



**RSNA** | **2006**  
Strengthening  
Professionalism

SUBSPECIALTY CONTENT BROCHURE

# Breast/ Mammography

Radiological Society of North America

92nd Scientific Assembly  
and Annual Meeting

November 26 – December 1, 2006

McCormick Place, Chicago

Subspecialty content brochures organize the components of the annual meeting by subjects that correspond to radiologic subspecialties. We hope this brochure, along with the meeting program, helps to enrich and ease your experience at RSNA 2006.

## RSNA Annual Meeting CME Information

RSNA® is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

RSNA designates this educational activity for a maximum of 85 *AMA PRA Category 1 Credits*.™

Physicians should only claim credit commensurate with the extent of their participation in the activity.

## Syllabus

**SYLLABUS** = Syllabus available for purchase at the Education Store in the Lakeside Center Ballroom or at Booth #1100, South Building, Hall A.

## Saturday, November 25, 2006

2:15-4:15      **Plenary Session**  
AAPM/RSNA Tutorial on Equipment Selection:  
Digital Mammography (E351)

## Sunday, November 26, 2006

10:45-12:15      **Scientific Paper Sessions**  
ISP: Breast Imaging (Digital Mammography: The  
ACRIN DMIST Results) (S100AB)  
ISP: Physics (Tomosynthesis Systems, Computer-  
aided Diagnosis) (S401CD)

2:00-3:30      **Refresher Courses**  
MR-guided Breast Biopsy (Hands-on Workshop)  
(Course RC150) (E260)  
Update Course in Diagnostic Radiology Physics:  
Advances in Breast Imaging—Physics,  
Technology, and Clinical Applications: Breast  
Anatomy, Pathology, and Diagnosis of Disease  
(Course RC121) (E351)

### **SYLLABUS**

Update Course in Diagnostic Radiology: Breast  
Imaging—Mammography: Interpretation Pointers  
for Detection of Early Breast Cancer (Course  
RC115) (E451A)

### **SYLLABUS**

## Monday, November 27, 2006

- 8:30-10:00     **Refresher Courses**  
Interventional Breast Procedures (Hands-on Workshop) (Course RC252) (E264)  
Update Course in Diagnostic Radiology Physics: Advances in Breast Imaging—Physics, Technology, and Clinical Applications: Mammography—Physics, Common Problems, and Accreditation (Course RC221) (E351)  
**SYLLABUS**  
Update Course in Diagnostic Radiology: Breast Imaging—Mammography-guided Biopsy (Course RC215) (E451A)  
**SYLLABUS**
- 10:30-12:00   **Multisession Course**  
Case-based Review of Radiation Oncology (Breast Cancers) (S402AB)
- 10:30-12:00   **Scientific Paper Sessions**  
Breast Imaging (Interventional) (Arie Crown Theater)  
Physics (Breast Computer-aided Diagnosis) (S401CD)
- 3:00-4:00     **Scientific Paper Sessions**  
Breast Imaging (MR Spectroscopy) (Arie Crown Theater)  
Breast Imaging (Multiple Modalities) (E253CD)
- 4:30-6:00     **Special Focus Session**  
New Directions in Breast Imaging: Where Are We Headed? (E451A)

## Tuesday, November 28, 2006

- 8:30-10:00     **Refresher Courses**  
Minicourse: From Image to Decision—Science and Technology for Effective Interpretation of Medical Images: The Radiologist and Computer-aided Detection (CAD) (Course RC323) (S404CD)  
Update Course in Diagnostic Radiology Physics: Advances in Breast Imaging—Physics, Technology, and Clinical Applications: Digital Mammography—Detector Technology, Image Quality, and Physics Audits (Course RC321) (E351)  
**SYLLABUS**  
Update Course in Diagnostic Radiology: Breast Imaging—Digital Mammography (Course RC315) (E451A)  
**SYLLABUS**
- 10:30-12:00   **Scientific Paper Session**  
ISP: Breast Imaging (Digital Tomosynthesis) (Arie Crown Theater)

