Scientific Assembly and Annual Meeting, Nov. 30-Dec. 5, 2008

#### **[1986-1994 - 53 Scientific Presentations/Abstracts]**

#### **MEDIA/VIDEO EDUCATION MATERIALS**

1. American College of Radiology Commission on Technology Assessment Interactive Software Educational Series: *Fundamentals of Clinical Research for Radiologists* – Module 8: “Screening”, March 2001
  2. “Follow-up of Abnormal CBE and Mammographic Findings” (video-based, self-study program for primary care physicians), Sponsored by the Division of Cancer Prevention and Control, National Centers for Disease Control and Prevention, 1999.
  3. “Stereotaxic Core Breast Biopsy” (1997; CME credit approved-ASRT)
  4. “Quality Determinants of Mammography” (1996; CME credit approved - ASRT)
  5. “Imaging-Guided Breast Needle Biopsy” (Slide/Tape CME Course - October 1995)
  6. “Role of Breast Imaging in the Conservative Treatment of Breast Cancer” (RSNA Educational Materials Program; RSP479. 1994)
  7. “Women’s Health: Diagnosis of Breast Cancer” (Medical Student/Resident/Fellow/Radiologist Educational Videotape; Approved for 1 Credit of Category I CME - 1992)
  8. “Current Perspectives on the Diagnosis of Breast Disease” (Medical Student/Resident/Fellow/Radiologist Educational Videotape; Approved for 1 Credit of Category I CME - 1991)
  9. “Stereotactic Breast Needle Localization” (Resident/Fellow/Radiologist Educational Videotape; Approved for 1 Credit of Category I CME - 1990)
  10. “Positioning Techniques for Film-Screen Mammography” (Technologist Educational Videotape - 1989)
- B. Areas of Research Interest and Current Projects

Breast Imaging

C. Published reviews of scholarship

None

D. Grants Received

### **ACTIVE GRANTS**

NIH/ACRIN. “ACRIN 2007 Publication Committee Chair Agreement”. Salary support for Publications Committee Chair. 7/1/02 – 12/31/07, (\$14,166), 6% effort.

NIH/University of Florida. “Optical Imaging of Breast Cancer” Evaluate optical imaging techniques for characterizing breast lesions, 5/6/2002 – 4/30/2008, (\$1,380,000), 1% effort, Co-Investigator.

NIH/University of Oklahoma “Development of an Innovative Field-emission X-ray Source to Facilitate Phase-contrast Digital X-ray Imaging” The overall objective of this project is to develop an innovative phase-contrast digital x-ray imaging system for clinical mammography, 9/30/2003 – 8/31/2007, (\$137,677), 0.5% effort, Subcontract to University of Iowa.

Hologic, Inc. “A Multicenter Controlled Clinical Trial to Evaluate the Hologic3-D Tomosynthesis Mammography System Used in Conjunction with Conventional 2-D Digital Mammography (Pivotal Tomosynthesis Trial)”, 9/8/2004 – 12/31/2007, 0.12% effort, Co-Investigator.

### **GRANTS/FUNDED RESEARCH – Prior (last 5 years)**

NIH-NCI UO1 CA80098 American College of Radiology Imaging Network. “ACRIN Committee Chair Agreement – Publications”, 7/1/2002 – 12/31/2005, (\$11,333), 1% effort, \$11,333 salary support, Principal Investigator.

DAMB17-99-1-9001, Army Breast Cancer Research Program, “Clinical Evaluation of Digital Mammography”, 7/1/03 – 9/30/05, (\$457,862), 25% effort, \$50,000 salary support; Principal Investigator.

LORAD-Hologic. “A Multi-center, Controlled Clinical Trial to Evaluate the Noninferiority of the Lorad Digital Breast Imager (LDBI) with Direct-Capture Detector Using an Amorphous Selenium Photoconductor Compared to the LDBI with a Charge-Coupled Device Detector”. Industry sponsored research”. \$50,000, 2002.

ACRIN (NIH-NCI – UO1 CA80098), “Screening Study of Digital Mammography”. 2001-2002. JHU site PI. (\$200,000)

NIH-NCI R21 CA91798-01, “Proton MR Spectroscopic Imaging in Human Breast Cancer”, 2001-2002 (P. Barker, PI) (3% effort).

Advanced Diagnostic Imaging. Industry sponsored research 2001-2002 (187,331 Total). “Evaluation of the DAI Holographic Breast Ultrasound System”. Principal Investigator (30% effort) (\$176,000).

ImageSmiths, 2001-2002. “Development of Digital Mammography Interpretation Workstation. Equipment Grant (\$40,000). Principal Investigator.

NIH-NCI Grant– NIH R01-CA76564, “Displays for Full Breast Digital Mammography “, (subcontract from the University of VA, S. Dwyer, PhD, P.I.) 2000-2002, \$7,800, Collaborating Investigator.

NIH-NCI Grant – RO1-CA85626, “Improving CRT Display of Digital Mammograms “, (subcontract from the University of AZ, H. Roehrig, Ph.D., P.I.) 2000-2001, \$4,500, Collaborating Investigator.

Susan G. Komen Foundation & Indian Health Service VF 2000-2001, “Field Trial of Mobile Digital mammography – Phase I, 2001. (J. Gitlin, PI), (5%).

R2 Technologies, 2001. Equipment Grant (\$125,000). “Development of CAD for Digital Mammography”. Principal Investigator.

NCI-NIH-ACRIN Clinical Research Fellowship Training Grant. 2001. \$20,000 (training for Judy Song, Breast Imaging Fellow).

Susan G. Komen Foundation Training Grant. “Multidisciplinary Clinical Breast Imaging Fellowship”. \$40,000/year. 1999-2001.

Parexel International, Evaluation of Second Look Computer Assisted Diagnosis System (FDA approval trial), 2000, \$40,000, Site Investigator.

DAMB1797 (5-25098), Army Breast Cancer Research Program, “Stereotactic Fluoroscopic Guidance”, 1997-2000, \$299,136, Collaborating Investigator (H.Liu, P.I.)

