

# Breast Imaging and Medical Physics: Past, Present, and Future

**SEAAPM Spring Symposium**

**March 27-28, 2003**

**Callaway Gardens, Pine Mountain, Georgia**



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**Symposium Directors**

**Gary T. Barnes, PhD, FAAPM, FACR**  
**Professor Emeritus**  
**University of Alabama at Birmingham**  
**Medical Center**  
**Birmingham, Alabama**

**Michael V. Yester, PhD, FAAPM, FACR**  
**Professor**  
**University of Alabama at Birmingham**  
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**Birmingham, Alabama**

## Symposium Faculty

<p><b>Paul L. Carson, PhD, FAAPM, FACR</b>  <b>Collegiate Professor and Director</b>  <b>Basic Radiological Science</b>  <b>University of Michigan Medical Center</b>  <b>Ann Arbor, Michigan</b></p>	<p><b>Loren T. Niklason, PhD</b>  <b>Consultant Physicist</b>  <b>Hillsborough, North Carolina</b></p>
<p><b>Kish Chakrabarti, PhD</b>  <b>Div. of Mammography Quality &amp;</b>  <b>Radiation Programs</b>  <b>Center for Devices and Rad. Health</b>  <b>Food and Drug Administration</b>  <b>Rockville, Maryland</b></p>	<p><b>James A. Princehorn</b>  <b>President, Omega Medical Imaging Inc.</b>  <b>&amp; Consultant to Lorad, a Hologic Company</b>  <b>Danbury, Connecticut</b></p>
<p><b>George David, MS</b>  <b>Associate Professor</b>  <b>Medical College of Georgia</b>  <b>Augusta, Georgia</b></p>	<p><b>Ehsan Samei, PhD</b>  <b>Assistant Professor</b>  <b>Duke University</b>  <b>Durham, North Carolina</b></p>
<p><b>Carl J. D'Orsi, MD, FSBI, FACR</b>  <b>Professor and Director of Breast</b>  <b>Imaging</b>  <b>Emory University</b>  <b>Atlanta, Georgia</b></p>	<p><b>John M. Sandrik, PhD</b>  <b>Imaging Physicist</b>  <b>General Electric Medical Systems</b>  <b>Milwaukee, Wisconsin</b></p>
<p><b>G. Donald Frey, PhD, FAAPM, FACR</b>  <b>Director, Diagnostic Physics Medical</b>  <b>University of South Carolina</b>  <b>Charleston, South Carolina</b></p>	<p><b>Anthony J. Seibert, PhD</b>  <b>Professor, University of California Davis</b>  <b>Medical Center</b>  <b>Sacramento, California</b></p>
<p><b>David M. Gauntt, PhD</b>  <b>Senior Project Engineer</b>  <b>X-Ray Imaging Innovations</b>  <b>Birmingham, Alabama</b></p>	<p><b>Perry Sprawls, PhD, FAAPM, FACR</b>  <b>Professor</b>  <b>Emory University School of Medicine</b>  <b>Montreat, North Carolina</b></p>
<p><b>John P. Gibbons, PhD</b>  <b>Chief Physicist</b>  <b>Palmetto-Richland Memorial Hospital</b>  <b>Columbia, South Carolina</b></p>	<p><b>Daniel J. Staton, PhD</b>  <b>President</b>  <b>Physica Imaging, LLC</b>  <b>Birmingham, Alabama</b></p>
<p><b>Andrew Karellas, PhD, FAAPM</b>  <b>Director of Radiologic Physics</b>  <b>Emory University</b>  <b>Atlanta, Georgia</b></p>	<p><b>Wlad T. Sobol, PhD</b>  <b>Professor</b>  <b>University of Alabama at Birmingham</b>  <b>Medical Center</b>  <b>Birmingham, Alabama</b></p>
<p><b>Debra L. Monticciolo, MD, FSBI</b>  <b>Scott and White Clinic</b>  <b>Temple, Texas</b></p>	

## Symposium Schedule

### Wednesday, March 26, 2003

7:00 PM– 9:00 PM	<b>Registration / Reception</b>	
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### Thursday, March 27, 2002

7:00 AM– 8:00 AM	<b>Continental Breakfast</b>	
8:00 AM– 10:00 AM	<b>Session I: Breast Imaging Past and Present</b>	
	Welcome and Symposium Overview	Gary T. Barnes
	Technological Advances in Mammography: 1960-2000	Perry Sprawls
	Recent Advances in Screen-Film Mammography	Donald G. Frey
	Technological Advances in Ultrasound	Paul L. Carson
10:00AM-10:30 AM	<b>Morning Coffee Break</b>	
10:30 AM– 12:30PM	<b>Session II: Medical Physics Testing I</b>	
	Dose Creep in Mammography	Gary T. Barnes
	Optimizing Processor Performance	Wlad T. Sobol
	Medical Physics Reports: Problems Found During ACR Site Visits	Michael V. Yester
	Problems with Medical Physics Testing, The Equipment Design Engineer's Perspective	James A. Princehorn
	Panel Discussion	
12:30PM-1:30PM	<b>Lunch Break</b>	
1:30PM– 3:30PM	<b>Session III: Digital Mammography I</b>	
	Digital Imagine Quality Concepts	David M. Gauntt
	Digital Mammography: An Overview	Anthony J. Seibert
	Mammography Soft Copy Viewing: Problems and Solutions	Ehsan Samei
3:30PM- 4:00PM	<b>Afternoon Refreshment Break in Commercial Exhibit Area</b>	
4:00PM– 6:00PM	<b>Session IV: Digital Mammography II</b>	
	3D Breast X-Ray Imaging: Current and Future Capabilities	Loren T. Niklason
	The Future of Breast Imaging: A Clinical Perspective	Carl D'Orsi
	Panel Discussion	
6:00PM-7:30PM	<b>Supper Break</b>	
7:30PM– 9:30PM	<b>Session V: Medical Physics Testing II (Optional Evening Session)</b>	
	Mammography AEC Design and Evaluation	George David

	Stereotactic Performance Audits: Problems and Solutions	Daniel J. Staton
	Auditing Mammography Processor Performance	Gary T. Barnes
	Panel Discussion	

**Friday, March 28, 2003**

7:00 AM– 8:00 AM	<b>Continental Breakfast</b>	
8:00 AM– 10:00 AM	<b>Session VI: Digital Mammography and Medical Physics Testing III</b>	
	Digital Mammography Performance Audits: Differences and Similarities	Andrew Karellas
	Digital Mammography Performance Audits and Associated Problems: A Vendor Medical Physicist's Perspective	John M. Sandrik
	Mammography Soft Copy Viewing: QC Considerations	Ehsan Samei
	Panel Discussion	
10:00AM-10:30 AM	<b>Morning Coffee Break</b>	
10:30 AM– 12:00 PM	<b>Session VII: FDA and ACR Activities and Accreditation</b>	
	ACR Breast Ultrasound Accreditation: Physics Testing and QC	Paul L. Carson
	MQSA and Digital Mammography	Kish Chakrabarti
	ACR MAP Committee and Physics Subcommittee Activities	Michael V. Yester
	Panel Discussion	
12:00PM-1:30 PM	<b>Lunch Break</b>	
1:30PM– 3:30PM	<b>Session VIII: Breast Cancer Management</b>	
	Breast Disease Diagnosis and Management	Debra L. Monticciolo
	Breast Cancer Management: Radiation Therapy Physics Considerations	John P. Gibbons, Jr.
	Panel Discussion	
6:30PM-9:30 PM	<b>Night Out at Callaway Gardens</b>	