- 1:15-2:00**      **Informatics**  
IHE Mammography: Whats New in 2006? (Informatics Classroom – Lakeside Learning Center)
- 3:00-4:00**      **Scientific Paper Sessions**  
Breast Imaging (Digital Mammography) (E253CD)  
Breast Imaging (Mammography) (Arie Crown Theater)
- 4:30-6:00**      **Refresher Courses**  
Imaging and Breast Cancer Radiation Treatment Planning (Course RC419) (S505AB)  
Update Course in Diagnostic Radiology Physics: Advances in Breast Imaging—Physics, Technology, and Clinical Applications: Digital Mammography—Digital Subtraction, Display Image Quality, and Clinical Perspective (Course RC421) (E351)
- SYLLABUS**
- Update Course in Diagnostic Radiology Physics: Multidimensional Image Processing, Analysis, and Display—Computer-aided Diagnosis in Breast Imaging (Course RC432) (S403B)
- SYLLABUS**
- Update Course in Diagnostic Radiology: Breast Imaging—Breast Ultrasound: Performance and Interpretation (Course RC415) (E451A)
- SYLLABUS**

## **Wednesday, November 29, 2006**

- 8:30-10:00**      **Refresher Courses**  
The State of Computer-aided Diagnosis (CAD): Are You Ready to Move? (Advanced Imaging Informatics) (Course RC530) (N226)  
Update Course in Diagnostic Radiology Physics: Advances in Breast Imaging—Physics, Technology, and Clinical Applications: Emerging Tomographic Techniques in Mammography (Course RC521) (E351)
- SYLLABUS**
- Update Course in Diagnostic Radiology: Breast Imaging—Breast Ultrasound: Screening, Biopsy, and Staging (Course RC515) (E451A)
- SYLLABUS**
- 10:30-12:00**      **Scientific Paper Session**  
Breast Imaging (Ultrasound) (Arie Crown Theater)
- 3:00-4:00**      **Scientific Paper Sessions**  
Breast Imaging (Interventional) (Arie Crown Theater)  
Breast Imaging (Multiple Modalities) (E253CD)  
Radiation Oncology and Radiobiology (Breast Cancer) (S403B)

4:30-6:00 **Special Focus Session**  
Breast Imaging: Battle of the Stars (E450A)

## Thursday, November 30, 2006

8:30-10:00 **Refresher Courses**  
Cancer Screening (Course RC618) (E352)  
Ultrasound-guided Interventional Breast Procedures (Hands-on Workshop) (Course RC652) (E264)  
Update Course in Diagnostic Radiology Physics: Advances in Breast Imaging—Physics, Technology, and Clinical Applications: Computer-aided Diagnosis of Breast Disease (Course RC621) (E351)

### **SYLLABUS**

Update Course in Diagnostic Radiology: Breast Imaging—MR Imaging: Performance, Interpretation, and Biopsy (Course RC615) (E451A)

### **SYLLABUS**

10:30-12:00 **Scientific Paper Session**  
Breast Imaging (MR Imaging)  
(Arie Crown Theater)

1:30-2:30 **Multisession Course**  
Case-based Review of Magnetic Resonance (Breast MR Imaging) (S100)

3:00-4:00 **Special Focus Session**  
Breast MR Imaging: When Is it Appropriate? (E353B)

4:30-6:00 **Refresher Courses**  
Problem Solving with Breast Ultrasound: To Biopsy or Not to Biopsy—Case-based Review—Improving Your Practice of Ultrasound (An Interactive Session) (Course RC710) (S402AB)  
Update Course in Diagnostic Radiology Physics: Advances in Breast Imaging—Physics, Technology, and Clinical Applications: Ultrasound Imaging of the Breast—Emerging Trends (Course RC721) (E351)

### **SYLLABUS**

Update Course in Diagnostic Radiology: Breast Imaging—MR Imaging: Screening, Diagnosis, and Staging (Course RC715) (E451A)