NIH-NCI Grant - R01-CA70209, “CCD X-Ray Fluoroscopy Using Binary Optical Techniques”, 1997-2000, \$666,526, Collaborating Investigator (H. Lui, P.I.)

#### E. Invited Lectures

### **INVITED LECTURES/ORGANIZATION OF SEMINARS/CME COURSES**

#### LOCAL/INSTITUTIONAL/COMMUNITY (University of Iowa – 2002- ):

1. University of Iowa Postgraduate Surgery Conference, “Digital Mammography”, Nov. 14-15, 2002.
2. Iowa Radiological Society - 2 lectures: “Medical Legal Aspects of Breast Imaging and Intervention” and “Digital Mammography”, Feb 14-15, 2003.
3. University of Iowa, *Review: 2002 San Antonio Breast Cancer Symposium*, Discussion Moderator – “Mammography: The Benefits and Risks of Screening”, Feb. 21, 2003.
4. Health for Your Lifetime: Breast Cancer, Oct.29, 2003.
5. “Obtaining and Managing the Mentoring You Need”. CCOM Faculty Professional Development Conference, October 20, 2004.
6. University of Iowa Carver College of Medicine OB/GYN Postgraduate Conference, “New Advances in Breast Imaging”, Sept. 24, 2004.

7. University of Iowa, CCOM Breast Cancer Symposium, “New (& Emerging) Breast Imaging Modalities”, February 6, 2004.
8. 3<sup>rd</sup> Annual Radiology Postgraduate Seminar & Residents Research Program “The Impact of Residency Experience on Radiology Practice”, April 30, 2005.
9. University of Iowa, *Review of the 2006 San Antonio Breast Cancer Symposium*, Discussion Moderator – “Lecture Series I”, February 16, 2007.
10. University of Iowa, Department of Family Medicine Grand Rounds “Algorithmic approach to breast cancer screening, mammogram reports (the BIRADS system), and approaches to diagnostic breast imaging”, March 2, 2007.
11. Johnson County Medical Society Meeting, “Digital Mammography”, Iowa City, IA, September 5, 2007.
12. Marengo Women’s Health Community Group Meeting, “Breast Cancer Awareness”, Marengo, IA, October 20, 2007.
13. Iowa Radiological Society Meeting - An Imaging Review, “Breast MRI”, November 2, 2007
14. University of Iowa, Review of the 2007 San Antonio CCOM Breast Cancer Symposium, “Radiology Update for Breast Cancer”, February 29, 2008.
15. University of Iowa, CCOM Refresher Course for the Family Physician, “Breast Imaging Decisions in Primary Care,” April 3, 2008.
16. Stony Brook, State University of New York, 20<sup>th</sup> Annual Conference on Mammography and Other Breast Imaging, September 27, 2008

LOCAL/INSTITUTIONAL (Johns Hopkins Medical Institutions – 1999-2002):

1. Department of Radiology and Radiological Science Division of Ultrasound 28<sup>th</sup> Annual Conference “Diagnostic Ultrasound and Gynecology and Abdomen”, Course Faculty. Lecture: “Sonography of the Breast”. Baltimore, MD, September 18, 1999.
2. The Maryland Radiological Society, Spring Scientific Session. “Sonographic Breast Imaging and Intervention”. Annapolis, MD, May 6, 2000.
3. Dean’s Lecture. Advances in the Diagnosis and Therapy of Breast Carcinoma Through Imaging. April, 2001.

LOCAL/INSTITUTIONAL (University of Virginia – 1995-1999):

1. Department of Radiology, University of Virginia, Course Faculty “Practical Radiology - 18th Annual Postgraduate Course”. Charlottesville, VA, October, 1995.
2. Postgraduate Course, Cancer Center, University of Virginia, Current Approaches and Cancer Surgery: A Case Management Discussion. “Core Biopsy Procedures in Mammography”. Charlottesville, VA, November 1995.
3. The UVA School of Medicine Faculty Retreat on Research “Paradigms for Translational Research in Medical Imaging”. White Sulphur Springs, WV, January 1996.
4. University of Virginia 1996 OB/GYN Postgraduate Course, “Breast Cancer Screening: Controversies & Innovations”. Charlottesville, VA, April 1996.
5. UVA Cancer Center Breast Cancer Working Group Research Retreat, “Basic Clinical & Translational Research in Breast Cancer Imaging”. Charlottesville, VA, May 1996.
6. UVA: Ladies Home Journal Project: Free Health Screenings. October 25, 1997.
7. Virginia Chapter of the American College of Radiology Annual Meeting. “Update: Interventional Mammography”. Charlottesville, VA, May 2, 1998.
8. Virginia Breast Cancer Education Conference. “The Use of Digital Mammography and Breast MRI in the Early Detection of Breast Cancer.” Richmond, VA. October 5, 1998.

[14 local/institutional invited lectures: University of Arizona, Tucson, AZ 1989 - 1994]

NATIONAL & INTERNATIONAL INVITED LECTURES & WORKSHOPS (Since 1993):

[17 invited lectures, 1988 - 1992]

