# RSIA



# Baron Joins RSNA Board of Directors

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- MR Predicts Cardiac Ablation Success
- Radiologists Prepare for Radiation Terrorism
- International e-Health Initiatives Vary in Execution, Effectiveness
- In 10th Year, Online Journals Stay on Technology's Edge
- RSNA 2008 Meeting Moments

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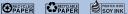
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### Becker is 2009 RSNA President

GARY J. BECKER, M.D., a prolific investigator and leader in vascular and interventional radiology, is RSNA president for 2009.

Dr. Becker is the executive director of the American Board of Radiology (ABR). He is also a professor in vascular and interventional radiology at the University of Arizona College of Medicine in Tucson.

Prior to his ABR executive direc- Gary J. Becker, M.D. tor position, Dr. Becker served as branch chief of image-guided intervention in the Cancer Imaging Program of the National Cancer Institute in Washington, D.C., and served 14 years at the Baptist Cardiac and Vascular Institute of Miami (then Miami Vascular Institute) as director of interventional radiology, assistant medical director and medical director of research and outcomes.



Dr. Becker's clinical work in the field of endografting of aortic aneurysms includes two IDE clinical trials with the U.S. Food and Drug Administration. He holds patents for two thrombolytic therapy stents.

An RSNA member since 1979, Dr. Becker has served on a number of RSNA committees and currently serves on the Research & Education (R&E) Foundation Board of Trustees.

He was elected to the RSNA Board of Directors in 2001, served as liaison for science and was Board chair in 2007.

Dr. Becker was founding editor of the Journal of Vascular & Interventional Radiology and was its editor-in-chief from 1990 to 1995. Dr. Becker delivered the RSNA 2000 Annual Oration in Diagnostic Radiology, "The Future of Interventional Radiology."

### Hricak is RSNA President-Elect

GLOBAL RESEARCH, EDUCATION and communication advocate Hedvig Hricak, M.D., Ph.D., Dr. h.c., is RSNA president-elect for 2009.

Dr. Hricak is the Carroll and Milton Petrie Chair of the Department of Radiology at Memorial Sloan-Kettering Cancer Center in New York City, a professor of radiology at Cornell University Medical College and an attending radiologist at Memorial Hospital in New York City.

A member of the RSNA Board of Directors since 2002, Dr. Hricak was Board liaison for publications and communications. She has served on several public information committees and was chair of RSNA's Public Information Advisors Board.

Dr. Hricak began her academic appointments at the University of Michigan in Ann Arbor. At the University of California, San Francisco from 1982 to 2000, she served as a professor of radiology, urology, radiation oncology, obstet-



Hedvig Hricak, M.D., Ph.D., Dr. h.c.

rics, gynecology and reproductive sciences, as well as chief of the uroradiology and abdominal imaging sections.

Dr. Hricak was an associate editor of Radiology from 1985 to 1993 and a consultant to the editor of Radiology from 1993 to 1997. An authority on MR, MR spectroscopy and molecular imaging in oncology, she is currently the principal investigator of two National Cancer Institute (NCI) grants and one NCI contract, three Depart-

ment of Defense grants and a number of private foundation grants.

She has served as president of the Society for the Advancement of Women's Imaging, the California Academy of Medicine, the Society of Uroradiology and the New York Roentgen Society.

### **MR IMAGING** uestion of the Month

A patient asks, "Why am I able to listen to music during an MR scan if the magnetic field and radio signals are so strong?"

[Answer on page 22.]

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### Drayer Becomes RSNA Board Chair

BURTON P. DRAYER, M.D., is the new chair of the RSNA Board of Directors.

Dr. Drayer is currently executive vice-president at The Mount Sinai Medical Center in New York City and the Dr. Charles M. and Marilyn Newman Professor and chair of the Department of Radiology at Mount Sinai Burton P. Drayer, M.D. School of Medicine. He served as president of The Mount Sinai

Hospital from 2003 to 2008.

Dr. Drayer's major areas of research include brain iron, cerebral



blood flow, contrast media safety, neurodegenerative and demyelinating disease and brain infarction. His academic career began at the University of Pittsburgh Health Center. From 1979 to 1986, Dr. Drayer was at **Duke University Medical** Center in Durham, N.C., where he became professor of radiology and assistant

professor of neurology. In 1986, he was appointed chair of the Division of Neuroimaging Research-Education at the Barrow Neurological Institute in

Phoenix, where he remained until 1995.

An RSNA member since 1980, Dr. Drayer served as first vice-president in 2003. He has been active on many RSNA committees including the Public Communications Committee, Public Information Advisors Network and the Research & Education Foundation Public Relations Committee. He moderated the RSNA Image Interpretation Session in 2004. Dr. Drayer was elected to the RSNA Board of Directors in December 2003 and has served as liaison for the annual meeting and technology.

### Baron Named New RSNA Board Member

A PIONEER IN ABDOMINAL imaging and in gastrointestinal applications of CT and MR imaging is the newest member of the RSNA Board of Directors. Richard L. Baron, M.D., will serve as the liaison-designate for edu-

Dr. Baron just concluded a three-year term as chair of Richard L. Baron, M.D. and practicing in St. Louis, the RSNA Education Exhibits Committee. He will serve a year as liaisondesignate for education under George S. Bisset III, M.D., and then assume



Bisset becomes RSNA Board chair at the conclusion of the 2009 RSNA annual meeting.

the role as liaison when Dr.

An RSNA member since 1978, Dr. Baron is currently chair of radiology at the University of Chicago Medical Center. Previously, he crisscrossed the country, teaching

Seattle and Pittsburgh, where he was chair and professor of radiology at the University of Pittsburgh and the founding president and CEO of the Univer-

sity of Pittsburgh Physicians, one of the country's largest medical provider groups with 1,400 physicians.

Dr. Baron has been principal investigator on a dozen research projects and has earned many research awards, especially in the area of diagnostic imaging of liver disease. He has served in leadership roles for several national radiology societies, including as president of the Society of Computed Body Tomography/Magnetic Resonance and the Society of Gastrointestinal Radiologists.

### **RSNA Endorses Cardiovascular Imaging Guidelines**

RSNA has endorsed the American College of Cardiology Foundation (ACCF) and the American Heart Association (AHA) 2008 Health Policy Statement on Structured Reporting in Cardiovascular Imaging and the 2008 Key Data Elements and Definitions for Cardiac Imaging. The documents were approved by the ACCF/AHA in September.

The health policy statement documents the generally accepted position of the cardiovascular imaging community regarding structured reporting for cardiovascular imaging. The position

requires that:

- Cardiovascular imaging laboratories collect data in structured format
- Physicians adopt compliant reporting procedures
- · Imaging and information systems support structured data storage and displayed report formats
- · Reporting software implements structured composition and other required features for interoperability

The 2008 Key Data Elements and Definitions for Cardiac Imaging are intended to define and standardize data relevant to clinical topics in cardiology, with the primary goal of assisting data collection by providing a platform of data elements and definitions applicable to various conditions.

Both documents are available for review online. The Health Policy Statement on Structured Reporting in Cardiovascular Imaging is at content.onlinejacc.org/cgi/content/full/j. jacc.2008.09.005. The 2008 Key Data Elements and Definitions for Cardiac Imaging is at content.onlinejacc.org/cgi/ content/full/j.jacc.2008.09.006.

### **AAWR Bestows 2008 Awards**

HE American Association for Women Radiologists (AAWR) has announced its 2008 award recipients. **Beryl R. Benacerraf, M.D.,** a clinical professor of obstetrics, gynecology, reproductive biology and radiology at Harvard Medical School and medical director and president of Diagnostic Ultrasound Associates, both in Boston, received the Marie Sklodowska-Curie Award.

Presented with the Alice Ettinger Award was **Marcia Javitt, M.D.,** a professor of radiology at the Uniformed Services University of the Health Sciences. Dr. Javitt, who serves as section head of body MR and genitourinary radiology at Walter Reed Army Medical Center, chaired the genitourinary radiology subcommittee of the 2008 RSNA Scientific Program Committee.