### **SYLLABUS**

## Friday, December 1, 2006

8:30-10:00 **Refresher Courses**  
Categorical Course in Diagnostic Radiology Physics: From Invisible to Visible—The Science and Practice of X-Ray Imaging and Radiation Dose Optimization (Course RC825) (S403A)

### **SYLLABUS**

Update Course in Diagnostic Radiology Physics: Advances in Breast Imaging—Physics, Technology, and Clinical Applications: MR Imaging of the Breast—Emerging Trends (Course RC821) (E351)

#### **SYLLABUS**

Update Course in Diagnostic Radiology: Breast Imaging—Clinical Practice Issues for Breast Imagers (Course RC815) (E451A)

#### **SYLLABUS**

### **10:30-12:00 Scientific Paper Session**

Breast Imaging (Computer-aided Detection) (E253CD)

### **Education Exhibits**

Space No.	Exhibit Title
LL-BR4811-L10	Breast Tomosynthesis: Preliminary Results and Future Applications
LL-BR4812-L11	The Total Digital Mammography Environment
LL-BR4813	Evaluation of the Computed Radiographic System by Comparison of the Digital Soft Copy Imaging with Digital Hard Copy Imaging
LL-BR4814	Clinical Factors to Affecting Patient Dose in the Case of Changing Equipment into a Digital System from Screen-film System
LL-BR4815	Complex Breast Masses: Imaging-Pathologic Correlation and Diagnostic Approach
LL-BR4816	Imaging Guided Interventional Procedures for Breast Diseases
LL-BR4817	Radioactive I-125 Seed Preoperative Localization for Surgical Excision of Non-Palpable Breast Lesions
LL-BR4818-R10	Techniques for Breast MRI Directed Interventional Procedures: Localization, Biopsy, and Treatment
LL-BR4819-H11	Pictorial Review of Common and Unusual Diseases of the Nipple-Areolar Complex (NAC)
LL-BR4820	Algorithm-based Approach for Focal Breast Lesion: Experience in Oncology Set-up
LL-BR4821-B11	Application of the ACRs MR Mammography BIRADS Lexicon: Test Your Skills
LL-BR4822-R11	Recognizing and Interpreting Artifacts and Pitfalls in MRI Imaging of the Breast
LL-BR4823	Diffusion-weighted MR Images of Breast Cancer: Are They Worth Adding to the Usual MR Protocol?
LL-BR4824	Problem Solving Uses of Magnetic Resonance (MR) for Breast Imaging
LL-BR4825-D11	Spectrum of Extra-Mammary Findings on Breast MRI: Test Your Skills
LL-BR4826	MRI Differentiation of Benign versus Malignant Breast Lesions: Test Your Skills