18. Presented to the San Diego Radiologic Society, "Breast Cancer Screening: The Need to Bridge the Gap Between Clinical Epidemiology and Diagnostic Radiology." San Diego, CA, February 1993.
19. University of Colorado School of Medicine Breast Imaging Course. "Breast Imaging and Intervention into the 21st Century". 3 Lectures. Colorado Springs, CO, July 1993.
20. Seventh Annual University of Washington School of Medicine Imaging Conference (2 lectures). Coer d'Alene, ID, July 1993.
21. Co-Facilitator - Accreditation Bodies - CDRH/FDA Conference, "Implementing the Mammography Quality Standards Act of 1992: Roles in Improving Mammography Services." Reston, VA, September 1993.
22. The University of Wisconsin Breast Imaging Review Course. 3 Lectures. Madison, WI, October 1993.
23. 22nd Annual Maricopa Medical Center Radiology Seminar: "Breast Diseases and Breast Imaging". 3 Lectures. Phoenix, AZ, November 1993.
24. The Radiological Society of North America 79th Annual Scientific Assembly and Annual Meeting. Introduction to Research Course. "How to Find an Academic Job Where You Can Do Research." Chicago, IL, December 1993.
25. Western Pennsylvania Hospital Symposium on Interventional Procedures for Breast Care. 3 lectures. Fajardo, PR, February 1994.
26. The 18th Annual University of Wisconsin Big Sky Radiology Conference. 4 lectures. Big Sky, MT, February 1994.
27. University of California, San Diego, "UCSD Women's Imaging Symposium". 2 Lectures. San Diego, CA, March 1994.
28. Indiana University School of Medicine "1994 Symposium on Breast Imaging". 3 Lectures. Indianapolis, IN, March 1994.
29. American Roentgen Ray Society - 1994 Introduction to Research Course, "Technology Assessment." New Orleans, LA, April 1994.
30. Lovelace Clinic Foundation Breast Imaging Course. 4 Lectures. Sante Fe, NM, September 1994.
31. Conference on Developing Long-Term Plan for Imaging Research. Sponsored by NIH. Section Leader - The Breast. Bethesda, MD, November 1994.
32. 80th Scientific Assembly. Radiological Society of North America, "Digital Mammography" - InfoRAD Exhibit. Chicago, IL, November 1994.
33. 80th Scientific Assembly. Radiologic Society of North America - Refresher Course. "The Role of Breast Imaging in the Conservative Treatment of Breast Cancer." Chicago, IL, December 1994.
34. 80th Scientific Assembly. Radiologic Society of North America Introduction to Research Course, "Technology Assessment & Outcomes Research." Chicago, IL, November 1994.
35. University of California, San Francisco, "A Practical Approach to Breast Imaging". 5 lectures. Maui, HI, December 1994.
36. Michigan State University Atis K. Freimanis Radiology Visiting Professor. East Lansing, MI, March 1995.

37. Visiting Professor - Radiology Grand Rounds, Univ. of Wisconsin. Madison, WI, March, 1995.
38. Society of Breast Imaging Meeting and Postgraduate Course. 2 lectures. Orlando, FL, May, 1995.
39. University of Washington/Sacred Heart Medical Center. Ninth Annual Summer Radiology Meeting. 3 Lectures. Coeur d'Alene, July 1995.
40. International Meeting on Outcomes Research and Cost Effectiveness in Radiology, "Cost Effectiveness of Stereotactic Breast Needle Biopsy." Oxford, England, August 1995.
41. 1995 University of Wisconsin Breast Imaging Seminar Mammography Update – 1995. 3 Lectures. Madison, WI, September 1995.
42. Middle Tennessee Mammography Society Mammography Symposium. 3 Lectures. Nashville, TN, October 1995.
43. Memorial Sloan Kettering Breast Imaging Seminar. 3 Lectures, 3 Workshops. New York, NY, October 1995.
44. Introduction to Research Course Radiological Society of North America, "Introduction to Technology Assessment." Chicago, IL, November 1995.
45. University of Michigan Postgraduate Radiology Course, 5 Lectures. Snowmass, CO, March, 1996.
46. Faculty, Small Group Session Leader: Picker-AUR Faculty Development Program. The Association of University Radiologists 44th Annual Meeting. Birmingham, AL, April 1996.
47. Director/Coordinator: 1996 AUR Imaging Research Symposium. The Association of University Radiologists 44th Annual Meeting. Birmingham, AL, April 1996.
48. Director/Coordinator: RSNA Categorical Course, Radiologic Society of North America, Annual Meetings, "Introduction to Research." Chicago, IL, 1996-1999.
49. New Frontiers in Image-Guided Breast Cancer Diagnosis U.S.D.H.H.S./NCI, "Image-Guided Needle Biopsy." Washington, DC, May 1996.
50. 3rd International Workshop on Digital Mammography, "Clinical Potential of Digital Mammography." Chicago, IL, June 1996.
51. DOD-NIH Mobile Breast Care Center Meeting, Bethesda, MD, August, 1996
52. Speaker, NCI Breast FNA Conference, Bethesda, MD, September, 1996
53. 1996 Stanford Symposium on Breast Imaging, 3 lectures, 2 workshops. Tysons Corner, VA, October 1996.
54. Breast & Chest Imaging Update, 4 lectures, 1 workshop. Palm Beach, FL, October 1996.
55. Academy of Radiology Research/Radiological Society of North America Grantsmanship Workshop, "Experiment Design for Clinical Research." Washington, DC, October 1996.
56. Radiological Society of North America 82nd Scientific Assembly & Annual Meeting, Moderator & Panel Participant, Special Focus Session, "Digital Mammography. Is It For You?" Chicago, IL, December 1996.
57. Charleston, West VA Cancer Center Symposium, "Stereotactic Breast Needle Biopsy." Charleston, WV, February 1997.
58. LSU/Tulane Radiology Course, 4 Lectures. Vail, CO, February 1997.
59. University of Minnesota Radiology Course, 5 Lectures. Beaver Creek, CO, March 1997.
60. Visiting Professor - University of Maryland, March 18, 1997.
61. Faculty and Small Group Session Leader: Picker-AUR Faculty Development Program. The Association of University Radiologists 45th Annual Meeting. Dallas, Tx, April 1997.
62. RSNA Advanced Course in Grant Writing. "Characteristics of a Productive Research Environment". Chicago, IL, April 25, 1997.
63. The New York Roentgen Society, Spring Conference. "Digital Breast Imaging". New York, NY, May 3, 1997.

