

**Current Position:** Assistant Professor and Diagnostic Medical Physicist  
Department of Radiology  
Denver Health Medical Center  
University of Colorado Denver  
777 Bannock Street, MailCode 0024  
Denver, CO 80204

**Telephone:** (303) 602-8478

**Education:**

**Ph.D. in Radiological Physics** – (b)(6)  
Department of Radiological Health Sciences  
College of Veterinary Medicine and Biomedical Sciences, Colorado State University

**Clinical Residency in Medical Physics** - (b)(6)  
Department of Radiology, University Hospital  
University of Colorado Health Sciences Center

**Master of Science in Health Physics** - (b)(6)  
Comparative Oncology Unit, Department of Radiological Health Sciences  
College of Veterinary Medicine and Biomedical Sciences, Colorado State University

**Bachelor of Science in Engineering Science** – (b)(6)  
Specialization in Bioengineering  
College of Engineering, Colorado State University

**Current Employment:**

**Assistant Professor**, Department of Radiology,  
University of Colorado Denver – August 2007 to Present

**Diagnostic Medical Physicist and Radiation Safety Officer**, Department of Radiology,  
Denver Health Medical Center – August 2007 to Present

## Previous Employment:

### At Northwestern University Medical School:

**Director of Diagnostic Medical Physics**, Department of Radiology, March 2004 to November 2007

**Research Assistant Professor**, Department of Radiology, Breast Imaging Section, September 2002 to November 2007

**Instructor**, Department of Radiology, Breast Imaging Section, October 1999 to August 2002

### At University of Colorado Health Sciences Center, Department of Radiology:

**Instructor**, Division of Radiological Sciences, October 1998 to October 1999

**Professional Research Assistant**, Division of Radiological Sciences, July 1997 to September 1998

**Resident in Medical Physics**, Division of Radiological Sciences, February 1996 to July 1997

### At Colorado State University:

**Graduate Research Assistant**, Department of Radiological Health Sciences, June 1993 to July 1996

**Research Assistant**, Department of Radiological Health Sciences, August 1990 to May 1993

## Professional Activities:

ACR – **Chair**, Subcommittee on Breast X-Ray Imaging Physics – Committee on Mammography Accreditation of the Commission on Quality and Safety, June 1, 2009 to present

ACR – **Chair**, Subcommittee on Quality Assurance in Mammography – Committee on Mammography Accreditation of the Commission on Quality and Safety, January 16, 2008 to present

ACR – **Member**, Committee on Stereotactic Breast Biopsy Accreditation of the Commission on Quality and Safety, June 1, 2009 to present

ACR – **Member**, Committee on Mammography Accreditation of the Commission on Quality and Safety, November 2, 2007 to present

ACR – **Member**, Committee on Government Relations - Commission on Breast Imaging, June 1, 2006 – present

ACR – **Member**, Committee on Breast Ultrasound Accreditation – Commission on Quality and Safety, June 2003 – May 2008

ACR – **Member**, Subcommittee on Mammography Physics – Commission on Quality and Safety, May 2003 – May 2009

ACR – Breast MRI Accreditation Program Reviewer – November 2010 (b)(6)

ACR - Computed Tomography Accreditation Program Reviewer – November 2002 (b)(6)

ACR – Digital Mammography Accreditation Program Reviewer – March 2003 (b)(6)

ACR - Magnetic Resonance Accreditation Program Reviewer – July 1998 (b)(6)

ACR - Mammography Accreditation Program Reviewer – March 2003 (b)(6)

ACR - Mammography Accreditation Program – Senior Reviewer – March 2006 - Present

ACR - R&F Accreditation Program Reviewer – December 2002 to April 2005 (Program Ended 2005)  
ACR – Stereotactic Breast Biopsy Accreditation Program Reviewer – May 2003 (b)(6)  
Radiation Safety Subcommittee – IRB, Northwestern University – July 2004 to November 2007

