



## Ultrasound Could Aid in Skin Cancer Detection

### ALSO INSIDE:

SPECT Imaging Technique Promises Earlier Brain Tumor Detection

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Daily Chest X-rays Not Necessary in ICU

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**Antonio C. Westphalen, M.D.**  
Department of Radiology  
University of California, San Francisco  
R&E Grant Recipient

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Thanks to an RSNA R&E Foundation research grant, Dr. Westphalen gained protected time to develop a new line of investigation techniques and algorithms that can more definitely identify the biochemical nature of prostate cancer's recurrence and help physicians and patients choose the best course of treatment.

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RSNA News proudly celebrates 20 years of providing high-quality, timely coverage of radiology research and education and critical issues in private and academic practice, along with comprehensive information about RSNA programs, products and other member benefits.

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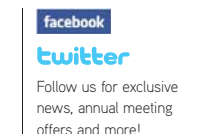
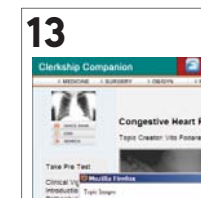
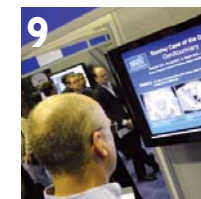
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# RSNA 2010 HONOREES NAMED

*RSNA has announced the Society will honor the following individuals during RSNA 2010:*

#### GOLD MEDALISTS

William R. Brody, M.D., Ph.D.  
*Baltimore*

David H. Hussey, M.D.  
*Georgetown, Texas*

Elias A. Zerhouni, M.D.  
*Pasadena, Md.*

#### HONORARY MEMBERS

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*Auch, France*

Iain McCall, M.D.  
*Shrewsbury, United Kingdom*

Kazuro Sugimura, M.D.  
*Kobe, Japan*

#### SPECIAL PRESIDENTIAL AWARD

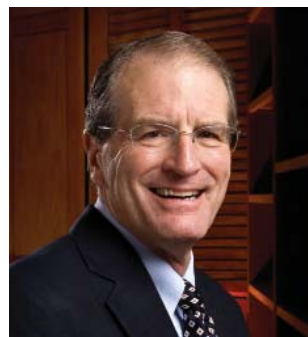
Hans G. Ringertz, M.D., Ph.D.  
*Linköping, Sweden*

#### RSNA MEETING PROGRAM DEDICATION

Peggy J. Fritzsche, M.D.



NOVEMBER 28 - DECEMBER 3 • McCORMICK PLACE, CHICAGO



Brody



Hussey



Zerhouni



Manelfe



McCall



Sugimura



Ringertz



Fritzsche

*Biographies of these honorees will appear in future editions of RSNA News.*

#### Boyd is Rutgers Distinguished Alum

A pioneer of fan-beam CT technology, **Douglas P. Boyd, Ph.D.**, has been inducted into the Hall of Distinguished Alumni at Rutgers University in Newark, N.J. Dr. Boyd, a 1968 Rutgers graduate, went on to Bell Labs, Stanford University and the University of California at San Francisco, where he founded the Physics Research Laboratory in the Department of Radiology. The holder of 13 U.S. patents, Dr. Boyd founded Imatron and InVision Technologies and is currently CEO of TeleSecurity Sciences, Inc.



#### Horror Receives Philadelphia Award

The Philadelphia Roentgen Ray Society has awarded its 2010 Mary S. Fisher Outstanding Educator Award to **Mindy Horror, M.D.**, section chief of body imaging at Albert Einstein Medical Center in Philadelphia. Dr. Horror received Albert Einstein's Outstanding Clinical Clinical Teacher Award in 1994 and 2004.



#### Forensic Radiology among Topics for ASRT@RSNA 2010

ASRT@RSNA 2010, a 1½-day education program for radiologic technologists, will kick off with a session on forensic radiology and radiography—past, present and future. Technologists may earn continuing education credit through ASRT@RSNA 2010, which begins Wednesday afternoon and runs all day Thursday. ASRT@RSNA 2010 sessions are:



#### Wednesday, December 1

- Forensic Radiology and Radiography: Historical Perspective, Current Status, and Future Challenges
- Multimodality-Proficient Cardiac Imaging Technologist
- Integrating Imaging into Radiation Therapy
- Current Trends in Imaging

#### Thursday, December 2

- The Improbable is Very Probable
- Multidisciplinary CT Operation Gap Analysis: Findings, Follow-through and Future Practice—A Canadian Perspective
- Trauma Care in the United Kingdom: The Changing Roles of Radiographers
- ACR and Intersocietal Accreditation Commission (IAC) Accreditation
- Digital Imaging: What Every Radiographer Needs to Know
- Lateral Violence and Bullying in the Workplace

An article in an upcoming issue of *RSNA News* will offer more details about ASRT@RSNA 2010 and the Associated Sciences program and how your staff can benefit.

#### Associated Sciences Program to Explore Ethical Dilemmas

Among the topics to be tackled during the RSNA 2010 Associated Sciences Program are regulatory and business ethics and the role of ethics in clinical excellence. The program is sponsored by the Associated Sciences Consortium, 12 organizations representing radiologic nurses and technologists, radiology business managers and administrators and other allied professionals. Associated Sciences sessions for RSNA 2010 are:



#### Monday, November 29

- Ethical Dilemmas: Regulatory and Business Ethics in Medicine Today
- Ethical Dilemmas: The Vital Role of Ethics in Clinical Excellence
- Picking Up the Pieces: Forensic Radiography Following Mass Disasters
- Imaging Facility Design in an Age of Diminishing Resources

#### Tuesday, November 30

- Who's Driving Radiology: Trends in Hospital/Radiologist Alignment
- The Clinical Impact of Molecular Imaging
- New Regulations and Their Impact on Radiology Practice
- Managing Risk for Optimal Patient Safety

#### Wednesday, December 1

- Radiology's Changing Dynamics
- Imaging through a Cross-cultural Lens: A Global Perspective on Ethics, Standards and Human Resource Issues

#### Pisano, Thrall Presented AUR Gold Medals

The Association of University Radiologists (AUR) awarded its 2010 gold medals to Etta D. Pisano, M.D., and James H. Thrall, M.D.