64. The Hawaiian Radiologic Society 14th Annual Meeting: Imaging Update. 3 lectures. Big Island, Hawaii, May 24-26, 1997.
65. Speaker, NCI Breast Cancer Progress Review Group. Washington, D.C., May 27, 1997
66. Speaker, NCI Workshop: "Oncologic Imaging in Treatment Planning". Washington, D.C., September 25-26, 1997.
67. Panel Member & Subcommittee Co-Chair: "Early Detection/Diagnosis/Risk Assessment", NCI Breast Cancer Progress Review Group. Baltimore, MD, September 14-16, 1997.
68. Speaker, NIH/NCI Workshop: "Imaging in Treatment Planning". Reston, VA, Sept. 25-26, 1997.
69. Sociedad Chilena de Mastologia. 5 lectures; 1 panel. Santiago, Chile, September 28-30, 1997.
70. Ninth Annual Conference on Mammography: Interpretation & Technique. 5 lectures. Long Island, NY, October 4, 1997.
71. Second Annual Multi-Disciplinary Breast Cancer Symposium. 1 lecture. Syracuse, NY, October 24, 1997.
72. The Department of Defense Breast Cancer Research Program Meeting: "Era of Hope". Keynote Talk: "Frontiers in Prevention & Detection:.". Washington, DC, October 31-November 4, 1997.
73. 83rd Scientific Assembly & Annual Meeting of the Radiological Society of North America. Special Focus Session: "Breast MR Imaging". Chicago, IL, December 2, 1997.
74. Solving Problems in Diagnostic Radiology. Sponsored by UCSF, 5 lectures. San Juan, Puerto Rico, January 25-30, 1998.
75. SPIE - 1998. "Breast Imaging for the Medical Physicist", workshop, San Diego, CA, Feb, 1998.
76. Diagnostic Imaging Grand Rounds - Brown University, Rhode Island Hospital. Providence, RI, March 2, 1998.
77. The Association of University Radiologists 46<sup>th</sup> Annual Meeting. Joint Symposium on Breast Imaging, "Digital Mammography". Breast CME Course - 1 lecture. Picker Young Faculty Development Program - 2 workshops. New Orleans, LA, March 25-29, 1998.
97. American College of Radiology, Introduction to Grantsmanship workshop: "Experimental Design for Clinical Studies". Washington, DC, May 15-16, 1998.
98. Michigan State Medical Society. "Digital Mammography". Grand Rapids, MI, October 23, 1998.
99. Mammography Issues for the 90's. Breast Imaging Symposium for Mammographers. 2 lectures. Grand Rapids, MI, October 24, 1998.
100. State of Michigan/Michigan Physicians Mutual Liability Co. Breast Cancer Conference. "Make Breast Cancer the Target: Lower Morbidity, Lower Mortality, Lower Liability." Detroit, MI, November 11, 1998.
101. 84<sup>th</sup> Scientific Assembly & Annual Meeting of the Radiological Society of North America. Introduction to Research Course – "Integrity in Scientific Investigation". Chicago, IL, December 1, 1998.
102. Louisiana State University/Tulane Radiology Mardi Gras Meeting. 5 lectures. Park City, Utah, February 14-19, 1999.
103. University of Minnesota Radiology Course, 4 Lectures. Beaver Creek, CO, Feb 27-Mar 3, 2000.
104. World Class Mammography: Imaging, Intervention, Innovation. Course Faculty. "Digital Mammography". Washington, DC, Apr 30-May 2, 2000.
105. Maryland Radiological Society – Breast Refresher Course – May 6, 2000.
106. Medical Technology Management Institute. The Physics of Mammography – 2000. "Stereotactic Biopsy Procedures. Part I: Technical Considerations for the Physicist. Part II:

- Clinical Perspective on Stereotactic Biopsy Procedures. Washington, DC. May 7, 2000.
107. AGOS Meeting. Invited speaker: “Breast Diseases and Breast Imaging”, Williamsburg, VA, Sept. 9, 2000.
  108. Society of Health Services in Radiology (SHSRR) 2000 Annual Meeting Scientific Session, “Breast Cancer Screening: Lessons Learned”. Oct.16, 2000, Washington, D.C.
  109. Breast Imaging in the Year 2000. 3 lectures. Naples, FL, Nov. 6-9, 2000.
  110. 23<sup>rd</sup> Annual San Antonio Breast Cancer Symposium. Plenary Speaker. “Digital Mammography”. Dec. 9, 2000.
  111. 22<sup>nd</sup> New Orleans Radiology Society Spring Conference. 3 lectures. New Orleans, LA, April 24-28, 2001.
  112. AAMI 2001. Session Chair: “Advanced Imaging Systems for Breast Cancer Detection and Therapy”. Lecture: “Digital Breast Imaging”. Baltimore, MD, June 9-12, 2001.
  113. Breast Imaging in the Year 2001. 3 lectures. Naples, FL, July 11-15, 2001.
  114. Society of Health Services in Radiology (SHSRR) 2001 Annual Meeting. “Radiology Outcomes Research Primer: Screening”. San Diego, CA, October 18-20, 2001.
  115. 7<sup>th</sup> Annual Puerto Rico Breast Cancer Conference. Sponsor: Puerto Rico Division of the American Cancer Society. 3 lectures. San Juan, Puerto Rico, October 12-14, 2001.
  116. 87<sup>th</sup> Scientific Assembly & Annual Meeting of the Radiological Society of North America. Introduction to Research Course – “Career Development and Advancement in Academic Radiology”. Chicago, IL, November 25-30, 2001.
  117. 7<sup>th</sup> Annual Multidisciplinary Symposium on Breast Disease. Amelia Island, FL, Feb. 14-15, 2001.
  118. European Congress of Radiology 2002. Special Focus Session – “Digital Mammography”. Vienna, Austria, March 1-5, 2002.
  119. Snowmass 2002: Clinical Mammography. 5 lectures. Snowmass, CO, March 10-15, 2001.
  120. Participant. RSNA Revitalizing the Radiology Research Enterprise Meeting. RSNA Research and Development Committee. Oak Brook, IL, March 22, 2002.
  121. World Class Breast Imaging: Advances in Diagnosis and Intervention. “Digital mammography: Present and Future”. Washington, DC, May 12-14, 2002.
  122. Second Annual Karmanos Cancer Institute Breast Cancer Symposium, “New Advances in Breast Cancer Detection”, Sept 14, 2002, Detroit, MI
  123. Michigan State University Academic Radiology Symposium. “Synergy Between Academia and Industry”, Sept.6, 2002, East Lansing, MI.
  124. 88<sup>th</sup> Scientific Assembly & Annual Meeting of the Radiological Society of North America. Introduction to Research Course – “Ethical Issues in Clinical Research”. Chicago, IL, November 2002.
  125. Sociedad Mexicana De Radiologia E Imagen, A.C. 4 Lectures, Mexico City, Mexico, Feb 2-5, 2003.
  126. Association of University Radiologists 51<sup>st</sup> Annual Meeting, “The GERRAF Experience”; Faculty: Philips-AUR 2003 Academic Faculty Development Program. Apr. 9-13, 2003, Miami, FL.
  127. Loma Linda University, “World Class Breast Imaging”, 2 lectures, May 11-12, 2003, Washington D.C.
  128. Loma Linda University, “World Class Breast Imaging”, 2 lectures, July 27-29, 2003, Vancouver, B.C.
  129. Detroit Breast Cancer Symposium. Invited Speaker, 9/1-9/3, 2003, Detroit MI.
  130. Third Annual Karmanos Institute Breast Cancer Symposium, Invited Speaker, “Current Issues in Breast Imaging”, 9/20-9/21, 2003, Dearborn, MI
  131. University of Wisconsin Breast Imaging Course. Invited Speaker. 3 lectures, 10/16-10/17, 2003, Madison, WI.