The Lucy Frank Squire Distinguished Resident Award in Diagnostic Radiology was presented to **Serena McClam, M.D.**, a radiology resident at Robert Wood Johnson University Hospital in New Brunswick, N.J. **Beth Beadle, M.D.**, **Ph.D.**, a resident at M.D. Anderson Cancer Center in Houston, received the Eleanor Montague Distinguished Resident Award in Radiation Oncology.

The AAWR Research & Education Foundation also presented awards: **Jennifer Jones, M.D.,** Member-in-Training Award for Outstanding RSNA Presentation in Radiation Oncology; **Beth Beadle, M.D., Ph.D.,** Member-in-Training Award for Outstanding ASTRO Presentation in Radiation Oncology; **Karyn A. Goodman, M.D.,** Professional Leadership Award—Early Career Faculty; **Iris Gibbs, M.D.,** Professional Leadership Award—Mid-Career Faculty and **Rohini Nadgir, M.D.,** Research Seed Grant.



Beryl R. Benacerraf, M.D.



Marcia Javitt, M.D.



Serena McClam, M.D.

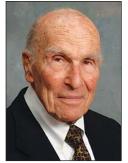


Beth Beadle, M.D., Ph.D.

### Picker receives Lifetime Achievement Award

Harvey Picker, M.B.A., Ph.D., inventor, physicist, entrepreneur, philanthropist and educator, was posthumously awarded Planetree's 2008 Lifetime Achievement Award. Dr. Picker died in March at age 92.

After leading the Picker X-ray Company for 25 years, Dr. Picker in 1986 joined his wife in founding the Picker Institute, a global, independent nonprofit organization dedicated to advancing the principles of patient-centered care.



Harvey Picker, M.B.A., Ph.D.

With a membership network that includes more than 140 acute care hospitals, continuing care facilities and outpatient clinics, Planetree has a mission to personalize, humanize and demystify the healthcare system.

RSNA dedicated the 2008 RSNA Meeting Program to the memory of Dr. Picker, a long-time RSNA supporter.

### **MEDICAL IMAGING COMPANY NEWS**

**Toshiba Acquires Barco's Advanced Visualization Division** 

■ Toshiba Medical Systems, of Tokyo, announced that its newly formed, wholly-owned subsidiary, Toshiba Medical Visualization Systems Europe, will acquire the Advanced Visualization Imaging System Division (AVIS) of Barco, of Edinburgh, Scotland. AVIS has researched, developed and sold medical 3D visualization software products since 1991 as Voxar. For the past 10 years, Toshiba has used Voxar 3D visualization core software in its medical imaging products PACS. AVIS was founded with the acquisition of Voxar in September 2004.

### MR Imaging Pioneer Receives Portrait

A portrait of **Sir Peter Mansfield**, **Ph.D.**, winner of the 2003 Nobel Prize for Medicine for his contribution to the invention of MR imaging, has been unveiled at the National Portrait Gallery in London. Knighted in 1993, Sir Peter Mansfield has received numerous scientific prizes and has been a professor in the



Sir Peter Mansfield, Ph.D.

Department of Physics at the University of Nottingham since 1979.

### Osborn Awarded Turkish Gold Medal

The Turkish Society of Radiology (TSR) recently awarded its gold medal to **Anne G. Osborn, M.D.,** immediate past-chair of the RSNA Research & Education Foundation Board of Trustees. Dr. Osborn, a professor in the Department of Radiology at the University of



Anne G. Osborn, M.D.

Utah Medical Center in Salt Lake City, gave the keynote address, "Expert Differential Diagnosis in the Brain: A New Approach," at the TSR annual meeting in Antalya, Turkey.

### IN MEMORIAM: Edward V. Staab, M.D.

Edward V. Staab, M.D., scientist, scholar, researcher and physician, passed away suddenly on Nov. 1. He was 72.

Most recently a professor emeritus of radiology at Wake Forest University Baptist Medical Center in Winston-Salem, N.C., Dr. Staab also served in chair and chief positions for the National Institutes of Health/National Cancer Institute, University of Florida, University of North Carolina and Vanderbilt University and as an Army

captain during his military service at Walter Reed Army Medical Center.

A creative early adaptor of technology, Dr. Staab foresaw many of the electronic communications used in radiology today. He was the first chair of the RSNA

**Electronic Communications Commit**tee (now the Radiology Informatics Committee). Dr. Staab was also a founding member of FutuRAD, an



Edward V. Staab, M.D.

outgrowth of the RSNA Ad Hoc Committee for the Centennial of Radiology that he chaired.

Dr. Staab, who joined RSNA in 1970, delivered the Eugene P. Pendergrass New Horizons Lecture, "Consensus Quest:

Reshaping the Future of Radiology," at RSNA 1995.

RSNA/lews

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MY TURN

### What Does it Mean to be "On Staff?"

EDICAL CENTERS have faced economic pressures over the past 30 years—driven by competitive market forces and managed care to reduce costs-but have maintained ever-increasing productivity and profits. Now, amid the worst economic downturn in recent history, medical centers face pressures similar to nonmedical businesses—decreasing volumes as patients defer elective spend-

ing, increasing bad debt from unemployed, uninsured patients and delays in thirdparty payor reimbursements.

VIEW Further compounding these issues are endowment values decreased by as much as 30 percent, further reducing needed income.

Rather than bemoan the lack of funding for new equipment or expansions, or the possibility of limited salary increases, radiologists must keep a balanced perspective. We remain well compensated with gratifying

daily activities. We can treat patients and teach residents without compromising quality. We positively influence morale by choosing not to focus on the negative which affects our technologists, nurses and staff who historically are at greater risk in economic crises. As physicians, we are leaders of the

> healthcare profession—the very word "care" implies a priority of caring for our patients, colleagues and staff.

Physicians must also care about the needs of their institutions rather than being complacent. I remember a disturbing conversation a decade ago with an internist employed by a soon-to-bebankrupt hospital system. Discussing how managed care was challenging medical practices, her response was, "Doesn't affect me-I'm on staff." She assumed her paycheck was guaranteed



Richard L. Baron, M.D.

no matter what the financial status of her institution. A few months later not only was her employer bankrupt and she unemployed, but also her pension was lost. So much for her concept of being "on staff."

Used differently, "on staff" can express pride pride in being affiliated with

a facility known for providing excellent care or education. Such organizations will remain strong and maintain their reputations only if all physicians understand institutional needs during difficult times and promote needed actions. By being proactive in supporting the success of our practices and entire institutions, we can truly be "caring" healthcare providers.

Richard L. Baron, M.D., is the newest member of the RSNA Board of Directors. More information about Dr. Baron appears on Page 2.

My Turn

RADIOLOGIST'S



Developed jointly by the Radiological Society of North America and the American College of Radiology

# MR Predicts Cardiac Ablation Success

SING MR imaging to measure scarring to the left atrium following radiofrequency ablation (RFA) for atrial fibrillation can predict treatment success. Researchers, including radiologists and cardiologists, published their findings in the Oct. 7, 2008, issue of the Journal of the American College of Cardiology.

Atrial fibrillation is a growing clinical problem. Of 5 million patients with atrial fibrillation, only around 38,000 are being treated with ablation, according to study co-author Nassir F. Marrouche, M.D., director of the cardiac electrophysiology laboratories and the atrial fibrillation program at the University of Utah Health Sciences Center in Salt Lake City.

To detect and quantify left atrial wall injury, investigators, led by Christopher J. McGann, M.D., and Eugene G. Kholmovski, Ph.D., performed a 3D delayed-enhanced cardiac MR imaging sequence before and three months after pulmonary vein antrum isolation in patients with atrial fibrillation.

"Noninvasive imaging of the left atrial wall with MR imaging is a recent advancement and a powerful tool to evaluate injury related to radiofrequency energy delivery during ablation," said Dr. Marrouche. "Results reported in our study suggest that the degree of left atrial wall injury predicts procedural outcome

**Current Scar Assessment Techniques** are Invasive

RFA appears effective in managing atrial fibrillation. The amount of the scar tissue created by RFA in the left

3D MR imaging models in two patients prior to ablation therapy. Segmented delayedenhancement MR imaging (a and c) reveals increased enhancement of left atrial tissue. Color 3D models (b and d) of MR images clearly show regions of abnormal enhancement (green) and healthy tissue (blue).

atrium is an indicator of success; however, current scar assessment techniques are invasive. MR images have greater resolution than the 2D images now used to establish tissue damage, said Dr. Marrouche.