A renowned expert in mammography, Dr. Pisano is dean of the College of Medicine at the Medical University of South Carolina (MUSC) in Charleston, a member of RSNA's Public Information Advisors Network and an AUR past-president.

Dr. Thrall is radiologist-in-chief at Massachusetts General Hospital, a professor of radiology at Harvard Medical Center in Boston and president of the American College of Radiology Board of Chancellors. He received the RSNA Gold Medal in 2007.



Pisano



Thrall

#### IN MEMORIAM

#### Frank Larkin Hussey Jr., M.D.

A leading radiation oncologist at the forefront of using radiation therapy in the fight against cancer, **Frank Larkin Hussey Jr., M.D.**, died on April 26. He was 84.

Born in Milwaukee, Dr. Hussey spent most of his life in the Chicago area, working as an attending physician, radiologist and radiation oncologist from 1959 to 1995 at Lutheran General Hospital (LGH) in Park Ridge, Ill., and Alexian Brothers Hospital in Elk Grove Village, Ill. At LGH, he served as chair of the Department of Radiology from 1968 to 1971 and as president of the medical staff in 1974. Dr. Hussey was an attending radiation oncologist and conducted research at the Fermilab Cancer Treatment Center in Batavia, Ill.

A 1993 RSNA Gold Medal recipient, Dr. Hussey served as president of the Chicago Radiological Society (CRS) in 1976 and received CRS's gold medal in 1990. Dr. Hussey was a dedicated supporter of the RSNA R&E Foundation, donating as a Pacesetter for the recent Silver Anniversary Campaign. Dr. Hussey was a member of RSNA's Public Information Advisory Board. For 35 years, Dr. Hussey was involved with the American College of Radiology where he served on numerous boards, committees and delegations. He was also a longtime member of the American Medical Association.





**RSNA Participates in AOCR**

“Radiology—The Core of Health-care” was the theme of the 13th Asian Oceanian Congress of Radiology (AOCR), held earlier this year in Taipei, Taiwan. Attendance at the meeting was estimated at about 2,000.

2010 RSNA President Hedvig

Hricak, M.D., Ph.D, Dr. h.c. (front row, center), was among those who shared the latest breakthroughs—from the bench to the clinic—in the specialty worldwide.

Increasing numbers of radiologists from Asian countries are involved with RSNA, as members,

authors of journal articles and annual meeting attendees, Dr. Hricak and RSNA Executive Director Mark G. Watson told the executive committee of the Asian Oceanian Society of Radiology.

A “China Presents” session highlighting the very latest in

radiologic research happening in that country is planned for RSNA 2010.

An article about the “China Presents” session will appear in the August issue of *RSNA News*.

**SIR Bestows Honors**

The Society of Interventional Radiology (SIR) presented gold medals to John D. Fulco, M.D., Irvin F. Hawkins Jr., M.D., and David C. Levin, M.D.

Past chief-of-staff of the Ellis Health System in New York and past-president of the Medical Society of the County of Schenectady, Dr. Fulco served as SIR’s first representative on the American Medical Association’s House of Delegates, beginning in 1991. He still holds the position today.

An internationally recognized pioneer in needle and catheter design, Dr. Hawkins is a professor of radiology and surgery at the University of Florida College of Medicine in Gainesville. Other honors he has received include the silver and gold medals of the American Roentgen Ray Society.

A 2009 RSNA Gold Medal recipient, Dr. Levin is professor and chair emeritus of the Department of Radiology at Jefferson Medical College and Thomas Jefferson University Hospital, where the David C. Levin Professorship and Chair was established in 2008.

Michael C. Soulen, M.D., a professor of radiology and surgery at the University of Pennsylvania School of Medicine in Philadelphia, delivered the 2010 Dr. Charles T. Dotter Lecture at the SIR meeting held earlier this year in Tampa, Fla.



(top to bottom) Fulco, Hawkins, Levin, Soulen

**Numbers in the News**

**73**

Number of new and continuing research and education grants funded by the R&E Foundation in 2010, totaling nearly \$2.3 million. A full list of recipients and their grant projects will be published in the October issue of *RSNA News*.

**7,078**

Number of patients included in a meta-analysis of eight clinical trials evaluating the use of daily routine chest X-rays in the intensive care unit. Researchers found that abandoning the daily scans would not adversely affect patient outcomes. (Read “Daily Chest X-rays Not Necessary in ICU,” starting on Page 11.)

**122,462**

Continuing medical education certificates awarded to physicians in 2009 by RSNA, which was just awarded a six-year reaccreditation by the Accreditation Council for Continuing Medical Education (ACCM). (Read “Reaccreditation Underscores RSNA’s Commitment to Continuing Education,” starting on Page 9.)

**1,000,000**

Number of skin cancer cases diagnosed in the U.S. each year, according to the American Cancer Society. (Read “Ultrasound Could Aid in Skin Cancer Detection,” starting on Page 5.)

**My Turn**

**The Magic of a Mentor**

Every radiologist can recount with a personal story why s/he decided to study radiology. Invariably the memory tracks to a mentor—mentoring is the ultimate joy of medicine. The ability to give to your mentees, so someday they can do likewise, is the true gift of education. One of my personal goals in medicine is to be just like those mentors who taught me. There were many, but the person who was most magical was Henry Kaplan, M.D.

Dr. Kaplan was a tough task master. He gave 100 percent, but I believed he expected 110 percent in return. His smile of approval was the needed reward; it was unthinkable to disappoint him. I was totally in awe of him, yet feared him. He was steadfast, however, in his support of a trainee, and exercised a uniquely magical mentoring style—his presence was felt even when he was absolutely silent. Most magical was Dr. Kaplan’s sensitivity to his patients and his drive to find solutions to seemingly impossible problems.

These characteristics defined his persona, which he imparted to his mentees. A student once said to Dr. Kaplan, “Most great achievements of man seem to originate from the greatness of spirit of their teachers. It is this which enables your followers to carry on your work and never let the torch fall.” All mentors should strive to embody these characteristics.