132. 89<sup>th</sup> Scientific Assembly & Annual Meeting of the Radiological Society of North America. Introduction to Research Course – “Presenting Scientific Research”. Chicago, IL, November 25-30, 2003.
133. Loma Linda University, “National Diagnostic Imaging Symposium”, 2 lectures, Dec. 7-11, 2003, Orlando, FL.
134. Educational Symposia, Inc., “Cooper 2004: Clinical Mammography”, 4 lectures, Feb. 8-13, 2004, Copper Mountain, CO.
135. 90<sup>th</sup> Scientific Assembly & Annual Meeting of the Radiological Society of North America. Introduction to Research Course – “Presenting Scientific Research”. Chicago, IL, November 28-Dec3, 2004.
136. “Bringing Innovation to Health Care Through Imaging”. Talk given at Siemens Medical, Erhlangen, Germany Mar. 8, 2005.
137. Grand Rounds: Columbia University “Engaging Institutional Leadership: The Importance of Faculty Mentoring”, April 6, 2005.
138. “Screening for Breast Cancer”. Presented at Harbin Medical University, Harbin, China Aug. 6, 2005.
139. VIII Ulusal Meme Hastalıkları Kongresi (8<sup>th</sup> Nat’l Breast Congress); Istanbul, Turkey, Sept 21-24, 2005.
140. Atis K. Freimanis Radiology Visiting Professor Program, 4 Lectures, Nov. 8, 2005, Lansing, MI
141. Northwest Radiology Network, “Breast Imaging: Digital mammography, Computer-Aided Detection & MRI”, Nov. 18, 2005, Indianapolis, IN.
142. Snowmass Clinical Mammography Conference, “Digital Mammography”, March 10, 2006, Snowmass Village, CO.
143. AUR Annual Meeting, “How a Chair can help your career (panelist)”, April 6, 2006
144. 7<sup>th</sup> Annual Workshop, “Early Detection of Breast Cancer Using MRI”, July 27, 2006, East Lansing, MI.
145. Breast Imaging Update, 4 lectures, Aug 11-18, 2006, Taiwan
146. 26<sup>th</sup> Annual Breast Imaging Conference, “Developing a Business Plan for Incorporating Breast MRI in your Department”, Digital Mammography: How to Make it Work in your Department”, Sept. 28-30, 2006, Las Vegas, NV.
147. National Diagnostic Imaging Symposium, Dec. 3-7, 2006, Loma Linda University, Lake Buena Vista, FL
148. Big Sky Radiology Conference, 4 Lectures, Jan. 26-27, 2007, Big Sky, MT
149. Review of the 2006 San Antonio Breast Cancer Symposium, Lecture Series I (moderator), The University of Iowa, February 16, 2007.
150. The Breast Cancer Symposium, “Imaging in Breast Screening (MRI)”, March 3, 2007, Troy, MI
151. Society of Breast Imaging – 8<sup>th</sup> Postgraduate Course, “Optimizing the Transition to Digital”, April 14-17, 2007, Hollywood, FL
152. American Society of Breast Surgeons, “All women with a diagnosis of breast cancer should have an MRI”, “Panelist”, May 3-5, 2007, Phoenix, AZ
153. Loma Linda University “World Class Breast Imaging Conference”, 3 Lectures, May 19-21, 2007, Atlanta, GA
154. 2007 Pittsburgh Breast Imaging Seminar, 4 Lectures, August 3-5, 2007, Pittsburgh, PA
155. Diagnostic Radiology Grand Rounds, “Digital Mammography,” University of Maryland, Feb. 20, 2008
156. 61<sup>st</sup> Annual Cancer Symposium, “Imaging Studies for Local-Regional and Systemic Assessment”, March 13, 2008, Chicago, IL
157. Co-Chair Department of Defense, Breast Cancer Research Program Meeting,, Era of Hope,

“Concurrent Symposia Sessions III”. Baltimore, MD, June 25-28, 2008

F. Pending decisions (grant proposals, book contracts)

**GRANTS/FUNDED RESEARCH –Pending**

PENDING

1.(Madsen) calendar US Department of Health & Human Services/NIH Abnormality Manipulation for Tomographic Imaging Perception Research	7/1/06 – 6/30/09 \$250,000	0.60
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The major goal of this project is to: Develop software for the removal and insertion of abnormalities in medical imaging studies. This will allow the generation of control and target image sets for image perception and computer aided detection research.

2.Eastman Kodak calendar Eastman Kodak Co. Mammography Computer Aided Detection	7/1/07 – 6/30/08	0.12
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The objective of this investigation is to obtain digital data for developing the algorithms required for the development and testing of Kodak Computer Aided Detection (CAD) System.