- LL-BR4827 MRI Evaluation of the Breast Following Reduction Mammoplasty: Diagnosis of Benign Findings and Malignancy
- LL-BR4828 Which Unenhanced Sequence Should We Use before Dynamic Breast MR Imaging?
- LL-BR4829 Improving Breast MR Imaging Using an 8-channel Array Coil: From Imaging to Intervention
- LL-BR4830 MR Imaging of the Breast Postradiation Therapy: A Review of the Normal Acute and Chronic Changes
- LL-BR4831 Incidental Breast Lesions Detected by MDCT: What the General Radiologist Needs to Know
- LL-BR4832 The Clues and the Difficulties in Evaluation of DCIS by Dynamic CT-Mammography
- LL-BR4833 The Role of 18-FDG PET-CT in Metastatic Breast Cancer
- LL-BR4834 Postsurgical Irradiated Breast: Approach for Correlating Ultrasound and Mammographic Findings
- LL-BR4835 Mammographic, Sonographic, and Pathologic Correlation of Rare Breast Lesions: Can Imaging Features Distinguish These Lesions from Breast Carcinoma?
- LL-BR4836 Multimodality Imaging Characteristics of Invasive Breast Cancer
- LL-BR4837 The Growth Patterns of Breast Cancer and Their Implications on Diagnosis
- LL-BR5190 Triangulation of Breast Lesions: Review and Clinical Applications
- LL-BR5191-B Pseudoangiomatous Hyperplasia of the Mammary Stroma: A Literature Review
- LL-BR5192 The Present Condition of the Facility Image Evaluation (Analog Image and Digital Image) towards the Improvement in Mammography Screening Accuracy in Japan
- LL-BR5193 Columnar Cell Lesions of the Breast: Mammographic and Histopathologic Correlation
- LL-BR5194 Specific Mammographic Images: Can We Recognize Them?
- LL-BR5195 Radiology in Breast Disorders Related to Pregnancy and Lactation
- LL-BR5196 "Nonglandular" Disorders of the Breast: A Pictorial Review of Imaging Findings with Pathologic Correlation
- LL-BR5197 A Pictorial Display of Breast Findings on Computed Tomography: Correlation with Breast Imaging
- LL-BR5198 Histologic and Immunohistochemical Features and Breast Imaging Findings in Patients with BRCA-1 and BRCA-2 Associated Breast Carcinoma
- LL-BR5199 FDG PET-CT in the Detection and Evaluation of Breast Diseases: Usefulness and Common Pitfalls

LL-BR5200-D	Practical Applications of Nuclear Medicine in Imaging Breast Cancer
LL-BR5201-H	The Lactating Breast: Benign and Malignant Disorders
LL-BR5202	Subtle Findings on “Second Look” Ultrasound Examination for MRI-detected Breast Lesions: Appearance and Histologic Type
LL-BR5203	Atlas of Automated Full Breast Ultrasound
LL-BR5204	BI-RADS Categorization of Sonographic Lesions: Application and Pitfalls
LL-BR5205	False-Negative Cases of Axillary Ultrasonography: How Much Size?
LL-BR5206	Computed Tomography-guided Preoperative Needle Localization of Nonpalpable Breast Lesions
LL-BR5207	Ultrasound-guided 14G Core Needle Biopsy of Axillary Lymph Nodes in Patients with Breast Cancer
LL-BR5208	Multifocal Filling Defects on Galactography with Pathologic Correlation
LL-BR5209	Does the Performance of Various Digital Mammography Systems Differ?
LL-BR5210	Telemammography: Interfacing between Primary Physicians and Experts
LL-BR5211	Varied MR Appearance of Pathology Proven Fibroadenomas
LL-BR5212	Breast Cancer Surgery: Spectrum of MR Findings
LL-BR5213	Transverse Rectus Abdominis Muscle Reconstruction (TRAM) in Breast Cancer: Benign Findings and Diffusion-weighted (DW) Magnetic Resonance Imaging (MRI) Role
LL-BR5214	Ductography versus MR Ductography: Can MR Ductography Replace Ductography as a Diagnostic Method for Patients with Nipple Discharge?
LL-BR5215	Avoidable Artifacts in Breast MRI
LL-BR5216	The Great Mimicker: Fat Necrosis of the Breast—MR-Mammography Appearances
LL-BR5217	Infiltrating Lobular Carcinoma of the Breast: Size Correlation with Sonography, Magnetic Resonance and Pathology
LL-BR5218	High-Resolution MRI of Uncommon Epithelial Breast Tumors
LL-BR5219	Changes in CAD-detected Patterns of Intralesional Enhancement in Breast Cancer Following Chemotherapy
LL-BR5220	MR Imaging of Medullary Carcinoma of the Breast
LL-BR5221	MR Imaging of Occult Breast Cancer and Benign Findings in Population with Genetic Predisposition or History of Breast Cancer
LL-BR5222	Top 10 Reasons to Order a Breast MRI: A Case-based Review