A new biography of Dr. Kaplan, written by Charlotte Jacobs and recently published by Stanford Press, *Henry Kaplan and the Story of Hodgkin’s*

*Disease*, describes a completely different man than the mentor I knew. I learned about his personal struggles amidst professional accomplishments, of losses intertwined with gains. He was driven to find the cure for cancer, but in the end, he lost to the disease he vowed to cure. Mentoring is but one of the lessons from this tale.

For more information about the new biography of Dr. Kaplan, go to Stanford University Press at [www.sup.org](http://www.sup.org).



Sarah S. Donaldson, M.D., is the RSNA Board Liaison for Publications and Communications. Dr. Donaldson is associate chair of the Department of Radiation Oncology, deputy clinic chief and residency associate program director for radiation oncology at Stanford University Medical Center in Stanford, Calif. Dr. Donaldson is also the Catharine and Howard Avery Professor of Radiation Oncology in the Stanford University School of Medicine.

**RSNA Endorses Brain Death Guidelines**

RSNA has endorsed a new guideline issued by the American Academy of Neurology (AAN), “Update: Determining Brain Death in Adults.” The guideline is available for review at [www.aan.com/guidelines](http://www.aan.com/guidelines).

AAN employed a systematic literature search, including a review of MEDLINE and EMBASE from January 1996 to May 2009, to update its 1995 version of the guideline. Among the results:

- There are no published reports of recovery of neurologic function after a diagnosis of brain death using the 1995 guideline.
- Complex-spontaneous motor movements and false positive triggering of the ventilator may occur in patients who are brain dead.
- There is insufficient evidence to determine the minimally acceptable observation period to ensure that neurologic functions have ceased irreversibly.

AAN called the updated guideline a clear, step-by-step method for determining brain death, which gives doctors and hospitals a uniform process to follow and steps to meet legal standards. Additionally, AAN noted that no one diagnosed brain dead on the basis of the 1995 guideline has recovered.

**SPEAK UP READER POLL RESULTS**

**Opinions Divided on Impact of Resident Duty Hour Limits**

Twenty-three people responded to a poll published in conjunction with the April 2010 *RSNA News* story, “Resident Duty Hour Proposal Could Impact Night Shifts”:



- 8 thought limiting resident duty hours would have little effect on resident training, as education opportunities are abundant.
  - 5 thought the effect would be moderate, with residents seeing significantly fewer cases but that being able to rely on other learning sources could make up for the loss.
  - 10 foresaw a severe effect, with residents missing too many cases and daytime educational activities.
- Learn more about this month’s Speak Up poll and vote at [rsnanews.org](http://rsnanews.org).

**RSNA News**

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# Ultrasound Could Aid in Skin Cancer Detection

*Researchers in two separate projects have demonstrated the ability to diagnose skin cancer with more accuracy and efficiency using innovative ultrasound applications.*

UNIVERSITY OF MISSOURI researchers are studying how photoacoustic ultrasound can help physicians identify melanoma cells in the sentinel lymph node, said John Viator, Ph.D., assistant professor in the Department of Biological Engineering and Department of Dermatology. The research is detailed in the July 2009 issue of *Journal of Biomechanical Engineering*.

The current method of detecting melanoma cells begins with the oncologist removing the lymph node, generally about the size of a lima bean, for examination by a pathologist, according to Dr. Viator, who added the process is time-consuming and costly.

"The pathologist performs histology on the lymph node and examines slices under a microscope," Dr. Viator said. "But a histology slice is about six microns thick. With a lima bean-sized lymph node, you can take 1,000 or 2,000 different slices but typically only check five to 10. Obviously it's possible to miss something."

In the photoacoustic method, a tabletop laser irradiates an entire lymph node biopsy with laser pulses. About 95 percent of melanoma cells contain melanin, which reacts to the laser beam, absorbing the light. The laser causes the cells in the lymph node to expand and contract rapidly, generating a photoacoustic pulse, or popping sound detected by piezoelectric acoustic sensors located near the lymph node.

Laser-induced ultrasound allows the clinician to precisely guide the slicing, saving time and money, and most importantly, leading to better patient care. "The laser method gives the clinician more information about the skin cancer patient, whether at stage 2 or stage 3, and allows him or her to be more certain about treatment," Dr. Viator said.

In the study, Dr. Viator cultured a malignant human melanoma cell line and injected a healthy canine lymph node. He then used the laser to determine the best way to locate the cancer cells.

Dr. Viator and his team are expanding photoacoustics research to cancer cells including breast

## ON THE COVER

John Viator, Ph.D., uses a tabletop device to scan a lymph node biopsy with laser pulses. This method could help doctors identify the stage of melanoma with more accuracy.

(Image courtesy of University of Missouri-Columbia)



and prostate. Because those cells have no color, researchers are developing a system using gold nanoparticles that magnetically attract to receptors on the cancer cells, allowing the laser system to detect them.

## Elastography Could Reduce Biopsies

Combining high-frequency ultrasound with elastography has the potential to improve the efficiency of skin cancer diagnosis by reducing the need for biopsies, according to Eliot Siegel, M.D., co-author of a study presented at RSNA 2009.

"The questions were, number one, could we determine the extent of the skin lesions below the surface using high-frequency ultrasound and, number two, could we differentiate between benign and malignant skin lesions by determining their elastographic properties," said Dr. Siegel, professor and vice-chair of the Department of Radiology at the University of Maryland School of Medicine. Bahar Dasgeb, M.D., a dermatologist at Wayne State University in Detroit, co-authored the study.

These early findings are significant considering the growing number of patients battling skin cancer. More than 1 million cases of skin cancer are diagnosed in the U.S. every year, according to the American Cancer Society.

Drs. Siegel and Dasgeb took images of 50 patients with an ultrasound system that utilizes a transducer capable of operating at a frequency up to 16 mega-

“The laser method gives the clinician more information about the skin cancer patient, whether at stage 2 or stage 3, and allows him or her to be more certain about treatment.”

John Viator, Ph.D.



In the photoacoustic technique, a laser light irradiates a flow chamber with an acoustic sensor in the background.

(Image courtesy of University of Missouri-Columbia)

hertz. While unable to penetrate deeply enough to image internal organs, the high-frequency transducer provides detailed anatomic images of the skin, Dr. Siegel said.