"Ablation is an intricate procedure with many complica-This is a breakthrough noninvasive way of evaluating the outcome of the procedure. Gautham Reddy, M.D.

tions," he said. "We built the MR imaging lab of the future with an MR imaging scanner and fluoroscopy. The goal is to complete the entire ablation procedure under

MR, which we hope to do this year."

The University of Utah's atrial fibrillation imaging group is the first in the world to integrate electrophysiology, radiology and image processing into one group, said Dr. Marrouche. "Today we can see the shadow of the catheter with fluoroscopy, but we can't see the wall of the heart or the changes we are creating on the wall or how deep these changes

are," he said. "In the future, we may be able to plan ablation using MR imaging to identify the heart muscle cells that need to be destroyed."

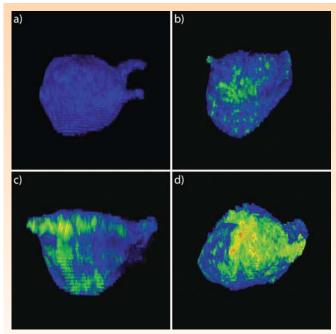
### Study Among First to Apply MR to **Nonischemic Disease**

MR has great utility and potential for evaluation of cardiac disease, said Gautham Reddy, M.D., a professor of radiology and vice-chair for education at the University of Washington School of Medicine in Seattle. Dr. Reddy led a session, Cardiac CT Mentored Case Review—Pulmonary Veins and Pericardium, at RSNA 2008.

Delayed-enhancement MR techniques are currently used to assess ischemic cardiac disease, said Dr. Reddy, and the Utah researchers' study is one of several that have shown applications of delayed-enhancement MR imaging to nonischemic cardiac disease.

"This is an innovative approach, using MR to assess the amount of scar

at three months."



**3D MR imaging color models of varying degrees of enhanced/ fibrotic (green and yellow) tissue preprocedure in four patients.**Determining the extent of tissue damage can help in determining if the patient is a good candidate for ablation.

c)

d)

white the thrives of that Stood of Weight.

3D MR color models of varying degrees of scar *(orange)* tissue three months postprocedure in four patients.

3D visualization and segmentation of the acquired MR image allor

3D visualization and segmentation of the acquired MR image allows for the overall extent of scarring to be evaluated.

tissue after the RFA," said Dr. Reddy.
"The scar tissue is not a complication, but the desired effect of ablation treatment. They have found that the more damage to the left atrial wall, the more successful the procedure in preventing recurrence of atrial fibrillation."

There is great potential to use the noninvasive procedure to evaluate the success of the ablation, said Dr. Reddy. "This is an innovative technique," he said. "In the past, success was measured by more invasive procedures, but MR takes us away from that. This is a breakthrough noninvasive way of evaluating the outcome of the procedure.

"I think radiologists will play an important role in MR evaluation following RFA for atrial fibrillation," Dr. Reddy continued. "The two lead authors on this paper are in the Department of Radiology and worked with their cardiology colleagues. I think radiologists will definitely have new roles that we didn't have in the past. There is a lot of potential for radiologists in clinical practice in cardiac MR as well as in other research applications."

Dr. Marrouche said he expects that

in three or four years, every electrophysiology lab may have at least one MR scanner. "The future is doing ablation and MR together, so we have exact confirmation of lesions," he said.

Added Dr. Reddy: "This can be put into practice relatively quickly because delayed-enhancement MR is already an established technique. Applying the technique to new indications is a simple

step. I think this could see widespread use in a short amount of time."

### **Learn More**

■ The abstract for "New Magnetic Resonance Imaging-Based Method for Defining the Extent of Left Atrial Wall Injury After the Ablation of Atrial Fibrillation," published in the Journal of the American College of Cardiology, is available online at content.onlinejacc.org/cgi/content/abstract/52/15/1263.



This RSNA 2008 session of Cardiac CT Mentored Case Review focused on pulmonary veins and pericardium. Session leader Gautham Reddy, M.D., said using MR to assess the amount of scar tissue after radiofrequency ablation for atrial fibrillation is an innovative approach. Radiologists will play an important role in implementing the practice clinically, Dr. Reddy said.

# Radiologists Prepare for **Radiation Terrorism**

T IS A worst-case scenario played out in movies, on television and in popular novels: An unfriendly nation or terrorist sect obtains radioactive material and attempts to use the chemicals or substances in a so-called "dirty" bomb planned to detonate somewhere in the U.S. While the situation has been explored sensationally in fiction, a group of scientific experts is striving to prepare the medical community for a more sobering reality.

The team is led by Michael E. Robbins, Ph.D., who received a Radiology Education Research Development Grant from the RSNA Research & Education (R&E) Foundation to develop a course called "Training the Trainers: How to Answer Radiation Biology Questions, Before, During and Following a Radiation Terrorism Event." The grant was also sponsored by the Association of University Radiologists, Association of Program Directors in Radiology and Society of Chairs of Academic Radiology Departments.

The course brings together a series of lectures featuring the work of worldrenowned radiation biologists, physicists and oncologists. Radiation biology leaders divided material into eight sections, then provided narration for the resulting presentations.

The program aims to provide a primer in radiation biology for those employed in radiology, with the idea that those personnel could then more successfully serve as subject-matter experts if such a need arose.

### Sept. 11 Increased Training Urgency

Until several years ago, this type of training was not a top national medical priority, but the political climate changed following the Sept. 11, 2001,



Michael Robbins, Ph.D., led a team of scientific experts in developing a radiation biology primer for radiologists. The Sept. 11, 2001, attacks and recent incidents involving radioactive materials have created a sense of urgency among healthcare providers to increase their knowledge about radiation terrorism, Dr. Robbins said.

The fact is, it's very

simple to cause a

lot of problems to a

little effort.

Michael Robbins, Ph.D.

attacks, said Dr. Robbins, a professor in the Department of Radiation Oncology at Wake Forest University Health Sciences in Winston-Salem, N.C. The creation of the Department of Homeland Security, and its funding of projects to

deal with mass casualty events, created a sense of urgency among healthcare providers to bring themselves up to speed in the area of radiation biology, he said.

Dr. Robbins noted that even before the Sept. 11 attacks, however, there

were incidents in which threats involving radioactive materials became headline news. "The fact is, it's very simple to cause a lot of problems to a country with relatively little effort," he said. "If someone gets hold of a radioactive device, they can leave it anywhere."

For example, in 1998, about 30 miles from Dr. Robbins' research center at Wake Forest, 19 small tubes of cesium were removed from a locked safe at a hospital in Greensboro, N.C. Local, state and federal police scoured the area using radiation-sensing equipment. Authorities said they believe the

thief was trained to handle radioactive materials, because unprotected contact would cause serious injury or death. The cesium was never country with relatively recovered.

> Incidents like the cesium theft, in conjunction with lingering fears

from Sept. 11, make the "Training the Trainers" project more relevant than ever, said Dr. Robbins. "It's pretty clear we now have individuals out there willing to use various resources and a more modern approach to deliver either weapons of mass destruction or weapons that will cause mass panic and mass disruption," he said.

RSNA NEWS

JANUARY 2009

### **Public Perception of Radiation Misguided**

By creating a more educated radiology community, said Dr. Robbins, the larger communities served by those radiologists will benefit. "The public's perception of radiation is negative," he said. "They believe radiation kills people, radiation makes people very sick, radiation is a slow death sentence." Having fast, accurate information disseminated immediately in times of a crisis is key to avoiding a larger catastrophe, he said.

"If there was an incident we'd have to worry about potentially hundreds of thousands of scared people, who might not be in direct danger but are trying to evacuate as soon as possible," said Dr. Robbins. "They could overwhelm our ability to cope rationally with the situation."