LL-BR5223-L	MRI Screen Detected Breast Cancers in the BRCA Population: Ultrasound, Mammographic and Histopathologic Correlation
LL-BR5224	A Practical Approach to the Differential Diagnosis of Benign Lesions Detected at Breast MR Imaging
LL-ED3403	Breast Imaging Case of the Day

## Scientific Posters

Space No.	Poster Title
LL-BR4218-B01	Initial Results of Breast Real-time Elasticity Imaging to Characterize Lesions
LL-BR4219-B02	Preoperative Sonographic Survey of Axillary Lymph Nodes in Breast Cancer Patients at Higher Risk for Regional Lymph Node Metastases
LL-BR4220-B03	Sonographic Features of Gynecomastia
LL-BR4221-B04	Characterization of Sonographically Detected Breast Lesions Using Three-dimensional Data Sets
LL-BR4222-B05	The Impact of FDG PET in the Staging of Breast Cancer
LL-BR4223-B06	Interstitial CT Lymphography for Breast Sentinel Lymph Node Mapping and Biopsy
LL-BR4224-B07	Molecular Breast Imaging Using a Dual-headed CZT Gamma Camera System: Preliminary Results in Patients with Small Breast Lesions
LL-BR4225-B08	Spatial Correlation of Breast Structure and Function Obtained with Co-registered 3D Mammography and Optical Imaging in Compressed Healthy and Cancerous Breasts
LL-BR4226-B09	Improving the Specificity of Breast Magnetic Resonance Imaging (MRI) by Fusing MRI with FDG-Positron Emission Tomography (FDG-PET/CT) 3D-Data-Sets
LL-BR4227-B10	Evaluation of Cystic Lesions of Breast on Mammography and Sonography and Pathological Correlation
LL-BR4228-D01	Speed of Sound Imaging: Improved Image Quality in Breast Imaging
LL-BR4229-D02	Breast Lesion Size in Elasticity Imaging as an Aide to Diagnosis of Malignancy
LL-BR4230-D03	Sonographic Features of Breast Carcinoma in BRCA Positive Patients
LL-BR4231-D04	An Advanced Method of Ultrasound: Real-time Elastography—First Experience in 300 Patients with Breast Lesions
LL-BR4232-D05	Mammographic Findings after Accelerated Partial Breast Irradiation
LL-BR4233-D06	Columnar Cell Lesions (CCL) at Core Needle Biopsy (CNB) of Breast Specimen: Should We Excise?

- LL-BR4234-D07 A Logistic Regression Model to Aid Breast Cancer Diagnosis Based on the National Mammography Database Format
- LL-BR4235-D08 Analysis of Microcalcification Descriptors and Their Influence to Stratify the Risk of Malignancy
- LL-BR4236-D09 MRI of Infiltrating Lobular Carcinoma Sometimes Shows Important Discrepancies between CAD Images and Delayed MIP Images: Work in Progress
- LL-BR4237-D10 Role of the Diffusion-weighted MR Imaging for Characterization and Differentiation of Breast Lesions
- LL-BR4238-H01 Computer-assisted Diagnosis of Axillary Lymph Nodes during Breast MRI: Does It Offer the Opportunity to Discriminate Malignant from Benign Nodes?
- LL-BR4239-H02 Comparison of MR Imaging Features between Estrogen Receptor Positive and Negative Breast Cancers
- LL-BR4240-H03 Impact of Breast MRI on Therapeutic Plan for Breast Cancer
- LL-BR4241-H04 Evaluation of a Motion Correction (MC) Algorithm for Breast MR
- LL-BR4242-H05 Diffusion-weighted Images in Breast Imaging: A Promising Tool to Detect Breast Cancer
- LL-BR4243-H06 Analysis of Optimal b Factor Value for DWI in Patients with Breast Cancer
- LL-BR4244-H07 Can Diffusion-weighted Imaging in Addition to Contrast-enhanced Dynamic MR Imaging Improve Diagnostic Accuracy in Characterization of Breast Lesions? ROC Analysis
- LL-BR4245-H08 Preoperative Magnetic Resonance Imaging of Intraductal Breast Carcinoma: Does It Help Better Determine Cancer Extent?
- LL-BR4246-H09 Comparing MR Imaging, US, Mammography, and MDCT in the Local Staging of Breast Cancer
- LL-BR4247-H10 Classification and Visualization of Different Breast Tumors Based on High-Resolution 1-H Nuclear Magnetic Resonance Spectroscopy
- LL-BR4248-L01 Assessment of the BI-RADS Lexicon for Magnetic Resonance Imaging and Introduction of the Scoring System
- LL-BR4249-L02 Automated Breast MR Tumor Volume Measurements for Prediction of Outcome in Breast Cancer Patients on Neoadjuvant Chemotherapy
- LL-BR4250-L03 Seven Tesla Breast MRI: Initial Experience
- LL-BR4251-L04 Correlation between MR Features and Prognostic Factors in Breast Carcinoma
- LL-BR4252-L05 Can Better Breast MR Spectroscopy (MRS) Be Obtained at + 3T versus 1.5T?
- LL-BR4253-L06 Diffusion-weighted Imaging (DWI) in the Assessment of Nodal Status in Patients Affected by Breast Cancer