### **Professional Societies and Organizations:**

American Association of Physicists in Medicine – May 1995  
American College of Radiology – January 1999  
Health Physics Society – January 1994  
Radiological Society of North America – May 2000  
Society of Breast Imaging – November 1999

### **Honors and Awards:**

RSNA Resident Research Trainee Prize – 2001 – “Clinical Performance Comparison of Full-Field Digital Mammography to Screen-Film Mammography”

### **Certifications:**

Board Certified in Diagnostic Radiological Physics – American Board of Radiology - November 2002, Maintenance of Certification Renewed December 2012  
FDA Full-Field Digital Mammography – Qualified Medical Physicist – January 2000  
MQSA Mammography-qualified Medical Physicist - State of Colorado - December 1998  
MQSA Mammography-qualified Medical Physicist – State of Illinois – March 2000  
Qualified Inspector – Colorado Department of Public Health and Environment, Laboratory and Radiation Services Division. – September 1999 – (b)(6)  
Qualified Expert – Colorado Department of Public Health and Environment, Laboratory and Radiation Services Division. – June 2003 – (b)(6)  
Diagnostic Imaging Specialist – Department of Nuclear Safety, State of Illinois – March 2000  
Registered Medical Physicist – Nebraska Department of Health and Human Services – July 2010 - (b)(6)

### **Grants as Principal Investigator:**

U.S. Army Breast Cancer Research Grant: “Optimization of Technique Factors for Full-Field Digital Mammography and Comparison of Optimized Techniques to Screen-Film Mammography”, (b)(4) direct plus indirect costs, July 1, 1999 to August 19, 2003. Pre-doctoral traineeship grant.

### **Grants as Co-Investigator:**

Colorado Mammography Advocacy Project. “Quality Assurance of CMAP sites and correlation with accuracy data”. August 1, 1998 to July 31, 1999. \$52,000 per year. NIH.

Colorado Mammography Advocacy Project, Subcontract (NCI Grant through AMC Cancer Research Center, Denver, Colorado) PI: R. Edward Hendrick (AMC (b)(6) (b)(6) Subcontract Co-Investigator, 1 April 2000 – 31 March 2005. NIH.

SPORE in Breast Cancer, PI: Craig V. Jordan, Ph.D. Co-Investigator Pilot Project #5, 30 Sept 2000 – 29 Sept 2001. NIH.

Factors Affecting Variability Among Radiologists, Subcontract (through the University of Washington, Seattle, WA), PI: (b)(6) at U. Washington) Subcontract Co-Investigator, (1 Sept 2000 – 31 Aug 2003). USAMC (now called AHRQ).

Physics Evaluation of Digital Subtraction Mammography, Subcontract (through the University of Colorado Health Sciences Center, Denver, CO) PI: (b)(6) (b)(6) Univ. of Colorado), Subcontract Co-Investigator, (1 Oct 2000 – 30 Sept 2002). Susan G. Komen Research Foundation.

ACRIN Digital Mammographic Imaging Screening Trial (NIH/NCI subcontract from ACRIN), PI: (b)(6), (3 June 1999 – 31 December 2003). NIH/NCI.

ACRIN 6666 – Screening Breast Ultrasound in High-Risk Women, PI – (b)(6) QC Physicist – Eric Berns, Ph.D. Subcontract from ACRIN, AVON Foundation, 1/1/04 – 12/31/04

Understanding Variability in Community Mammography, (b)(6) PI – (b)(6) Elmore, MD, Site PI. Eric Berns, Ph.D., Subcontract from University of Washington, 6/1/05 – 5/31/06

### **Committee Publications:**

ACR-AAPM-SIIM Practice Guideline for Determinants of Image Quality in Digital Mammography. Co-Chairs: Kalpana Kanal, PhD and Elizabeth Krupinski PhD. Eric Berns – ACR Member Representative and Comments Reconciliation Committee. October 1, 2012