Using the transducer to also measure the elasticity ratio of the lesions and adjacent normal skin, researchers found that malignant tissue was five or more times harder than surrounding normal tissue and benign tissue was consistently three or less times harder than adjacent normal tissue in each case. "We had 100 percent sensitivity, 100 percent specificity and 100 percent accuracy in our testing when we applied the elasticity ratio," Dr. Siegel said.

High-frequency ultrasound with elastography could reduce the guesswork, cost and invasive technique currently involved with taking a biopsy of skin lesions, Dr. Siegel said.

"When the decision is made to excise a lesion, the potential for high-frequency ultrasound-guided surgery has been another important implication of our research for clinical dermatologists," Dr. Siegel said.

Dr. Dasgeb, who has begun training medical students on the ultrasound technology, will continue her research at the National Institutes of Health.

"The need is there for dermatologists to use imaging to examine skin lesions," Dr. Dasgeb said. "The need and the market are there for technology to detect microscopic skin cancer cells."

For more information about the studies cited in this article and to view a video featuring John Viator, Ph.D., explaining photoacoustic ultrasound, go to [rsnanews.org](http://rsnanews.org).



John Viator, Ph.D.  
University of Missouri

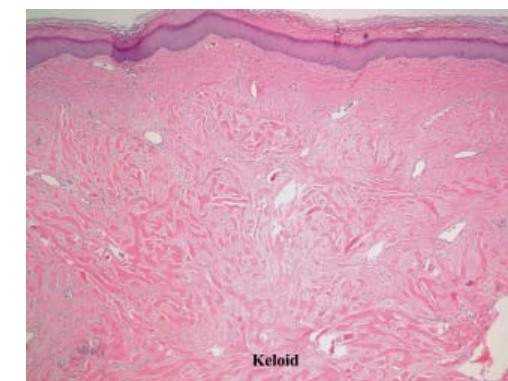
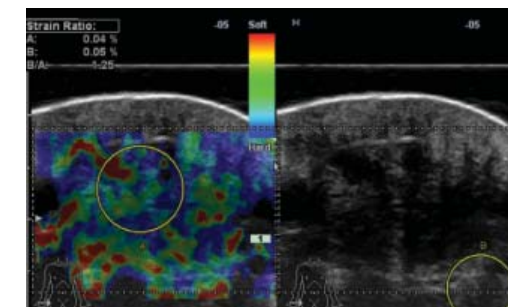


Eliot Siegel, M.D.  
University of Maryland

## ULTRASOUND AMONG CME OFFERINGS

RSNA Education™

Ultrasound Cases of the Day from RSNA annual meetings are among the numerous continuing medical education (CME) courses offered online free to RSNA members. Participants identify and analyze findings in ultrasound imaging studies and develop differential diagnoses based on clinical information and correlative imaging findings. All CME offerings are available at [RSNA.org/Education](http://RSNA.org/Education).



Research by Elliot Siegel, M.D., showed that combining high-frequency ultrasound with elastography has the potential to improve the efficiency of skin cancer diagnosis by reducing the need for biopsies.

Above: Anatomic and elastographic imaging of a keloid skin lesion imaged with a standoff pad at 16 megahertz, as presented at RSNA 2009 by Dr. Siegel.

# SPECT Imaging Technique Promises Earlier Brain Tumor Detection

British researchers developing technology for the next generation of single photon emission computed tomography (SPECT) say the technique could lead to earlier detection of brain tumors and increase probability of successful cancer therapy.

THE TECHNIQUE, which uses a Compton camera to acquire images faster using less radioactive material, could eventually allow clinicians to combine SPECT scanning with MR imaging to create more effective imaging studies, according to researchers with Project ProSPECTus. The project is led by the University of Liverpool in England with the nuclear physics research group and technology department at the Science and Technology Facilities Council (STFC) at Daresbury Laboratory in Cheshire, England.

Currently in the simulation stage, phantom imaging utilizing ProSPECTus protocol is expected to begin in about a year.

SPECT imaging now utilizes an Anger camera, which relies on a collimator—a filtering device with many pinholes that allows some of the gamma rays through and uses geometry to identify exactly where they are coming from—to build a 3D picture of the biological process at work. With a Compton camera, a tiny amount of a radioactive pharmaceutical is injected into the body and the gamma rays from the material are detected by the camera. Because the Compton camera identifies the origin of the gamma rays without the collimator, less radioactive material is necessary.

“The technique is 100 times more sensitive than that of the traditional Anger camera,” said project spokesman Andy Boston, Ph.D., senior lecturer in the Department of Physics at the University of Liverpool. “The SPECT/MR imaging multimodality is hugely important as it allows for performance of simultaneous anatomical and functional imaging studies.”

## Experts Reserve Judgment

Although he believes the ProSPECTus project has considerable potential, one nuclear medicine instrumentation expert said the jury will be out until Liverpool researchers can produce images to back up their predictions.

“This is not a new approach,” said Simon R. Cherry, Ph.D., professor of biomedical engineering at the University of California at Davis and a member of RSNA’s Molecular Imaging Committee. “People have been trying Compton cameras for decades and so far no one has demonstrated superior performance to conventional gamma cameras for clinical applications.”

“It is true that because they don’t have a collimator they will detect a lot more events, so it would appear that the sensitivity is higher,” Dr. Cherry



continued. “But each event actually carries less position information than an event from a standard SPECT scan, and therefore, the true benefit of the improved sensitivity still needs to be demonstrated.”

As Dr. Boston explains, the primary issues with the Compton camera—achievable noise level, energy resolution and position resolution in the scatter sensor—are addressed by the new technology. “Utilizing recently available state-of-the-art digital electronics and optimized low-noise sensing elements, ProSPECTus is able to combine these three crucial elements in order to deliver on the camera’s potential. The objective of ProSPECTus is to demonstrate this experimentally.”

## Promise Lies in Combining SPECT, MR Imaging

Although he agrees that images from phantoms are necessary to accurately assess the technology, SPECT expert Homer A. Macapinlac, M.D., said ProSPECTus stands to make a significant change in medical imaging if it succeeds.