- LL-BR4254-L07 Breast MR Imaging in the Surveillance of Women at High Risk of Breast Cancer: A Meta-analysis
- LL-BR4255-L08 Breast Fibroadenoma: Comparative Study of Pathological Features with Varied MR Imaging Findings
- LL-BR4256-L09 Predictive Value of a Size-based Criterion on SE T1-weighted Imaging for the Differential Diagnosis of Internal Mammary Nodes Metastases in Women with Breast Cancer
- LL-BR4257-R01 Computer-aided Analysis of Delayed Enhancement Pattern in Dynamic Breast MRI: Correlation with the Histologic Grade of Invasive Cancer
- LL-BR4258-R02 The Effect of Computer-aided Detection (CAD) in Mammography on the Detection of Breast Cancer by Radiologists Experience Level
- LL-BR4259-R03 Comparison of Specimen Radiograms with Direct Magnification Obtained with Full-field Digital Mammography and Screen Film Mammography
- LL-BR4260-R04 Diagnostic Performance of Detecting Breast Cancer on Screening Digital Mammogram: Comparison of Hard Copy Film, 3-megapixel Liquid Crystal Display (LCD) Monitor and 5-megapixel LCD Monitor
- LL-BR4261-R05 Scar Formation after Stereotactic Vacuum-assisted Core Biopsy of Benign Breast Lesions
- LL-BR4262-R06 Accuracy of Ultrasound-guided Percutaneous Biopsy of Complex Cystic Breast Masses
- LL-BR4263-R07 Stereotactically-guided 9-G Breast Biopsy with a Self-contained Vacuum-assisted Device: A Multicenter Study with Two Years Follow-up
- LL-BR4264-R08 Ultrasound-guided 9-G Breast Biopsy with a Self-contained Vacuum-assisted Device and with Two Years Follow-up
- LL-BR4265-R09 Basal-like Subtype of Invasive Breast Carcinoma: Ultrasound and Mammographic Features
- LL-RO4315-B03 Variation in Target Volume in HDR Interstitial Breast Implants as Measured by Conventional Film-based and CT-based Planning Systems
- LL-RO4316-B04 Dosimetric Effect of Multileaf Collimator Leaf Transmission and Leaf Gap on Dynamic Multi-leaf Collimation IMRT Treatment Plans
- LL-RO4317-B05 Impact of N Stage as a Predictive Factor of Survival in Stage III Breast Cancer: Retrospective Study of 93 Patients from 1983 to 2002

## **Informatics Special Events**

- | Space No.    | Exhibit Title   |
|--------------|---|
| LL-IN1213-IC | IHE Mammography: What's New in 2006?  |
| LL-IN1404-5A | I-SPY and caBIG: Integrated Database to Identify Biomarkers in Breast Cancer Trials |