One of the primary goals of developing the "Training the Trainers" program was to attract the leaders in the field of radiation biology to share their knowledge and develop course materials. Members of RSNA's R&E Foundation Grant Program committee praised the detail and commitment to the material each team member provided, while leaders in the radiation biology field praised Dr. Robbins' ability to bring the prestigious group and their expertise under one umbrella.

Dr. Robbins pulled together the "crème de la crème," said Douglas Coldwell, M.D., Ph.D., presenter of an RSNA 2008 Associated Sciences session, "Radiology's Role: When Disaster Strikes!"

"They're believable," said Dr.
Coldwell of the contributors to Dr.
Robbins' project. "These people really
know the subject backwards and forwards. This panel is made up of the top
dogs in radiation biology and physics
in the world. I'm very impressed."

Dr. Coldwell, formerly a professor of radiology with The University of Texas and now working as a biotech and counterterrorism consultant, added that he was thrilled to see the way the course developed. It's vital for all members of the radiology community



All radiologists—from those working at Level 1 trauma centers to those employed at 100-bed hospitals in rural areas—must re-educate themselves in radiation biology, said Douglas Coldwell, M.D., Ph.D., a biotech and counterterrorism consultant who presented an RSNA 2008 Associated Sciences session, "Radiology's Role: When Disaster Strikes!"

to re-educate themselves on some of the basic biology they haven't reviewed since taking the radiology board exams, he said. "It doesn't make any difference if you're working at a Level 1 trauma center or at a 100-bed hospital in the middle of the boondocks," he said. "You could be faced with this problem. Everybody needs to look at this."

### Training Could be Offered as CME

Dr. Coldwell said he supports developing coursework similar to the "Training the Trainers" program that would provide CME credits for physicians. "We should consider using this as a basis for some CME," he said. "That would get radiologists involved with it even more.

"There's no question we learn from each mass casualty event," Dr. Coldwell continued. "As an institution though, we forget it. We're still combating the last disaster. Hopefully training like this will turn things around. All radiologists need to have a basic knowledge of radiation biology; it's part of their diagnostic radiology board exams. There are a tremendous number of possibilities."

Dr. Robbins agreed, saying there is a sense of urgency about getting the information out into the medical com-

munity. "From an educational perspective, there's an ever-decreasing pool of individuals who have the expertise and knowledge to explain the consequences of radiation exposure," he said. "We have essentially lost a generation of people like myself. The radiation oncology community, the radiology community and the medical community are in dire need of educational resources that will give people up-to-date information."

Watch the "Training the Trainers: How to Answer Radiation Biology Questions, Before, During and Following a RSNA lews Radiation Terrorism Event" course online. Go to RSNANews.org and click RSNA News Extras. For a free copy of the course on CD-ROM, contact: Michael Robbins, Ph.D. Room 412C NRC Department of Radiation Oncology Wake Forest University School of Medicine Medical Center Blvd Winston-Salem, NC 27157 1-336-713-7635 mrobbins@wfubmc.edu

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# International e-Health Initiatives Vary in Execution, Effectiveness

HILE MANY radiology leaders participating in the International Trends meeting at RSNA 2008 spoke of slow progress toward teleradiology and the electronic medical record (EMR) and a low return on investment, one leader inspired her colleagues with great hope for the future.

Hong Kong employs a governmentled model, with compelling but not compulsory record sharing and a strong privacy/security base, said Lilian F. Leong, M.D., immediate past-president of the Hong Kong College of Radiologists. The Hospital Authority, a statutory body set up by the government in 1991, hosts a sizable information technology (IT) department managing 43 public hospitals and 120 public clinics in Hong Kong, said Dr. Leong. A clinical management system (CMS) operates throughout the Hospital Authority and is used by all frontline clinicians, with 3 million daily healthcare transactions, she said. In addition, the Hospital Authority offers an e-Knowledge Gateway to promote evidence-based practice and an e-Learning Center with online courses. Clinicians in Hong Kong working are heavily involved in the e-Health initiative, said Dr Leong, with a new program in progress to implement sharing of clinical information between Hospital Authority and private doctors. "In Asia, there is strong IT penetration and strong interest in electronic health records," said Dr. Leong. China is particularly interested in Hong Kong's solutions, she noted.

In addition to the government's initiatives, other non-governmental organizations like the eHealth Consortium are also actively promoting the use of IT in Hong Kong healthcare.

Among the current goals of the eHealth



The European Union, made up of 27 countries, has an ambitious plan to have full electronic health records by 2015, said European Society of Radiology President lain McCall, M.D. (far right). Any doctor in any EU country would have access to records for all European citizens, Dr. McCall said.

We hope the U.S. system

will empower patients

to bave more control

over their health.

Consortium, said Dr Leong, are data sharing and standardization, education and value creation. "It is a collaboration of patients, primary healthcare givers and hospitals," Dr. Leong said of the program.

Leaders from Asian countries attending the Asian Oceanian Congress

of Radiology in October in Seoul were surveyed on EMR and teleradiology. Thirteen of the 19 countries said their hospital information systems were in the growing stage. Patient care, management,

research and cost savings were the most important advantages offered by the systems, respondents said.

"E-health will have a major impact on 21st century medicine," said Byung Ihn Choi, M.D., Ph.D., president of the Korean Society of Radiology, who presented the survey results at the RSNA 2008 meeting. In making patient information available anywhere, e-health shifts medicine from being doctor/hospital centric to patient centric, said Dr. Choi.

Asked about the EMR, 12 of the 19 respondents to the Korean survey

said digitalization and standardization were their top hopes. In terms of teleradiology, 13 of the 19 countries had new and developing programs, while one country reported never

Ronald L. Arenson, M.D.

e the most by the having tried teleradiology. Asked about their receptiveness to teleradiology, 14 respondents said it would be beneficial to their patients, while three expressed concern for loss of radiology jobs.

Overall, the survey found the EMR is used in clinical practice in Asia, said

Dr. Choi, adding that reimbursement and the development of guidelines have supported growth of the EMR. For teleradiology, the benefits prevail over concerns because remote reading helps ease the shortage of doctors, he said.

There is an expectation that e-health in Asia will provide health services to previously unreachable areas, Dr. Choi added.

European Society of Radiology President Iain W. McCall, M.D., said the European Union (EU), made up of 27 countries, has an ambitious plan to have full electronic health records by 2015. Any doctor in any EU country would have access to electronic health records for all European citizens and could treat a patient while the patient traveled around the EU, said Dr. McCall.

In Europe, physicians look to teleradiology and teleconsultation to bring medical support to remote areas, specialized care when there are shortages of doctors and enhanced help for chronic disease, Dr. McCall said. "It would make a significant contribution to the EU economy, too," he added.

The draw of a cross-border health-care directive, said Dr. McCall, is to allow the free movement of patients, giving them quality treatments while providing for their safety and privacy. He noted two significant problems, however, with the EU system under construction: there is a great need for translators for the multiple languages used by citizens of the EU—those translators must have strong knowledge of proper medical terms—and lack of regulations.

"No specific language exists to target e-Health services and products," said Dr. McCall.

Cooperation and cost are two other major problems, he added. "It is difficult getting all 27 states involved," he said. "In the United Kingdom, the government already has spent \$25 billion pounds to try to set up a government-funded teleradiology program."

EU member states have plans in



Hans Ringertz, M.D., Ph.D., (far left), president of the International Society of Radiology, participated in the International Trends Meeting at RSNA 2008.

2010 to assess needs and priorities in telemedicine to form national strategies. In 2011, plans call for assessing and adapting national regulations—addressing accreditation, liability, reimbursement, privacy and data protection—to enable wider access to telemedicine.

In the U.S., one emphasis in electronic health initiatives is patient safety, said Ronald L. Arenson, M.D., RSNA board liaison for the annual meeting and technology. There is no monolithic healthcare system, he said, with services in the U.S. fragmented among community hospitals, academic institutions, federally based hospitals and other networks. "The penetration of EMR here is highly variable," Dr. Arenson said. "There are no national healthcare identifiers due to security concerns."