### **Peer-Reviewed Publications:**

Hendrick RE, Pisano ED, Averbukh A, Moran C, Berns EA, Yaffe MJ, Herman B, Acharyya S, Gatsonis C. Comparison of Acquisition Parameters and Breast Dose in Digital Mammography and Screen-Film Mammography in the American College of Radiology Imaging Network Digital Mammographic Imaging Screening Trial. American Journal of Roentgenology. February 2010;194:362-369

Jackson SL, Taplin SH, Sickles EA, Abraham L, Barlow WE, Carney PA, Geller B, Berns EA, Cutter GR, Elmore JG. Variability of Interpretive Accuracy Among Diagnostic Mammography Facilities. Journal of the National Cancer Institute. June 2009; Vol. 101, Issue 11, Pages 814-827.

Fenton JJ, Taplin SH, Carney PA, Abraham L, Sickles EA, D'Orsi C, Berns EA, Cutter GC, Hendrick RE, Barlow WE, Elmore JG. Influence of Computer-Aided Detection on Screening Mammography Performance. *New England Journal of Medicine*. April 2007; Vol. 356, No. 14, Pages 1-11.

Smathers RL, Wright A, Boone J, Lee L, Berns EA. Augmentation Mammography: Radiation Dose Reduction. *American Journal of Roentgenology*. May 2007; 188.

Berns EA, Hendrick RE, Solari M, Barke LD, Reddy D, Wolfman JA, Segal L, DeLeon P, Benjamin S, Willis L. Digital and Screen-Film Mammography: Comparison of Image Acquisition and Interpretation Times. *American Journal of Roentgenology*. July 2006; 187:38-41

Berns EA. Quality Control for Technologists in Digital Mammography. *Seminars in Breast Disease: Radiologic, Pathologic and Surgical Considerations*. Volume 8, Issue 4, Pages 192-197. December 2005.

D'Orsi C, Tu SP, Nakano C, Carney PA, Abraham LA, Taplin SH, Hendrick RE, Cutter GR, Berns, E, Barlow WE, Elmore JG. Current realities of delivering mammography services in the community: Do challenges with staffing and scheduling exist? *Radiology*, 2005; 235: 391-395

Hendrick RE, Cutter G, Berns E, Nakano C, Egger J, Carney PA, Abraham L Taplin SH, D'Orsi C, Barlow WE, Elmore JG. Community-based screening mammography practice: Services, charges and interpretation methods. *American Journal of Roentgenology*. Feb 2005; 84: 433-438

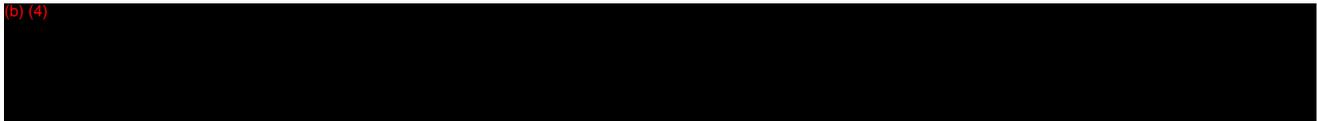
Berns EA, Hendrick RE, Cutter GC. "Optimization of Technique Factors for a Silicon Diode Array Full-field Digital Mammography System and Comparison to Screen-film Mammography with Matched Average Glandular Dose". *Medical Physics*. 30 (3), March 2003

Berns EA, Hendrick RE, Cutter GC. "Performance Comparison of Full-Field Digital Mammography to Screen-Film Mammography in Clinical Practice". *Medical Physics*. 29 (5), May 2002.

Martin MJ, Kraft M, Hong WC, Berns EA, Cassell GH. "A Link Between Chronic Asthma and Chronic Infection". *Journal of Allergy and Clinical Immunology*, Volume 107 (4), April 2001, Pages 595-601.

**Peer-Reviewed Papers To Be Submitted For Publication:**

(b) (4)

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### **Books:**

Hendrick RE, Berns EA. Full-Field Digital Mammography Quality Control Manual. PhantomImage Publishing, January 2001.