“Clinically we need all the help we can get with SPECT imaging,” said Dr. Macapinlac, a professor and chair of nuclear medicine at M.D. Anderson Cancer Center in Houston and chair of the Nuclear Medicine Subcommittee of RSNA’s Scientific Program Committee. “Its greatness lies in its tracers; its Achilles’ heel is the poor sensitivity of the imaging technique.”



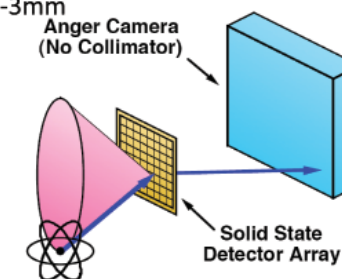
(top)  
**Simon R. Cherry, Ph.D.**  
University of California at Davis

(bottom)  
**Andy Boston, Ph.D.**  
University of Liverpool

## ProSPECTus: What is new?

### ProSPECTus is a Compton Imager

- Radical change → No mechanical collimator
- Utilising semiconductor sensors
- Segmented technology and existing electronics
- Position resolution 7-10mm → 2-3mm
- Sensitivity factor ~100 larger
- Simultaneous SPECT/MRI



Researchers with Project ProSPECTus have developed a technique that uses a Compton camera to acquire images faster using less radioactive material, which could eventually allow clinicians to combine SPECT scanning with MR imaging to create more effective imaging studies.

While Dr. Macapinlac compares the injected radiopharmaceutical in SPECT to a Ferrari engine, he points out that the imaging technique—which acts as the wheels that put traction on the road—is poor in terms of the sensitivity. It takes too darn long to complete a study. We want an image that can take a snapshot. The faster we can do it the better.”

The potential for merging SPECT and MR imaging is the greatest promise of the ProSPECTus technology, he said.

“MR imaging offers exquisite resolution of the anatomy as well as some functional images for blood flow, but if you could combine it with the SPECT tracers, there are innumerable things you could measure,” Dr. Macapinlac said. “Researchers could view the function and the anatomy in a single sitting.”

Operating SPECT scanners simultaneously with MR imaging is not a current option due to MR imaging’s strong magnetic field and the metal parts included in traditional scanners, Dr. Boston said.

“With ProSPECTus, it would be possible to fit the SPECT system retrospectively to the approximately 350 imaging scanners across the U.K.,” Dr. Boston said.

For patients, it would mean fewer appointments and earlier and more effective diagnosis of tumors, which means a higher probability of effective treatment, Dr. Boston added.

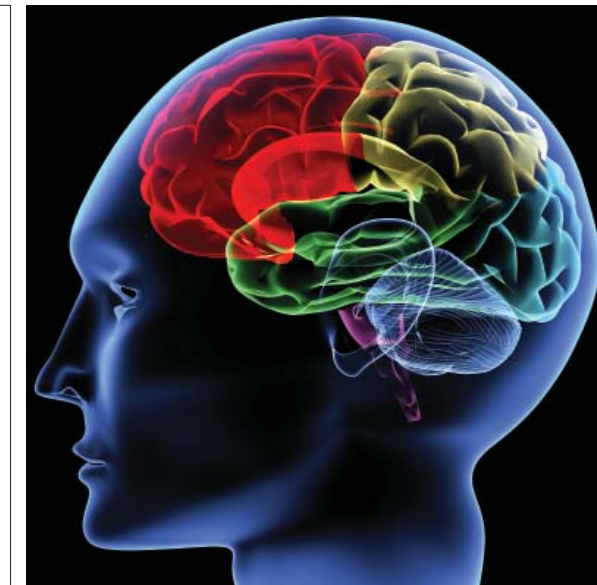
### Phantom Imaging Expected Within Year

Researchers are building the cutting-edge detectors that will be used to gather images from phantoms, according to Ian Lazarus, Ph.D., of STFC’s Nuclear Physics team at Daresbury Laboratory.

“We have simulated the detector in order to prove that the Compton imaging technique will produce data from which we can produce superior images,” Dr. Lazarus said. “We’ve made Compton images for other projects including a small animal PET scanner using similar techniques. Right now the detectors are being fabricated.”

At the end of two years, researchers aim to demonstrate the images on phantoms, Dr. Lazarus said. “Within the scope of this project, the trials will only be on phantoms,” he said. “After that, we’re ready to do whatever is necessary to take it to the market.”

For more information on Project ProSPECTus, go to [rsnanews.org](http://rsnanews.org).



## JAPAN HOSTS WORLD MOLECULAR IMAGING CONGRESS

RSNA is a sponsor of the World Molecular Imaging Conference (WMIC) to be held September 8-11 in Kyoto, Japan. The meeting integrates submitted abstracts into special sessions that unite attendees from various disciplines for a comprehensive examination of the role of molecular imaging in solving biomedical problems. An RSNA-organized Educational Workshop, “Clinical Translation of Molecular Imaging: Opportunities & Challenges,” will cover:

- “Emergency Investigational New Drug/Investigational New Drug for Molecular Imaging agents,” King Li, M.D.
- “Translation of optical imaging agents to the clinic,” Ching Tung, Ph.D.
- “Translation of MR imaging agents to the clinic,” Michael Kuo, M.D.
- “Translation of microbubbles to the clinic,” Evan Unger, M.D.
- “Translation of SPECT/PET agents to the clinic,” H. William Strauss, M.D.

For more information, go to [www.wmicmeeting.org](http://www.wmicmeeting.org).

“The SPECT/MR imaging multimodality is hugely important as it allows for performance of simultaneous anatomical and functional imaging studies.”

**Andy Boston, Ph.D.**

## Reaccreditation Underscores RSNA's Commitment to Continuing Education

While many organizations are opting to forego reaccreditation with the Accreditation Council for Continuing Medical Education (ACCME), RSNA not only sought reaccreditation, but received the renewal for six years—the longest possible term.

IN ITS LETTER OF compliance and commendation, ACCME credited RSNA with “demonstrating that yours is a learning organization and a change agent for the physicians you serve.”

The reaccreditation reaffirms RSNA's unique role as a leader in the increasingly complicated world of continuing medical education (CME), said Richard L. Baron, M.D., chair of radiology at The University of Chicago Medical Center and RSNA Board Liaison for Education.