**IV. SERVICE**

A. Memberships in Professional Organizations

**JOURNAL EDITORSHIP AND REVIEWER STATUS**

Journal of the American Medical Association

Reviewer, 1995 -

Academic Radiology (successor to Investigative Radiology)

Associate Editor, 1997 -

Deputy Editor, 1994-1997

Member, Editorial Executive Committee, 1994 -

Investigative Radiology

Associate Editor, 1993-1994

Editor, 1989-1993

Member, Editorial Executive Committee, 1993-1994

Radiology - Reviewer, 1995 -

American Journal of Roentgenology -

Member, Editorial Advisory Panel, 1998

The Breast Journal

Editorial Board Member, 1997 -

Reviewer, 1992 -1996

Medical Physics - Reviewer, 1996 -

Cost-Effective Medicine Reports - Associate Editor, 1995-1996

Medical Directions - Member, Editorial Board, 1994-1995  
Journal of Adolescent Health - Reviewer, 1992-1995

Western Journal of Medicine - Reviewer, 1990-1996  
Survey of Anesthesia - Reviewer, 1989 – 1994  
Journal of Women's Imaging  
Editorial Board Member, 2001-  
Reviewer, 2000-  
Editor's Certificate of Recognition, 2001, 2002  
Archives of Internal Medicine - Reviewer, 1992 -  
Radiographics - Health Policy Section - Reviewer, 1993 -

Frontiers in Bioscience - Editorial Board Member, 1995 – 2002

Preventive Medicine - Reviewer, 1997 –  
Journal of the American College of Radiology, Member, Editorial Board, 2003-

## **PROFESSIONAL SOCIETIES**

Iowa Radiological Society, 2002-  
Johnson County (IA) Medical Society, 2002-  
Society of Chairmen of Academic Departments, 2002-  
AMA Women Physicians Congress, 1996 -  
American Medical Association, 1996 -  
Society of Health Services Research in Radiology, (renamed Radiology Alliance for Health Service Research in 2002), 1996 -  
European Society of Mastology, 1991 -  
Society of Breast Imaging, Member (Fellow 1995), 1990 -  
American College of Radiology (Fellow 1997), 1990 -  
Association of University Radiologists, 1989 -  
American Association of Women Radiologists, 1987 -  
Radiological Society of North America, 1984 -  
American Roentgen Ray Society, 1987 - 1994  
Arizona Radiological Society, 1985 - 1994

## **SERVICE**

### STATE OF IOWA

- President, Iowa Radiological Society Iowa Chapter, 9/2006 – 10/08
- Member, Community Leadership Program, 2006-07
- Member, Board of Directors, Biosciences Alliance of Iowa 2005
- President Elect, Iowa Radiological Society, 2005
- Member, Battelle Platform Committee, 2004
- Academic Leader, Univ of Iowa Hosted Battelle Platform – Imaging
- Chair, External Advisory Board for the Iowa Biomedical Imaging Institute, 2007

### UNIVERSITY OF IOWA HOSPITALS AND CLINICS

- Member, Senior Executive Leadership Committee, 2002
- Member, University Hospital Advisory Committee, 2002-
- Member, Strategic Planning Subcommittee, 2002
- Member, Hospital Information Systems Advisory Subcommittee, 2002-

- Member, Advisory Board, *Currents*, 2003-
- Member, New Technology Advisory Committee (NTAC), 2003-
- Member, Search Committee Chief Financial Officer, 2003
- Member, Excellent Service Tactical Planning Committee, 2004-2005
- Member, Holden Comprehensive Cancer Center, 2004
- Member, Steering Committee, Institutional Leadership Development Program (ILDLP), 2005
- Member, UIHC/CCOM Committee on Joint Planning for Clinical Services, 2005
- Member, UIHC Strategic Plan Task Force, 2004-2005
- Vice Chair, UIP Compliance, Credentialing and Malpractice Committee, 2006

#### UNIVERSITY OF IOWA COLLEGE OF MEDICINE

- American Medical Women's Association (AMWA) Mentor, 2002-
- Member, Affiliation Partnership Council (Veterans Administration Medical Center), 2002-
- Member, Faculty Practice Plan Board, 2002-
- Member, Medical Council, 2002-
- Member, Search Committee Head Emergency Room, 2002
- Member, Senior Executive Leadership Group, 2002-
- Member, Multidisciplinary Vascular Service Working Group, 2002-2004
- Chair, Search Committee, Associate Dean for Faculty Affairs, 2003
- Doris Duke Clinical Research Fellowship Program Mentor, 2003
- Interviewer, Doris Duke Clinical Research Fellowship Applicants, 2003, 2004, 2005,
- Member, Board of Directors, Iowa Medical Mutual Insurance Company (Faculty Practice Plan Committee Liability Insurance Company), 2003-
- Member, COM Executive Committee, 2003-
- Member, Compensation Plan Task Force, 2003
- Member, Search Committee Head, Internal Medicine, 2003
- Member, Steering Committee, Assessment of CCOM Allocation of General Funds, 2003-
- Member, COM Ad Hoc Committee on Revision of the COM Manual of Procedure, 2003
- Secretary, Medical Council, 2003-
- Member, Graduate Student Thesis Committee for Lina Aurbach, 2003-2006
- Chair, CCOM Planning Committee, 2004-05
- Chair, CCOM Strategic Planning Subcommittee – Leadership: Communication/Collaboration Design Team, 2004-05
- Member, CCOM Distinguished Alumni Award Committee, 2004
- Member, CCOM Medical Student Appeals Committee, 2004
- Member, Clinical Cancer Center Advisory Subcommittee, 2004
- Reviewer, HCCC CCSG Translational Seed Grant Applications, 2004
- Co-Chair, UIP Compliance, Credentialing and Malpractice Committee
- Member, Board of Directors, University Physicians Incorporated, 2006
- Member, Graduate Student Thesis Committee for Lina Arbach, 2005-2007
- Member, Graduate Student Thesis Committee for Kai Zeng, 2005-2007
- Member, Search Committee, Associate Vice President for Human Resources, 2008
- Subcommittee Member, Developing Off-Site Ambulatory Care Facility Plans, 2008