Some companies are working hard to improve the EMR, said Dr. Arenson, citing the Electronic Privacy Information Center (EPIC) and the VA System for working with customers to get the systems right. President-elect Barack Obama has proposed \$10 billion per year for five years to improve digital medical records—a goal Dr. Arenson calls "ambitious."

"The U.S. has a long way to go,

but I'm encouraged after hearing about the work in Hong Kong and Europe," said Dr. Arenson. Currently the costs are huge and the savings tiny, he said, "However, we hope the U.S. system will empower patients to have more control over their health."

### Participants in the International Trends Meeting

Contributors to the International Trends Meeting at RSNA 2008 included representatives from RSNA and its International Advisory Committee, as well as:

- Asian Oceanian Society of Radiologists
- Brazilian College of Radiology
- British Institute of Radiology
- Canadian Association of Radiologists
- · European Society of Radiology
- · French Society of Radiology
- Hong Kong College of Radiologists
- International Society of Radiology
- Italian Society of Medical Radiology
- · Japan Radiological Society
- · Mexican Society of Radiology
- Radiological Society of the Netherlands
- Royal Australian & New Zealand College of Radiologists
- · Spain Radiological Society

RSNA President Gary J. Becker, M.D., moderated the discussion and plans to create a blog offering international updates about electronic health initiatives.

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### RSNA 2008 in Pictures

XCITING TECHNOLOGICAL ADVANCEMENTS and expert collaboration drove new programs and new enhancements to longstanding favorites at the 94th RSNA annual meeting. "Personal Learning in the Global Community," the meeting's theme, reflected each individual's commitment to ongoing education with the advent of resources that make the radiology community more connected than ever.













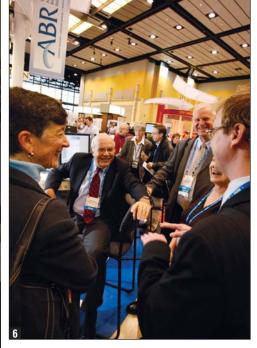












- **1.** RSNA 2008 attracted 161 members of the medical news media.
- 2. The 25 foot by 11 foot plasma wall, featuring daily meeting news and photos, was a popular meeting spot in the Grand Concourse.
- **3.** The RSNA 2008 technical exhibition expanded to three halls, spanning almost 514,000 square feet and featuring 724 exhibitors.
- **4.** The RSNA Research & Education Foundation lounge offered donors a place for relaxation and refreshments.
- **5.** Evan S. Siegelman, M.D. *(right),* led the discussion at the body MR topic table in the new Bistro RSNA in the Lakeside Learning Center.
- 6. Annual meeting attendees could learn more about the maintenance of certification process at the American Board of Radiology kiosk.
- 7. The Residents Lounge was an extremely popular spot for RSNA members-in-training and non-member residents to relax and network.
- 8. Personnel at the Refresher Course Ticketing desk helped RSNA 2008 attendees arrange attendance in more than 300 refresher courses covering traditional and cutting-edge topics in numerous subspecialties.
- 9. Membership, education store, publications, *RSNA.org* and RadiologyInfo™ were among the RSNA amenities conveniently located in RSNA Services.
- **10.** Cases of the Day in 14 categories were offered Sunday—Thursday in the Lakeside Learning Center, offering attendees the chance to earn 0.5 *AMA PRA Category 1 Credit*<sup>™</sup> for each correct diagnosis submitted.
- **11.** The Chicago Children's Choir gave a memorable performance during the RSNA 2008 Opening Session.
- **12.** Ramin Javan, M.D., was among the hundreds who presented scientific posters and education exhibits in the Lakeside Learning Center.

# In 10th Year, Online Journals Stay on Technology's Edge

N 2009, as the RSNA journals celebrate their 10th anniversary of online publication, the journals offer extensive access to timely and relevant information—in ways the editors envisioned and in others they may never have imagined.

"The online journals now have many new advantages that go beyond the electronic capabilities of even just a few years ago," said RadioGraphics Editor William W. Olmsted, M.D. "Online readers can explore the links and find exciting interactive features that cannot be duplicated in print."

Online versions of RadioGraphics and Radiology have evolved dramatically over the years and recent additions—including sophisticated search features, ahead-of-print availability and interactive components—make them more comprehensive than ever, said Dr. Olmsted and Radiology Editor Herbert Y. Kressel, M.D.

#### RSNA EJ Focused on Education

RSNA's online journal endeavors first went public in 1996 with RSNA

EJ, the "electroniconly journal," which mainly focused on education. RSNA EJ was edited by Laurens V. Ackerman, M.D., an associate editor of RadioGraphics. By the time RSNA EJ's 3-year pilot was com-

plete, RadioGraphics and Radiology had made their online appearance and the RSNA Board of Directors decided to merge EJ's educational content into RadioGraphics and expand the online versions of both journals.

In 1999, online access to the full-



William W. Olmsted, M.D. RadioGraphics Editor

The online journals now

capabilities of even just a

few years ago.

William W. Olmsted, M.D.

text versions of RadioGraphics and Radiology became an exclusive member benefit. "The online versions are beautifully designed and published, and they offer our overseas members and subscribers more timely access to new issues," said Dr. Olmsted in a 1999 editorial, recognizing then the potentially huge impact online availability would have on international readers.

Also in that editorial, Dr. Olmsted projected that eventubave many new advantages ally each online issue that go beyond the electronic would be available for viewing soon after the distribution of its printed counterpart. That was an underestimate, Dr. Olmsted

> said, because now members can see online articles well in advance of the print versions, as well as articles published exclusively for the Web. "These articles feature lots of images and movies running on advanced software, with convenient links to correspond-



Herbert Y. Kressel, M.D. Radiology Editor

ing figures and downloadable teaching slides," he said. Members can even view future tables of contents for a preview of articles to come.

### Searchability, CME are Major Online **Benefits**

In addition to accessibility, the online journals offer distinct advantages in supplementary images, external links and—most popular—the ability to search for specific information. "Many readers refer to the online content to answer specific questions, rather than just browse a particular issue of the print journal," said Dr. Kressel. Members can search full Radiology content as far back as 1980 (Radiology abstracts are available from 1975 to 1979 and tables of contents from 1965 to 1974). Full RadioGraphics content is available as far back as 1981, the year of the journal's inception.

Over the years, the journals' search features have been continually refined, and overhauls in the past year in particular have made the search process

much more sophisticated. Additional tools have been introduced with the advent of myRSNA®, the personalized RSNA member homepage. New features make personalization even more precise, with the ability to bookmark and tag articles in myRSNA and the availability of automatic article recommendations based on a member's subspecialty, interests and article viewing history.

Another tremendous benefit is interactive online continuing medical

education (CME) modules in RadioGraphics, said Dr. Olmsted. CME offerings have steadily increased, he said, and members can now earn up to 13 credits per issue. "Not only can members get their credits instantly online, but they can also see extended discussion on the answers to the test questions, which greatly enhances learning," he said.

In a 2000 editorial in Radiology, then-editor Anthony V. Proto, M.D., both foresaw the online version's potential for

additional content and acknowledged its potential for divergence from the print version. "The electronic medium will offer the opportunity for authors to provide supplemental material that will enhance their articles found in the printed version of the journal," Dr. Proto wrote. "These supplements will contain materials that are important, rather than just 'overflow' items. The material, however, will not be essential to the understanding of the printed article, so as not to deprive our readers who use only the printed version of any such essential information."

### "Online Only" Not Imminent

With the online revolution in full swing, more and more readers are accepting the inevitability of exploring possible online-only publication. However, as reflected in the 2007 Radio-Graphics readership survey (see RSNA News, March 2008), many readers still

> enjoy receiving and browsing their printed journals, and some say they don't like reading on a computer screen. "I'd expected by this time we would be closer to online-only publication," said Dr. Olmsted, "but the scholarly publication industry in general doesn't appear to be rushing to do that. Most major journals still have a pretty healthy print component.