“I've been involved myself in preparing ACCME applications for organizations for more than 20 years, and I have seen the full spectrum of responses from the ACCME,” Dr.

Baron said. “I have never before seen such a positive process where there were virtually no issues raised by the examiner and only laudatory comments. That is truly exceptional.

“The outstanding evaluation from ACCME reflects the talent and effort of the staff and of our volunteer faculty who help design and deliver all of our educational products,” Dr. Baron added.

During the yearlong reaccreditation process RSNA demonstrated how it has implemented ACCME's 2006 Updated Accreditation Criteria, how the Society's educational planning and programming result in measurable outcomes, and how CME plays an integral role in RSNA's collaborative relationships and practice improvement initiatives.

RSNA demonstrated compliance in all 22 ACCME criteria, including educational planning, evaluation and improvement, and engagement with



**Richard L. Baron, M.D.**  
The University of Chicago Medical Center

the environment. The reaccreditation extends to March 2016.

Thousands of physicians turn to RSNA for their continuing medical education each year. In 2009 alone, RSNA issued 122,462 CME certificates to physicians—representing anywhere from one to 90.75 credits each—and nearly 2,000 more to other radiologic healthcare professionals.

“We're continually looking to take materials that we've peer reviewed and vetted—like self-assessment modules (SAMS)—and package them so that they're readily accessible to meet the changing needs of the world as we face them,” Dr. Baron said.

### Complex Accreditation Process Can Deter Applicants

The increasing complexity involved with reaccreditation as well as the difficulty of demonstrating measurable outcomes have resulted in more organizations withdrawing from the process, Dr. Baron said.

“In the last three or four years, ACCME has gradually increased oversight and compliance requirements and it's gotten very difficult to measure outcomes,” he said. “They're no longer willing to just accept your word that you're offering a good program and the word of your registrants who say ‘I liked it.’ They're now asking, ‘What are the outcomes?’ ‘How can you show us that you're improving patient care by raising the educational level?’ It's gotten so difficult to document that many organizations are not going through the process.”



“We're continually looking to take materials that we've peer reviewed and vetted—like self-assessment modules (SAMS)—and package them so that they're readily accessible to meet the changing needs of the world as we face them.”

**Richard L. Baron, M.D.**



**Cases-of-the-Day from RSNA annual meetings are among the many continuing medical education resources offered to members. For more information go to [RSNA.org/Education](http://RSNA.org/Education).**

At its December board meeting, ACCME reported that 142 medical education providers in 2009 either lost their accreditation or did not apply for renewal. Thirty-three organizations had their accreditation end during the past 12 months.

While the American Board of Radiology (ABR) and third-party payers are putting more pressure on radiologists to earn certified education credits, fewer organizations are available to deliver them, Dr. Baron continued. “So it becomes even more important to our community that RSNA remain strong and vital to be able to meet all their expectations and needs.”

### Web Tools, Publications Aid Learning

ACCME also recognized RSNA's development of Web resources and other information tools, such as My Professional Learning Map, to assist the physician learning process.

The importance of RSNA's collaboration with other organizations was also recognized, as were the Society's efforts to address patient issues such as familiarization with radiologic procedures and improving communication between physicians and patients. *RadiologyInfo.org*, the public information website created by the RSNA and the American College of Radiology, serves as an important resource for both patients and referring physicians.

RSNA's informatics tools for radiology, including Medical Imaging Resource Center image-sharing software and the RadLex® radiology lexicon, were also highlighted.

“[RSNA] has worked to develop and promulgate standardized informatics strategies that support clinical decision making ... to bring about change aimed at improving patient outcomes,” ACCME noted in its report.

The ACCME commendation affirms RSNA's commitment to continuing education and underscores the Society's overall purpose, Dr. Baron noted. “The commendation represents a real, rare feat. It recognizes not just the breadth of RSNA's offerings but the quality of how they're prepared and presented. It's a direct reflection of the very key components of what RSNA is.”

### SpeakUp

How have changes in CME availability affected you? Vote in this month's RSNA News reader poll at [rsnanews.org](http://rsnanews.org)

## RSNA OFFERS ONLINE CME RESOURCES

Information on RSNA educational resources available through its peer-reviewed journals, Education Center and annual meeting



is available at [RSNA.org/Education](http://RSNA.org/Education).

The RSNA educational activities have been approved for *AMA PRA Category 1 Credit™*. All CME activities are accessible to all members free of charge.

Resources include:

- Peer-reviewed Refresher Courses from RSNA annual meetings
- Cases-of-the-Day from RSNA annual meetings
- Self-assessment modules (SAMS) based on previously distributed, peer-reviewed materials in a variety of subspecialty content areas
- *Radiology* readers are invited to review cases and submit the most likely diagnosis in the feature “Diagnosis Please”

# Daily Chest X-rays Not Necessary in ICU

Although new research has added to mounting evidence that abandoning daily routine chest X-rays in the intensive care unit (ICU) would not adversely affect patient outcomes, investigators said it isn't likely the protocol will be eliminated any time soon.

IN A META-ANALYSIS of eight clinical trials held over a 12-year period, Yuji Oba, M.D., and Tareq Zaza, M.D., of the University of Missouri-Columbia concluded that abandoning daily routine chest X-rays in the ICU did not adversely affect a patient's mortality or length of stay. The study, "Abandoning Daily Routine Chest Radiographs in the Intensive Care Unit," was published in the May 2010 issue of *Radiology* ([RSNA.org/Radiology](http://RSNA.org/Radiology)).

Because of a long-standing protocol based largely on American College of Radiology (ACR) Appropriateness Criteria recommending daily chest radiographs for mechanically ventilated patients—and more if necessary—Dr. Zaza said the practice is likely to remain solidly entrenched in the majority of ICUs.