#### UNIVERSITY OF IOWA, DEPARTMENT OF RADIOLOGY

- Chair, Department of Radiology Executive Committee, 2002-
- Chair, Department of Radiology Administration Committee, 2002-
- Chair, Department of Radiology Finance Committee, 2002-
- Chair, Radiology Network Migration Committee, 2002-
- Chair, Radiology PACS Tactical Committee, 2002-
- Member, Radiology Education Roundtable, 2002-
- Member, Radiology Research Committee, 2002-
- Member, Radiology Professional Conduct Committee, 2002-

#### JOHNS HOPKINS MEDICAL INSTITUTIONS:

- Member, School of Medicine Search Committee – Osler Chair of Medicine, 2000-
- Member, Dept. of Surgery Search Committee – Chief, Breast Service/ Breast Surgical Oncology, 2001
- Member, Department of Radiology Promotions Committee, 2000-2002
- Member, Women’s Leadership Council, Johns Hopkins School of Medicine, 2000-2002
- Department of Radiology Vice Chair, Clinical Research, 1999-2002
- Head, Breast Imaging & Intervention, 1999-2002
- Member, Executive Committee, The Russell H. Morgan Department of Radiology and Radiological Science, 1999-2002
- Co-Chair, Research Committee, The Russell H. Morgan Department of Radiology and Radiological Science, 1999-2002
- Member, Space Committee, The Russell H. Morgan Department of Radiology and Radiological Science, 1999–2002
- Member, Research Committee, The Russell H. Morgan Department of Radiology and Radiological Science, 1999-2002
- Member, Search Committee to recruit joint Radiology/Biomedical Engineering Faculty, 1999-2000
- Member, Radiology Information Technology Steering Committee, 1999-2002
- Chair, Gatewood Research Fellowship Committee, 1999, 2000, 2001
- Participant, Johns Hopkins Medical & Surgical Biennial, June 1999
- Co-Director, Susan G. Komen Comprehensive Breast Cancer Clinical Fellowship Program (trains 3-4 post-graduate, multi-disciplinary fellows per year), 1999-2002

#### UNIVERSITY OF VIRGINIA SCHOOL OF MEDICINE:

- Member, University of Virginia Faculty Promotions & Tenure Committee, 1997 – 1999
- Mentor, Office of African-American Affairs, University of Virginia Mentoring Program, 1997- 1998
- Chair, School of Medicine Committee on Women, University of Virginia, 1997 - 1999
- School of Medicine Committee on Women, University of Virginia, 1994 - 1996
- Subcommittee on Spousal Placement, (Committee on Women), University of Virginia, 1994 - 1998
- Member, UVA LCME Self Study Task Force, Subcommittee on Research, 1997
- University of Virginia - National Science Board Panel on Stakeholders in Research, 1996
- School of Medicine Research Retreat Participant, 1996
- University of Virginia Cancer Center, Breast Program Organizational Committee, University of Virginia, 1994 – 1999
- Member, Site Visit Review Committee for School of Medicine MSTP Training Program, 1998

- Head, Department of Radiology, University of Virginia, Research Committee, 1994 - 1999
- Executive Committee, Department of Radiology, University of Virginia, 1994 - 1999
- Head, Research Division Search Committee: Ph.D. Physicist & Psychophysicist Positions, 1994
- University of Virginia Health Sciences Center Strategic Planning Committee; Research Programs Task Force, 1994 - 1995
- Incentive Committee, Department of Radiology, University of Virginia, 1995 - 1996
- Member, Advisory Board, Academic Enhancement Program for Advanced Medical Imaging Technology, 1995

UNIVERSITY OF ARIZONA (selected):

- Faculty Senate, University of Arizona, 1992 - 1994
- Member, University of Arizona Commission on the Status of Women, 1992 - 1994
- Dialogue and Reception Committee, Arizona Association of Chicanos for Higher Education, University of Arizona Chapter, 1991 - 1994
- Head, Department of Radiology Resident Research Committee, University of Arizona, 1991 - 1994
- Head, Department of Radiology Research Fund Committee, University of Arizona, 1990 - 1994
- Continuing Medical Education Committee, University of Arizona, 1992 - 1994
- Member, University of Arizona Continuing Medical Education Committee, 1993 - 1994
- Medical Student Research Committee, University of Arizona, 1991 - 1994
- Director, Medical Student Radiology Rotation, University of Arizona, 1992 - 1994

NATIONAL AND INTERNATIONAL (Government or Radiology-Related):

Academy for Radiology Research

- Member, Biomedical Engineering Committee, 2002-

Agency for Health Care Policy & Research

- AHCPR/HCFA Guideline Panel for Quality Determinants in Mammography, 1992 - 1993

American Association for Women Radiologists

- Chairman, Ad Hoc Resident Committee, 1990 - 1992
- Nominating Committee, 1992 - 1993
- Corporate Support Committee, 1995 - 1999
- Mentoring Committee, 1995 - 1999
- Co-Chair, Committee on Promoting the Advancement of Women, 2005-
- Executive Committee Member to Promote the Advancement of Women in Radiology, 2008

American College of Radiology

- ACR/AMA Ad Hoc Expert Panel for Estimating Physician Relative Work Values for Breast Core Biopsy, 1993 - 1994
- ACR-ACOS Joint Committee, Issues Relating to Imaging-Guided Breast Biopsy, 1996
- Committee on Judicial Affairs, Arizona Radiological Society, Chapter of American College of Radiology, 1993 - 1994
- Legislative Committee, Arizona Radiological Society, Chapter of American College of Radiology, 1993 - 1994
- Member, ACR Task Force - ACR Standard for the Performance of Whole Breast Digital

Mammography, 2001

- Member, Commission on Research & Technology Assessment, 1997-2001; reappointed 2002
- ACR representative, AMA House of Delegates, 2000-2001, reappointed 2002.