### **Book Chapters:**

(b)(6)

Berns EA. "Mammography and Digital Equipment". Breast Imaging 3<sup>rd</sup> Edition, Larry Bassett, Sophia Apple, Mary Mahoney, and Carl D'Orsi. Elsevier Publishing, November 2010.

Hendrick RE, Berns EA. "Artifacts: Mammography, Analog". Diagnostic Imaging: Breast. Berg WA, Birdwell, RL, Amirsys Publishing, December 2006.

Hendrick RE, Berns EA. "Artifacts: Mammography, Digital". Diagnostic Imaging: Breast. Berg WA, Birdwell, RL, Amirsys Publishing, December 2006.

Hendrick RE, Berns EA. "Quality Control in Digital Mammography". Quality Assurance – Society for Computer Applications in Radiology. SCAR University Primer 3. April 2002.

Hendrick RE, Berns EA. "Optimizing the Selection of Film and Film Processing in Screen-Film Imaging." Advances in Film Processing Systems Technology and Quality Control in Medical Imaging, Medical Physics Publishing, December 2000.

Hendrick RE, Berns EA. "Optimizing Techniques In Screen-Film Mammography." Radiological Clinics of North America, Volume 38, Number 4, July 2000.

Hendrick RE, Berns EA. Optimizing Mammographic Techniques. RSNA AAPM syllabus on technological innovation in breast imaging - 1999.

### **Non-Peer Reviewed Publications:**

Hendrick RE, Berns EA. "Image Quality, Dose, and Quality Control in Digital Mammography". Society of Breast Imaging 5<sup>th</sup> Postgraduate Course, May 2001.

## **Presented Abstracts**

Berns EA, Hendrick RE, Barke LD. Comparison of Average Glandular Dose and Image Quality on Four FDA-approved Full-Field Digital Mammography Systems Using Different Automatic Exposure Modes. RSNA 2006

Berns EA, Hendrick RE, Barke LD. Comparison of Image Quality and Average Glandular Dose on Four FDA-approved Full-field Digital Mammography Systems. ARRS 2006

Berns EA, Hendrick RE. Assessment of Image Quality and Dose When Using Breast Cushions During Full-Field Digital Mammography. 16 Annual National Interdisciplinary Breast Center Conference. Las Vegas, March 12-15, 2006.

Jong RA, Umranikar SS, Wolfman JA, Hendrick RE, Berns EA, et al. Performance of CAD on a FFDM System. RSNA 2005

Yaffe M, Jong RA, Wolfman JA, Hendrick RE, Causer PA, Berns EA, et al. Performance of CAD for Pre-screening with Digital Mammography. RSNA 2005

Berns EA, Hendrick RE. Comparison of Average Glandular Dose for Slot-Scanning Full-Field Digital Mammography and Screen-Film Mammography. RSNA 2004

Berns EA, Hendrick RE. Technical Evaluation of Foam Pads for Mammography. AAPM 2004

Hendrick RE, Pisano ED, Yaffe MJ, Berns EA, Moran K, Herman B, Gatsonis C. Comparison of Compression Forces, Compressed Breast Thickness, Doses, and Extra Views in the American College of Radiology Imaging Network (ACRIN) Digital Mammographic Imaging Screening Trial (DMIST). IWDM 2004

Berns EA, Hendrick RE, Cutter GA. Interpretation Time Comparison of Soft-copy Full-Field Digital and Screen-Film in Screening Mammography. IWDM 2004

Berns EA, Solari M, Hendrick RE, Wolfman JA, Willis L, Segal L, DeLeon P, Benjamin S, Reddy D. Comparison of interpretation times for screening exams between soft copy full field digital mammography and hard copy screen-film mammography. ARRS 2004

Hendrick R, Berns E, Gatsonis C, Moran C, Pisano E, Yaffe M. Technical Performance in Digital and Screen-film Mammography: Results from 31 ACRIN DMIST Sites. RSNA 2003