"Dr. Kressel and I, and Dr. Proto and I in the past, have gone around to our most of them have said

that if they only had an hour to read online-only, Dr. Olmsted raises the possibility in an editorial in the JanuaryFebruary 2009 issue of RadioGraphics, noting that the option is probably still several years in the future. What may come sooner, writes Dr. Olmsted, is a hybridization, with a print issue that includes expanded abstracts of onlineonly articles that include images, teaching points and references to additional content that can be found online.

The added benefits of online features can't be denied even by those with a fondness for print, said the editors. "While most readers still prefer reading the journal in print, currently more than 50 percent of journal usage is online," said Dr. Kressel. "It is readily accessible from many locations and it is searchable." Another key advantage is the opportunity for interaction and discussion. Dr. Kressel urged readers to familiarize themselves with online offerings including RSS feeds, online collections and Radiology Forums. "The Forums give readers the opportunity to weigh in on controversial topics in the field," he said.

RadioGraphics and Radiology online will continue to explore new ways to get the most useful information to readers in the most practical ways, the editors said. "Better tools to navigate journal content, more interactive features, more use of multimedia, more opportunity for readers to customize the journal content they receive and more ability to structure the content display to suit the readers' needs are on the horizon for the online journals," said Dr. Kressel.





RadioGraphics members and asked, and

the journal, they'd look at it online," Dr. Olmsted continued. "But there's still a fair amount of hesitation about eliminating the print journal, and my concern about going online-only is for the members who still enjoy reading it in print." While at this time neither of the journals has specific plans to go

### "Hear What We Think" Podcasts Add Dimension to Radiology Content

Radiology editor Herbert Y. Kressel, M.D., has launched podcasts featuring summaries of selected articles and brief interviews with authors in the January 2009 issue. The podcasts debut in the form of MP3 files that can be streamed or downloaded from the Radiology Web site, RSNA.org/radiology. Each issue

will have a new podcast and an archive will be maintained on the Web site.

"The podcasts will highlight recent journal articles and provide additional insights into their context and significance," Dr. Kressel said.

The podcasts will be about 10 minutes long. Content for the January debut draws from selected articles including those featured in This Month in Radiology. Dr. Kressel plans future issues to also draw from "hot" articles like those in the Controversies section of the journal. "These podcasts will include the deputy editors and authors engaging in roundtable discussions on these topics," he said.



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# Journal Highlights

The following are highlights from the current issues of RSNA's two peer-reviewed journals.

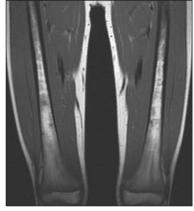
### **Imaging Insights into Skeletal** Maturation: What Is Normal?

HILE MR imaging offers a remarkable window into the dynamic process of skeletal growth and maturation, it also creates Kadıology the unique chal-

lenge of distinguishing normal pediatric development from abnormal growth.

Although conversion from hematopoietic to fatty marrow throughout childhood occurs in a predictable and reproducible pattern, familiarity with these transformations in the pediatric skeleton in terms of interpreting MR imaging isn't always easy. But such familiarity is essential.

In a review in the January issue of Radiology (RSNA.org/radiology), authors Tal Laor, M.D., of Cincinnati Children's Hospital Medical Center, and Diego Jaramillo, M.D., M.P.H., of Children's Hospital of Philadelphia, discuss the histologic structure and



MR imaging appearance of normal development-related changes of the musculoskeletal system in children, including those that may be mistaken

Authors discuss each component of the growing bone:

• Bone marrow and bony envelope

for abnormalities.

- Epiphyseal cartilage and secondary ossification center
- Physeal cartilage and its adjacent metaphysis, including the difference

Marrow reconversion in 11-year-old boy with rhabdomyosarcoma of the buttocks who had been treated with granulocyte colony stimulating factor.

Coronal T1-weighted MR image (338/14) of thighs shows numerous irregular islands of low signal intensity (SI) throughout both femoral diaphyses. These foci have slightly higher SI than adjacent muscle on T1-weighted images. There is hematopoietic marrow in distal femoral metaphyses and fatty marrow in distal femoral epiphyses. (Radiology 2009;250:28-38) © RSNA, 2009. All rights reserved. Printed

> between normal and irregular growth in terms of MR imaging appearance

"Growth, ossification and marrow conversion result in developmental changes that can be identified on MR images," the authors write. "Familiarity with these transformations in the pediatric skeleton, and the MR imaging appearance of these changes, can be challenging. However, a thorough recognition will help to differentiate normal growth from disease."

### CT Diagnosis of Chronic **Pulmonary Thromboembolism**

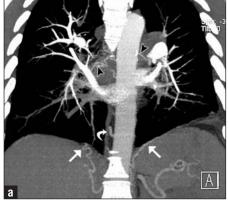
IS A USEFUL alternative to conventional angiography for diagnosing chronic pulmonary thromboembolism (CPT), which is potentially curable but commonly **RadioGraphics** 

misdiagnosed because symptoms are nonspecific and related to the development of pulmonary hypertension.

CT technology aids not only in diagnosing CPT, but also in determining which cases are treatable with surgery and confirming postoperative success.

In an article in the January-February issue of RadioGraphics (RSNA.org/

Continued on next page





Chronic pulmonary thromboembolism in a 47-year-old man with multiple episodes of acute pulmonary thromboembolism.

(a) Coronal 30-mm-thick maximum intensity projection CT image shows marked enlargement of branches of the right and left inferior phrenic arteries (straight arrows), right and left bronchial arteries (arrowheads), and an intercostal artery (curved arrow). (b) Coronal 30-mm-thick maximum intensity projection image shows enlargement of intercostal arteries on the right side compared with those on the left.

(RadioGraphics 2009;29:31-53) © RSNA, 2009. All rights reserved. Printed with permission.

# Radiology in Public Focus

### **Media Coverage of Radiology**

N November, media outlets carried 215 news stories generated by articles appearing in *Radiology*. These stories reached an estimated 181 million people.

News releases promoted findings from a study on diffusion-weighted imaging in cervical cancer with an endovaginal technique (*Radiology* 2008;249:541-550) and a study on the use of 3D power Doppler ultrasound to distinguish between malignant and benign breast masses (*Radiology* 2008;249:463-470).

Broadcast coverage included KYW-TV (Philadelphia), WAFB-TV (Baton Rouge, La.), KCAU-TV (Sioux City, Iowa), KCBD-

TV (Lubbock, Texas) and KAIT-TV (Jonesboro, Ark.).

Print and wire coverage included *Imaging Technology News*, *Biotech Week*, *Diagnostic Imaging, Record-Journal* (Meriden, Conn.), *Health and Medicine Week*, *Clinical Oncology Week*, *Women's Health Weekly*, Targeted News Service, HealthDay News and Asian News International.

Web placements included Yahoo! News, AOL.com, USNews.com, docguide.com, healthcentral.com, forbes.com, washington-post.com and drkoop.com.

### Women's Imaging the Focus of January Public Information Activities

In January, RSNA will distribute the "60-Second Checkup" audio program to nearly 100 radio stations across the U.S. Segments will focus on gynecologic interventional radiology and the use of ultrasound, CT and MR to image the female pelvis.

### CT Diagnosis of Chronic Pulmonary Thromboembolism

Continued from previous page

radiographics), Eva Castañer, M.D., and colleagues review the risk factors, clinical characteristics and pathogenesis of CPT, describe optimal techniques for CT angiography and the CT criteria for CPT and discuss differential diagnoses and treatment.

Both congenital and acquired conditions may cause pulmonary hypertension or obstruction of the pulmonary arteries and mimic CPT. The authors address findings that will help distinguish CPT from the following conditions:

- Idiopathic pulmonary hypertension
- Proximal interruption of the pulmonary artery

  This article me
- · Takayasu arteritis
- Primary sarcoma of the pulmonary artery
- Bronchial abnormalities

• Acute thromboembolism

"Knowledge of the radiologic imaging signs is required to detect and accurately diagnose the condition,"

Dr. Castañer and colleagues conclude.

of the pulmo"Because chronic thromboembolism is
This article meets the criteria for 1.0 AMA PRA Category 1 Credit".

potentially curable with pulmonary thromboen-

darterectomy, early recognition may improve the outcome in cases that are technically operable."