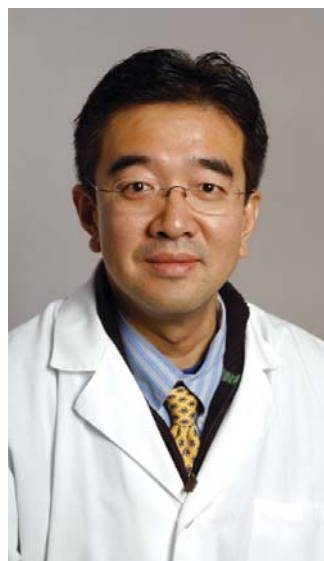
"As a senior pulmonary and critical care fellow I have been asked many times by residents and students whether we really need to give an ICU patient daily chest X-rays," Dr. Zaza said. "Traditionally the answer is 'yes' based on ACR guidelines and a practice that has been widely adopted in ICUs. After researching the literature, we found that there is more and more evidence that at least calls into question the practice of administering daily routine chest X-rays in the ICU."

Along with the ACR guideline, Dr. Oba says that research from the 1980s and 90s likely exaggerated the usefulness of daily chest radiographs, compounding reliance on the daily protocol, he said. "Once a certain practice is considered or established as a standard of care, clinicians tend to stick to it even if it is not supported by solid scientific evidence," Dr. Oba said.

Drs. Zaza and Oba recommend that ICUs develop an on-demand approach in which chest X-rays are taken when clinically indicated—a protocol that would reduce workload, radiation exposure to staff and patients, and healthcare costs.

## Analysis Included More than 7,000 Patients

The meta-analysis of randomized, controlled or observational trials compared outcome efficacy of daily routine versus clinically indicated chest X-rays in patients admitted to an adult medical or surgical ICU. Research comprised 7,078 ICU patients—3,429 who received daily chest X-rays and 3,649 who received clinically indicated chest X-rays—and included hospital or ICU mortality, length of mechanical ventilation or hospital stay and adverse event rate as a primary outcome variable.



In a meta-analysis that included more than 7,000 patients, University of Missouri-Columbia researchers Yuji Oba, M.D. (top left), and Tareq Zaza (top right), concluded that abandoning daily routine chest X-rays in the ICU did not adversely affect a patient's mortality or length of stay. Jaap Stoker, M.D., Ph.D., (right), agrees with the conclusion and urges the American College of Radiology to review its current recommendations on the practice.

Eliminating daily chest X-rays did not affect either hospital or ICU mortality and there was no statistically significant difference in ICU or hospital length of stay or ventilator days between the on-demand and daily routine groups, the analysis determined. Researchers failed to find any subgroup that benefited from daily routine chest X-rays in the ICU—an area Drs. Oba and Zaza said still needs further study.

## Abnormal Findings Fuel Reliance on Daily X-Rays

Two schools of thought about the usefulness of routine X-rays still exist, according to Dr. Oba, who attributes opposing opinions to differences in patient population, enrollment criteria and the degree of reliance on radiographic findings.

While the meta-analysis showed that chest X-rays in the ICU often revealed abnormal findings, rarely did they affect patient management, Drs. Oba and Zaza said. One radiologist whose research was included in the meta-analysis said he believes those abnormal findings are the crux of the reluctance to abandon daily routine chest X-rays.



“After researching the literature, we found that there is more and more evidence that at least calls into question the practice of administering daily routine chest X-rays in the ICU.”

Tareq Zaza, M.D.

“Having a daily updated image of the cardiac and pulmonary status of every ICU patient often produces abnormal findings, which enforces the idea that chest X-rays are useful,” said Jaap Stoker, M.D., Ph.D., of the University of Amsterdam in the Netherlands, who has authored his own research on the issue. “However, the large majority of these abnormal findings are either already clinically known or do not change management. Performing chest X-rays in the ICU should be determined by whether the test gives information important for management and whether there are findings that we do not want to miss.”

Along with potentially leading to unimportant or false-positive findings, the labor-intensive process of administering daily chest X-rays often involves moving critically ill patients, which can lead to tube displacement or other adverse effects, Dr. Oba said.

Although it goes against the ACR recommendation, Dr. Oba recommends ICUs adopt an on-demand protocol to administering chest X-rays. ACR's Chest Radiography and Portable Chest Radiography Practice Guidelines are being revised for the organization's annual meeting and leadership conference in 2011, according to ACR.

“Each ICU should develop a protocol to encourage clinically indicated rather than daily routine radiography that meets their own specific needs since patient case-mix, physicians' comfort level and available manpower may vary widely,” Dr. Oba said.

While more research is needed to determine whether there is a subset of ICU patients who would benefit from daily chest radiography, Dr. Stoker believes this meta-analysis goes a long way in eliminating any doubt about abandoning daily X-rays in the ICU.

“Multiple studies have shown that the current practice of daily chest X-rays in the ICU can be safely abandoned,” Dr. Stoker said. “In my opinion, revision of ACR's current recommendations should be based on these insights.”

To access the study cited in this article, go to [rsnanews.org](http://rsnanews.org).



# New Website is Critical Companion to Medical Students

*While radiology plays an increasingly important role in managing patient care, the specialty is generally relegated to an elective status in many medical schools, often leaving medical students lacking information about the essential principles of diagnostic imaging.*

A NEW ONLINE TOOL allows medical students to explore the basic principles of diagnostic imaging while accessing information to aid in diagnosing and caring for patients in everyday practice at the point of care. Recently launched by RSNA, the Clerkship Companion acts as a “companion” to assist medical students in clinical core rotations and electives, according to the site’s developer, Judith K. Amorosa, M.D.

“There really was no practical way of teaching radiology,” Dr. Amorosa said. “Teaching film libraries are very expensive and cumbersome. With this online resource, the information is right at a student’s fingertips, whether he or she wants to spend in-depth study time or simply use it as a quick reference.”

Dr. Amorosa led a 100-plus member team from the Robert Wood Johnson Medical School/University of Medicine and Dentistry of New Jersey (UMDNJ) in Newark, in creating the Clerkship Companion, which was funded with two RSNA R&E Foundation Grants totaling \$150,000. The grants were awarded to Dr. Amorosa and Alliance for Medical Student Educators and Radiology (AMSER) colleagues, Josh Becker, M.D., James Choi, M.D., Kitt Shaffer, M.D., Petra Lewis, M.D., Beverly Wood, M.D., Henry Goldberg, M.D., and Marcia McCowin, M.D., from 2005 to 2007. The grants were sponsored by GE Healthcare.

The Clerkship Companion is available free to RSNA members—medical students can become RSNA members at no charge—at [RSNA.org/medstudents.cfm](http://RSNA.org/medstudents.cfm).