American College of Radiology Oncology Imaging Network

- Vice Chair, Media and Publications
- Chair, Committee on Publications and Media, 1998-
- Member, Executive Committee, 1998-
- Member, Research Strategy Committee, 1998-
- Member, Breast Modality Committee, 2000-

American Joint Committee on Cancer

- Member, AJCC Staging System work group and Best Stage Task Force, 1998 -2004

American Medical Association

- Diagnostic and Therapeutic Assessment (DATTA) Program Panel: Image-Guided Breast Biopsy, 1995

Association of University Radiologists

- Gold Medal Committee, 1994
- Member, AUR Editorial Executive Committee, 1994-
- Member, Scientific Program Committee, 1996 -
- Chair, Membership Committee, 1996-1997
- Secretary-Treasurer, AUR, 1996-1997
- Chair, Corporate Fund Raising Ad Hoc Committee, 1997-1998
- Chairman, Program Committee, 1998-1999
- Member, AUR Awards Committee, 1998-1999
- Vice President, AUR, 1997-1998
- Ad Hoc Committee, Research & Education Foundation, 1997 –1998
- President Elect, AUR, 1998-1999
- AUR representative to the AAMC Council of Academic Societies, 2003, 2004, 2005, 2006
- Member, AUR Development Committee (formerly Corporate Support Committee), 2004
- Member, AUR Executive Committee, 1994 -1997, (2nd term) 1997-2000, (third term) 2000-2003
- Member, Board of Directors, AUR Research & Education Foundation, 1998-2005
- Member, Corporate Support Committee, 1998-2004
- President, AUR, 1999-2000
- Member, Nominating Committee, 2003, 2004, 2005, 2006
- Member-at-Large, AUR Board of Directors (formerly Executive Committee) 2004-2007
- Member, AUR Board of Directors, 2007-2008
- President, AUR R&E Foundation, 2006-2008
- Scientific Program Committee, AUR, 2008
- Member, Ad Hoc Committee, AUR Development, 2008
- Member, Ad Hoc Committee, Editorial Executive, 2008
- Member, Ad Hoc Committee, Nominating, 2008
- R & E Foundation Board, 2008

Association of Program Directors in Radiology

- Member, APDR Board of Directors, 1999-2000

#### American Roentgen Ray Society

- Scientific Program Committee, 1993-1995
- Scientific Abstracts/Reviewer for Annual Meeting, 1992-1995

#### Centers for Disease Control and Prevention

- Consultant on development of video-based self-study program for primary care physicians – “Follow-up of Abnormal CBE and Mammographic Findings”, 1999.

#### European Society of Mastology

- Co-Chairman, Study Group - Detection and Diagnosis, European Society of Mastology, 1991- 1993

#### Food and Drug Administration

- Center for Devices and Radiological Health, Federal Advisory Committee, Mammography Quality Standards Act (MQSA), 1994-1996

#### GERRAF Board of Review

- Member, Board of Directors, 2006
- Member, 2007

#### Institute of Medicine

- Member, IOM National Cancer Policy Board Committee on Technologies for the Early Detection of Breast Cancer, 1999-

#### Iowa Radiological Society

- Chair, Awards Committee

#### NCI/NIH

- NCI Workshop Participant - Oncologic Imaging in Treatment Planning, Sept. 25-26, 1997
- NCI Breast Cancer Progress Review Panel, 1997-
- NIH Consensus Development Panel: Breast Cancer Screening in Women Ages 40-49, 1997
- NIH/NCI/Conjoint Committee on Diagnostic Radiology - Conference on Developing A Long-Term Plan for Imaging Research, 1994
- Member, NCI Cancer Trials Editorial Board, 1999-
- Member, Diagnostic Radiology Study Section [Surgery, Radiology and Bioengineering IRG], 1998-2001

#### Radiological Society of North America

- Course Director, RSNA/AUR/ARRS “Introduction to Research” Course, 1995–
- Course Faculty, RSNA “Introduction to Grantsmanship” 1996-
- Member, Research and Education Fund, Corporate Advisory Council, 1998-
- Member, RSNA Research and Education Foundation Visionaries Advisory Council, 1999-
- Organizer, Special Focus Session: Digital Mammography, 1996
- Organizing Committee, InfoRad , Digital Mammography Exhibits, Radiological Society of North America, 1994, 1995
- Refresher Course Committee, 1996 - 2004
- Research and Education Fund Scientific Advisor, 1997-

- Member, RSNA Research Development Committee, 2001, 2002
- Member, Research Development Committee, 2002, 2003-(2006)
- Steering Committee Member, Revitalizing the Radiology Research Enterprise
- Member, Corporate Giving Subcommittee, Fund Development Committee 2007-
- Member, RSNA Corporate Giving Subcommittee, 2008

Radiology Quality Society Leadership (RQ)

- Chair, Auditing Committee, 2008

Society of Chairs of Academic Radiology Departments (SCARD)

- SCARD representative to the AAMC, 2003
- SCARD representative to the AAMC, 2008-09

Society for Health Services Research in Radiology

- Steering Committee, 1995-
- Chair, Membership Committee, 1996-

USAMRDC - Army Breast Cancer Research Program

- Scientific Advisory Integration Panel, 1993–1996; reappointed 2002 - 2004
- Co-Chair, Subcommittee on Digital Breast Imaging, 1995-1996

USPHS (Office of Women's of Health)

- Office of Women's Health/NCI Workshop Participant – 1998

Doctoral Thesis Judge: “Procesado Digital En El Domino Espacial de Mamografias” (by Carmen Gonzalez Rivero). Santiago de Compostela, Spain, October 1990.

ADVISORY BOARDS

Member, Medical Advisory Board, The MedWell Group, Inc., Westlake Village, CA., 2001-  
Member, Imaging Advisory Committee, Wellmark Blue Cross Blue Shield, Des Moines, IA 2007

B. Clinical assignments since last promotion (if applicable)

N/A