MAINTENANCE OF CERTIFICATION

### **MOC** News

### My Professional Learning Map Now Live

The RSNA Education Center has created a new online CME tool designed to assist all physicians in organizing their CME and maintenance of certification (MOC). With My Professional Learning Map, radiologists can map out their yearly CME based on educational requirements as well as their individual practice requirements.

For original users of the Practice Profile, your original data has been transferred over to

the new system. Access this new member benefit and update your 2009 information by visiting RSNA.org/myplm.

For more informa-

tion about RSNA Education Center products, call 1-800-272-2920 or 1-800-381-6660 x3753.



# Working For You

### **Associated Sciences Consortium**

RSNA News continues its series highlighting the work of organizations working with RSNA in the Associated Sciences Consortium.

### American Registry of Radiologic Technologists

■HE American Registry of Radiologic Technologists® (ARRT) recently expanded its offerings with the Online Digital Imaging Academy (ODIA), designed to give registered radiologic technologists and radiologic science students a solid understanding of the technology and application behind digital imaging systems. Developed for ARRT by the American Society of Radiologic Technologists Education and Research Foundation, ODIA comprises 11 modules—including videos, narration and interactive scenarios—that cover practical aspects of digital imaging such as image capture, display, processing and analysis, PACS, patient exposure and radiation safety and quality assurance.

"We believe that ODIA is one of the most significant educational initiatives launched in recent years," said Jerry B. Reid, Ph.D., ARRT executive director.

ARRT is the certifying body for more than 285,000 technologists across the U.S. Individuals certified and registered through ARRT have the right to use the title "registered technologist" and its abbreviation "R.T. (ARRT)" or "registered radiologist assistant" and its abbreviation "R.R.A. (ARRT)." ARRT provides a primary pathway to certification in radiography, nuclear medicine technology, radiation therapy, sonography and MR

imaging, and a post-primary pathway to certification in mammography, CT, MR imaging, quality management, bone densitometry, cardiac interventional radiography, vascular interventional radiography, sonography, vascular sonography and breast sonography.

The organization also works closely with radiologic professional societies to govern criteria as new technologies emerge. A recent partnership with the Society of Imaging Informatics in Medicine created the American Board of Imaging Informatics to provide certification for PACS administrators.

Earlier this year, the ARRT Board of Directors announced the "CQ/2011"

> initiative. "Believing that 'once certified, forever qualified' is no longer tenable given the rapid pace of technological changes, ARRT certifications awarded in 2011 and thereafter will be

time-limited to 10 years," said Dr. Reid. "Requirements over and above the mandatory CE currently mandated will need to be met to maintain certification. This move keeps ARRT moving in the same direction as other healthcare certification organizations."

More information about ARRT can be found at www.arrt.org.

### **SAMs Results to be Issued mid-February**

RSNA 2008 attendees who participated in self-assessment modules (SAMs) will receive their certificates of participation, test answers, references and performance data no later than mid-February. Faculty contributors worked with RSNA to offer 48 SAMs attended by more than 2,000 RSNA 2008 registrants.

### **RSNA Education Center Director is ACCME surveyor** RSNA Education Center Director Mellie Villahermosa Pouwels,

M.A., has been selected as an accreditation surveyor with the Accreditation Council for Continuing Medical Education (ACCME). In this volunteer position, Villahermosa Pouwels will serve as a member of a surveyor team, which documents preliminary compliance with accreditation elements and policies.

RSNA is one of 741 organizations accredited by the ACCME to provide continuing medical education for physicians.

### **Categorical Course Supplements Available**

RSNA 2008 categorical course supplements on CD-ROM are available for purchase from the RSNA Education Center. Each supplement—for the Categorical Course in Diagnostic Radiology: Cardiac and the Categorical Course in Diagnostic Radiology Physics: CT and MR Imaging—was designed by course faculty to complement the live presentations.

CD-ROMs are available to members for \$20 and nonmembers for \$25. To purchase the 2008 supplements or view a complete product listing, go to RSNA. org/education.

### **MR IMAGING** [Question on page 1.] **Most MR audio** systems move the sound to the patient via an air filled tube. The electronics are well away

from the fields.

@ Q&A courtesy of AAPM.

If you have a colleague who would like to become an RSNA member, you can download an application at RSNA.org/mbrapp or contact the RSNA Membership and Subscriptions Department at 1-877-RSNA-MEM [776-2636] (U.S. and Canada), 1-630-571-7873 or membership@rsna.org.

## Program and Grant Announcements

### SNM Symposium on Multimodality Cardiovascular **Molecular Imaging**

### April 30-May 1 • National Institutes of Health, Bethesda, Md.

This symposium aims to bring together individuals from chemistry, engineering, physics, molecular biology, cardiovascular physiology and imaging sciences to promote cardiovascular molecular imaging. The meeting continues the work of a similar conference held at NIH in 2004 that served as the basis for the first textbook dedicated to the field of cardiovascular molecular imaging. Included will be expert lectures, panel discussions and an abstract poster session, with a focus on imaging of cardiovascular receptors, stem cell therapy, vascular biology and myocardial metabolism. RSNA is co-sponsoring this meeting. More information is available at www.snm.org/cvmi2009.

### RSNA Eyler Editorial Fellowship

### Application Deadline-May 1

Candidates are sought for the RSNA Eyler Editorial Fellowship, sponsored by the RSNA Publications Council and the Committee on International Relations and Education (CIRE).

Named after William R. Eyler, M.D., a former editor of Radiology, the fellowship is designed to provide an opportunity for a mid-career radiologist to further his/her experience in radiologic journalism. Working with the editors of Radiology and RadioGraphics and RSNA publications staff, the fellow will learn about manuscript preparation, peer review, manuscript editing, journal production, printing and electronic publishing.

For more information regarding eligibility requirements and to apply, go to RSNA.org/Publications/editorial\_fellowships.cfm.

### **RSNA-Sponsored Sessions at the Association of University Radiolo**gists (AUR) Annual Meeting

May 12-15 • Marriott Crystal Gateway Hotel, Arlington, Va.

### **MERC Workshop**

Part of the Association of American Medical Colleges (AAMC) Medical Education Research Certificate (MERC) Program, this workshop is targeted to clinicians and other educators who want to learn research skills enabling collaborative participation in medical education research projects. The workshop will be offered on Tuesday, May 12.

### **AUR-RSNA Quality Keynote**

This lecture will be delivered on Thursday, May 14. Catherine C. Roberts, M.D., will moderate. Presenters are Steven J. Swensen, M.D., and Kevin B. Weiss, M.D., M.P.H.

### RSNA Medical Imaging Resource Center (MIRC®) Session

"Introduction to RSNA's Teaching File Software: A Do-It-Yourself Guide to Setting It Up, Capturing Cases or Simply Using It for Board Review" will be offered Friday, May 15. Faculty will be Eliot Siegel, M.D., Micah Adams, B.A., Naomi Saenz, M.D., and Tara Morgan, M.D.

MEETING WATCH RSNA 2009

### News about RSNA 2009

### **Submit Abstracts for RSNA 2009**

The online system to submit abstracts for RSNA 2009 will be activated this month. The submission deadline is 12:00 p.m. Central **Time on April 15, 2009.** Abstracts are required for scientific papers. scientific posters and education and applied science exhibits.

### To submit an abstract online, go to RSNA.org/abstracts.

The easy-to-use online system helps the Scientific Program Committee evaluate submissions more efficiently. For more information about the abstract submission process, contact the RSNA Program Services Department at 1-877-776-2227 within the U.S. or 1-630-590-7774 outside the U.S.

Important dates for RSNA 2009	
April 15	Deadline for abstract submission
April 29	RSNA/AAPM member registration and
	housing open
May 27	Non-Member registration and housing
	open
June 30	Course enrollment opens
November 6	Final advance registration, housing and
	course enrollment deadline
Nov. 29 – Dec. 4	RSNA 95th Scientific Assembly &
	Annual Meeting

# **Product News**

### **NEW PRODUCT**

### Patient Entertainment System Upgrades

range of enhancements to its MR-compatible CinemaVision patient comfort audio-video system, which delivers high-quality, all-digital entertainment in the MR imaging environment. Enhancements include a new, powerful audio-phone with enhanced noise-cancellation technology integrated into the device's one-piece headset. The technology minimizes MR gradient noise and enables clear communication between the technologist and patient during scanning. By enhancing the patient scanning experience, CinemaVision helps sites reduce aborted and repeat procedures, as well as delays in exam completion due to patient movement. Some difficult-to-scan patients may even be able to avoid sedation.