Berns EA, Hendrick RE, Cutter GA. Trends in Image Quality, Patient Dose, and Film Processing in the Colorado Mammography Advocacy Project from 1989 through 2003. RSNA 2003

Berns EA, Hendrick RE. Effect of Foam Pads On Mammography Dose Calculation. AAPM 2003

Hendrick RE, Benjamin S, Kuritza T, Moran K, Berns EA, Wolfman JA, Mendelson EB. Evaluation of Soft Compression Using Foam Pads with Digital Mammography. RSNA 2002

Hendrick RE, Pisano ED, Yaffe MJ, Gatsonis C, Moran C, Berns EA. Evaluation of Technical Parameters Used in a Paired Study of Digital versus Screen-film Mammography. RSNA 2002

Berns EA. Optimization of Technique Factors for a Silicon Diode Array Full-Field Digital Mammography System and Comparison to Screen-Film Mammography with Matched Mean Glandular Dose. Era of Hope 2002 Department of Defense Breast Cancer Research Program Meeting, September 25-28, 2002

Berns EA, Hendrick RE, Cutter GA. Clinical Performance Comparison of Full-Field Digital Mammography to Screen-Film Mammography. RSNA 2001

Hendrick RE, Berns EA. Optimization of technique factors for a silicon diode array full-field digital mammography system and comparison to screen-film mammography with matched mean glandular dose. RSNA 2001

Berns EA, Hendrick RE, Cutter GA, Dignan MA. Mammography Equipment Performance: 10-years of Clinical Site Data from the Colorado Mammography Advocacy Project. RSNA 2000

Martin RJ, Kraft M, Berns EA, Cassell GH. A Link Between Chronic Asthma and Chronic Infection.

Hendrick RE, Berns EA, Chorbajian B, Choi K, Lewin JM, Sisney GA, et al. "Low-contrast lesion detection: comparison of screen-film and full-field digital mammography". Radiology 205(P), 274, 1997 (Abstract).

### **Invited Lectures:**

"Digital Mammography: 2.0". Radiological Society of North America. Chicago, IL. December 1-6, 2013

"Optimizing Your Digital Images". Society of Breast Imaging 11<sup>th</sup> Postgraduate Course, Los Angeles, CA. April 7, 2013.

"Full-Field Digital Mammography QC Manual". Society of Breast Imaging 11<sup>th</sup> Postgraduate Course, Los Angeles, CA. April 6, 2013.

"Update on the ACR's FFDM QC Manual". 2012 American Association of Physicists in Medicine Annual Meeting. Charlotte, North Carolina. August 1, 2012.

"Acceptance Testing and QC Programs, Artifacts, and Troubleshooting". 2012 American Association of Physicists in Medicine Summer School. San Diego, California. June 25, 2012.