#### **NEW PRODUCT**

### CAD Upgrade with False-Positive Reduction

Parascript (www.parascript.com) has released AccuDetect 2.0, the next generation of its computer-aided detection (CAD) algorithms for mam-

mography. AccuDetect 2.0 is more robust with improved performance and increased potential for lowering false-positive rates in detecting suspicious lesions



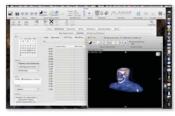
on mammograms. Available for OEM customers interested in reducing false-positive rates of existing CAD systems, AccuDetect is intended to assist radiologists in the early detection of breast cancer during film-based or digital mammography exams. *Accu*Detect 2.0 integrates several proprietary algorithms and sophisticated voting methods to achieve low false-positive rates while maintaining high sensitivity rates.

#### **NEW PRODUCT**

### RIS for Mac

RISLinQ, the fully integrated radiology information system (RIS), billing and collections tool by PETLinQ (www.petlinq.com), is now available for the Mac platform. RISLinQ supports

the entire RIS workflow, from scheduling to collections. The product features low cost of owner-



ship, quick deployment time and low bandwidth use. The RISLinQ management and support team is available to quickly implement client-specific requests.

### **NEW PRODUCT**

### **Ultrasound Phantom**



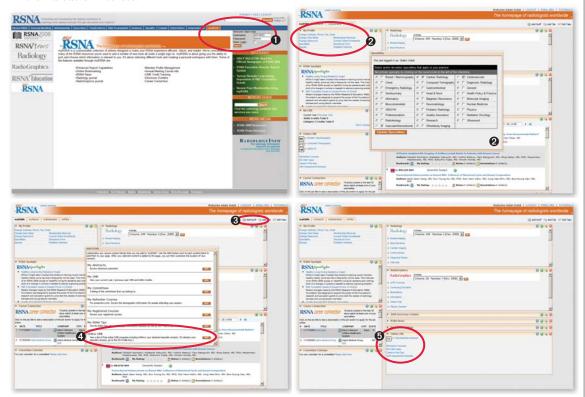
Sonora Medical Systems (www.4sonora.com) launches the Optimal™ Ultrasound Phantom, an easy-to-use comprehensive means of evaluating ultrasound systems with an effective operating frequency range of 2.25 to 10 MHz. The phantom is designed with a combination of monofilament line targets for distance measurements and tissue mimicking target structures of varying sizes and contrast content. Four grayscale targets ranging in contrast from +6 to -3 decibels are provided to evaluate the system's displayed dynamic range and gray scale processing performance. The Optimal phantom offers a new and improved dual scan surface design to easily accommodate linear, sector, endoscopic probes and transesophageal probes.

**RSNA** Information for *Product News* came from the manufacturers. Inclusion in this publication should not be construed as a product endorsement by RSNA. To submit product news, send your information and a non-returnable color photo to *RSNA News*, 820 Jorie Blvd., Oak Brook, IL 60523 or by e-mail to *rsnanews@rsna.org*. Information may be edited for purposes of clarity and space.

# RSNA.org

### Finding Free CME with myRSNA®

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Identify areas of interest to you by editing My Profile in the upper lefthand corner of the page. Click Specialties and choose a primary specialty and additional areas of interest.

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The widget appears

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tunities in your areas of interest. Click on a subspecialty to see

CME types and titles. 6

For a complete listing of opportunities in all subspecialties, click on a particular type

> of CME—Cases of the Day, Education Exhibits or Refresher

Courses—and select the desired subspecialty.



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rsnanews.org

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RSNA.org/education

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### CME Gateway CMEgateway.org

International Radiology Outreach Resources RSNA.org/International/ IROR.cfm

#### InterOrganizational Research Council

radresearch.org

### RSNA Medical Imaging Resource Center RSNA.org/mirc

RSNA Career Connection RSNA.org/career

### RadiologyInfo™

RSNA-ACR patient information Web site *radiologyinfo.org* 

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### Abstract Submission RSNA.org/abstracts



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### CALENDAR

# Medical Meetings February – June 2009

#### FEBRUARY 4-8 VISIT THE RSNA BOOTH

Sociedad Mexicana de Radiologia e Imagen (SMRI) • www.smri.org.mx

### FEBRUARY 7-12

SPIE, Medical Imaging, Disney Coronado Springs Resort, Lake Buena Vista, Fla. • *spie.org* 

#### FEBRUARY 23-27

Integrating the Healthcare Enterprise (IHE®), Connectathon and Education Conference, Hyatt Regency Chicago • www.ihe.net

### MARCH 6-10 VISIT THE RSNA BOOTH

European Congress of Radiology (ECR), Austria Center, Vienna • www.ecr.org

#### MARCH 7-12

Society of Interventional Radiology (SIR), 34th Annual Meeting, San Diego • www.sirweb.org

#### MARCH 15-20

Society of Gastrointestinal Radiologists (SGR) and Society of Uroradiology (SUR), Abdominal Radiology Course, Grand Wailea Resort Hotel & Spa, Maui, Hawaii • www.sgr.org

#### APRIL 2-5

American Institute of Ultrasound in Medicine (AIUM), Annual Meeting, Marriott Marquis, New York • www.aium.org

#### APRIL 4-8

Healthcare Information and Management Systems Society (HIMSS), Annual Conference and Exhibition, Chicago • www.himssconference.org

#### **APRIL 18-24**

International Society for Magnetic Resonance in Medicine (ISMRM), 17th Scientific Meeting and Exhibition, Honolulu • www.ismrm.org

#### **APRIL 21-25**

Society for Pediatric Radiology (SPR), 52nd Annual Meeting, La Costa Resort and Spa, Carlsbad, Calif. • www.pedrad.org

#### APRIL 25-29

American Radium Society (ARS), Annual Meeting, Four Seasons Vancouver, British Columbia

www.americanradiumsociety.org

#### **APRIL 26-29**

Society of Breast Imaging (SBI), 9th Postgraduate Course, The Broadmoor, Colorado Springs, Colo. • www.sbi-online.org

#### APRIL 26-MAY 1

American Roentgen Ray Society, Annual Meeting, John B. Hynes Veterans Memorial Convention Center, Boston • www.arrs.org

#### **APRIL 27-29**

International Atomic Energy Agency (IAEA), International Conference on Advances in Radiation Oncology, Vienna International Centre, Austria • www.iaea.org

#### APRIL 30-MAY 1

SNM/RSNA, Symposium on Multimodality Cardiovascular Molecular Imaging, National Institutes of Health, Bethesda, Md. • www.snm.org/cvmi2009

### APRIL 30-MAY 2

French Society of Radiology, InterAmerican College of Radiology, Sao Pãulo Society of Radiology and Brazilian College of Radiology, French and Latin American Congress of Radiology, São Paulo, Brazil

#### MAY 2-6

American College of Radiology, Annual Meeting and Chapter Leadership Conference, Hilton Washington, D.C. • www.acr.org

#### MAY 12-16

Association of University Radiologists (AUR), Annual Meeting, Crystal Gateway Marriott, Arlington, Va. • www.aur.org

### MAY 16-21

American Society of Neuroradiology (ASNR), 47th Annual Meeting, Vancouver Convention and Exhibition Center, British Columbia • www.asnr.org

#### MAY 30-JUNE 2

2nd World Congress of Thoracic Imaging and Diagnosis in Chest Disease, Valencia Conference Centre, Spain

• www.geyseco.es/thoracicimaging.htm

### **NOVEMBER 29-DECEMBER 4**

RSNA 2009, 95th Scientific Assembly and Annual Meeting, McCormick Place, Chicago • RSNA 2009.RSNA.org