- “Parameter, Protocol Optimization, New Technologies and Applications”. 2012 American Association of Physicists in Medicine Summer School. San Diego, California. June 25, 2012.
- “Update on the ACR’s Upcoming FFDM QC Manual”. 2011 Joint American Association of Physicists in Medicine and Canadian Organization of Medical Physicists Annual Meeting. Vancouver, Canada. August 1, 2011.
- “Conducting the Tests in The New Full-Field Digital Mammography QC Manual: What a Tech Needs to Know”. Society of Breast Imaging 10<sup>th</sup> Postgraduate Course, San Antonio, TX. May 21, 2011.
- “The New and Upcoming ACR FFDM QC Program and Manual”. 11<sup>th</sup> Annual Advances in Breast Imaging and Interventions 2010. Stanford University Radiology. Las Vegas, NV. March 4, 2010
- “Quality Control for Digital Mammography: Current and Future”. 11<sup>th</sup> Annual Advances in Breast Imaging and Interventions 2010. Stanford University Radiology. Las Vegas, NV. March 4, 2010
- “Artifacts in Digital Mammography”. 11<sup>th</sup> Annual Advances in Breast Imaging and Interventions 2010. Stanford University Radiology. Las Vegas, NV. March 4, 2010
- “Image Quality Optimization and Radiation Dose in Digital Mammography”. 11<sup>th</sup> Annual Advances in Breast Imaging and Interventions 2010. Stanford University Radiology. Las Vegas, NV. March 4, 2010
- “Digital Mammography Quality Control for Today and the Future”. Colorado Mammography Society. Colorado Springs, CO. September 12, 2009
- “Digital Mammography Quality Assurance: Digital Detector QC, Tips and Problems”. American Association of Physicists in Medicine 51<sup>st</sup> Annual Meeting. Anaheim, CO. July 26-30, 2009
- “Team Approach to Breast Imaging”. Society of Breast Imaging 9<sup>th</sup> Postgraduate Course, Colorado Springs, CO. April 26, 2009
- “Digital Mammography: Equipment and Quality Control”. Radiological Society of North America. Chicago, IL. November 30- December 5, 2008
- “Digital Mammography Quality Assurance: Comparing the Manufacturers Procedures”. American Association of Physicists in Medicine 50<sup>th</sup> Annual Meeting. Houston, TX. July 27-31, 2008
- “Fundamentals and Optimizing Digital Mammography”. ACR 2008 National Conference on Breast Cancer. Orlando, FL. May 8-10, 2008
- “Ultrasound: Physics and Imaging for the Technologist”. ACR 2008 National Conference on Breast Cancer. Orlando, FL. May 8-10, 2008

- “Multimodality Workstations and PACS Storage Solutions for Digital Mammography Workflow”. 9<sup>th</sup> Annual Advances in Breast Imaging and Interventions 2007. Stanford University Radiology. Las Vegas, NV. March 13, 2008
- “Digital Mammography QC for Mammography Technologists”. 9<sup>th</sup> Annual Advances in Breast Imaging and Interventions 2007. Stanford University Radiology. Las Vegas, NV. March 13, 2008
- “Update on Breast Ultrasound Equipment, Accreditation, QC, and Future Technologies”. 9<sup>th</sup> Annual Advances in Breast Imaging and Interventions 2007. Stanford University Radiology. Las Vegas, NV. March 14, 2008
- “Breast Ultrasound Physics”. 9<sup>th</sup> Annual Advances in Breast Imaging and Interventions 2007. Stanford University Radiology. Las Vegas, NV. March 14, 2008
- “Digital Mammography: Equipment and Quality Control”. Radiological Society of North America. Chicago, IL. November 25-30, 2007
- “Digital Mammography Quality Assurance: Comparing the Manufacturers Recommendation”. American Association of Physicists in Medicine 49<sup>th</sup> Annual Meeting. Minneapolis, MN. July 22-26, 2007
- “Digital Mammography QC for Mammography Technologists”. 8<sup>th</sup> Annual Advances in Breast Imaging and Interventions 2007. Stanford University Radiology. Las Vegas, NV. May 4, 2007
- “PACS Equipment Storage Solutions for Digital Mammography”. 8<sup>th</sup> Annual Advances in Breast Imaging and Interventions 2007. Stanford University Radiology. Las Vegas, NV. May 4, 2007
- “Multimodality Workstations: Managing Digital, US, MR Imaging Workflow”. 8<sup>th</sup> Annual Advances in Breast Imaging and Interventions 2007. Stanford University Radiology. Las Vegas, NV. May 3, 2007
- “Basic Breast Ultrasound Physics for Mammography Technologists, Made Easy”. 8<sup>th</sup> Annual Advances in Breast Imaging and Interventions 2007. Stanford University Radiology. Las Vegas, NV. May 3, 2007
- “Troubleshooting MR Images”. Society of Breast Imaging 8<sup>th</sup> Postgraduate Course, Hollywood, FL. April 14, 2007
- “Quality Control for Digital Mammography Systems”. The Chicago International Breast Course. Chicago, IL. October 25, 2006
- “Optimizing Image Quality and Dose in Digital Mammography”. American Association of Physicists in Medicine 48<sup>th</sup> Annual Meeting. Orlando, FL. July 30-September 3, 2006

- “Current Status of Digital Mammography Equipment”. Advanced Breast Imaging and Interventions 2006. Stanford University Radiology. Las Vegas, NV. April, 27, 2006
- “Multimodality Digital Mammography Review Workstations”. Advanced Breast Imaging and Interventions 2006. Stanford University Radiology. Las Vegas, NV. April, 27, 2006
- “Digital Mammography QC for Mammography Technologists”. Advanced Breast Imaging and Interventions 2006. Stanford University Radiology. Las Vegas, NV. April, 27, 2006
- “PACS Equipment Solutions”. Advanced Breast Imaging and Interventions 2006. Stanford University Radiology. Las Vegas, NV. April, 28, 2006
- “Basic Breast Ultrasound Physics for Mammography Technologists, Made Easy”. Advanced Breast Imaging and Interventions 2006. Stanford University Radiology. Las Vegas, NV. April, 28, 2006
- “What’s New in Breast Ultrasound Equipment”. Advanced Breast Imaging and Interventions 2006. Stanford University Radiology. Las Vegas, NV. April, 29, 2006
- “Evaluating Digital Mammography Systems”. American Association of Physicists in Medicine 47<sup>th</sup> Annual Meeting. Seattle, WA. July 26, 2005
- “FFDM Accreditation and QC Troubleshooting”. Breast Imaging and Interventions. Stanford University Radiology. Las Vegas, NV. May 14, 2005
- “Update on Multimodality Digital Mammography Workstations”. Breast Imaging and Interventions. Stanford University Radiology. Las Vegas, NV. May 14, 2005
- “Update on PACS and Other Digital Storage Solutions”. Breast Imaging and Interventions. Stanford University Radiology. Las Vegas, NV. May 13, 2005
- “Current Status of Digital Equipment”. Breast Imaging and Interventions. Stanford University Radiology. Las Vegas, NV. May 13, 2005
- “Quality Control for Breast Ultrasound and Stereotactic Equipment”. Lynn Sage Breast Imaging Symposium. Chicago, IL., October 8, 2004
- “Digital: Technical Aspects of Digital Mammography”. Breast Imaging Conference. Monterey, CA. September 21, 2004
- “Troubleshooting: QC Tests for Digital & Film Screen”. Breast Imaging Conference. Monterey, CA. September 21, 2004
- “QC for FFDM: What You Must Do and What Really Matters”. American Association of Physicists in Medicine 46<sup>th</sup> Annual Meeting. Pittsburgh, PA. July 29, 2004
- “Stereotactic and Ultrasound Quality Control”. Lynn Sage Breast Imaging Symposium. Chicago, IL., November 4, 2003

“Magnetic Resonance Imaging Quality Control”. Lynn Sage Breast Imaging Symposium. Chicago, IL., November 3, 2003

“Ultrasound Quality Control”. Lynn Sage Breast Imaging Symposium. Chicago, IL., November 2, 2003

“Medical Physicist’s Digital Mammography Quality Control”. Lynn Sage Breast Imaging Symposium. Chicago, IL., November 2, 2003

“Quality Control for Digital Mammography”. Lynn Sage Breast Imaging Symposium. Chicago, IL., November 1, 2002.

“Troubleshooting QC Tests in Screen-Film and Digital Mammography”. Breast Imaging Conference. Orlando, FL., September 13, 2002.

“Approaches to Digital Mammography”. Breast Imaging Conference. Orlando, FL., September 13, 2002.

“What a Practicing Medical Physicist Needs to Know for Testing Full-Field Digital Mammography Systems”. American Association of Physicists in Medicine 44<sup>th</sup> Annual Meeting. Montreal, Canada. July 17, 2002

“Digital Mammography – Physics and Quality Control”. Mammographers of Southeastern Wisconsin. Waukesha, WI., November 3, 2001