The project is a multi-institutional, multi-authored databank of materials that creates virtual classrooms with content adhering to the National Radiology Curriculum developed by AMSER. The site features more than 100 most common discharge diagnoses from the year 2004. Modules reflecting these discharge diagnoses reflect best practices of each, according to American College of Radiology Appropriateness Criteria®.

Users can choose a topic by subspecialty or physical complaint. The interactive format includes games, illustrations and questions, and each module features a quiz section for self-assessment. Available modules include cancer, congestive heart failure, diabetes, appendicitis and many other diagnoses, Dr. Amorosa said.



A unique program feature, the Image Bank, allows users to pull up specific images to aid in diagnosis based on topic areas.

AMSER members will review all content to “address the issue of new methods and rapidly evolving technology in the field of imaging,” said Dr. Amorosa, an AMSER past-president.

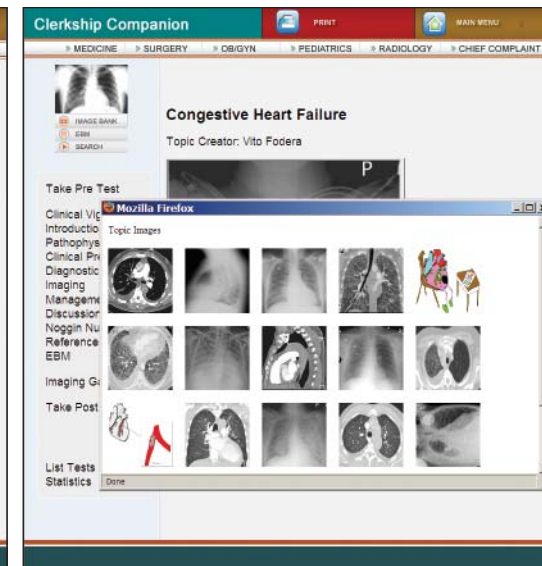
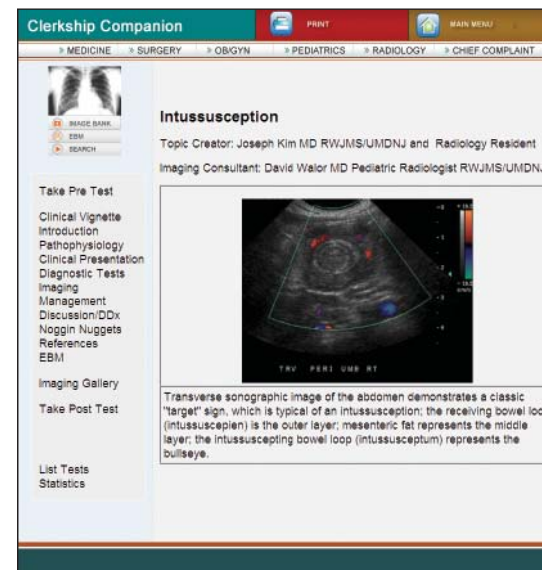
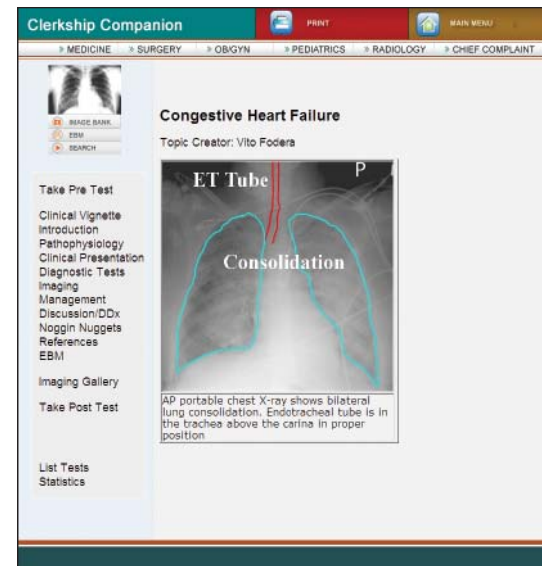
## Medical Students Help Craft Content

Input from medical students will continue to play a vital role in developing new materials, as it was from the outset in creating and developing the Clerkship Companion. Anthony Burgos, M.D., was one of those students looking to get involved in a research project while in medical school, and after a “very exciting meeting” with Dr. Amorosa, became hooked.

“If we can capture just a small part of a medical student’s study time to expose them to the relevance of radiology in all aspects of medicine, I think students stand to learn a great deal,” said Dr. Burgos,



**RSNA’s recently launched Clerkship Companion website, which assists medical students in clinical core rotations and electives, was created by by Judith K. Amorosa, M.D., (top left) who elicited input from medical students including Anthony Burgos, M.D., (top) and Jaskirat Virk, M.D., (bottom) in developing educational materials for the site. The project was funded with two RSNA R&E Foundation grants sponsored by GE Healthcare.**



An Image Bank offering medical students access to specific images to aid in diagnoses is one of the many features offered by RSNA’s Clerkship Companion at [RSNA.org/medstudents.cfm](http://RSNA.org/medstudents.cfm).

“With this online resource, the information is right at a student’s fingertips, whether he or she wants to spend in-depth study time or simply needs a quick reference.”

**Judith K. Amorosa, M.D.**

now in practice at Radiology Associates of Wyoming Valley and Wilkes-Barre General Hospital in Pennsylvania.

“After all, a picture says a thousand words and sometimes after a long OB-GYN shift, for example, when the study day has just begun for some student, hopefully, the Clerkship Companion can help them get their learning time in with fewer words,” Dr. Burgos said.

Jaskirat Virk, M.D., a recent graduate of UMDNJ who will be a radiology resident at Mount Sinai Medical Center in New York after a medical internship, also played a significant role in developing the Web tool.

“As a first-year medical student, I recall spending time looking at X-rays and CT scans which were included in Netter’s *Atlas of Human Anatomy*,” Dr. Virk said. “I was fascinated with the detail with which the human body could be imaged and thought that I should contact someone to further explore my curiosity in radiology.”

He e-mailed Dr. Amorosa, who directed him to Dr. Burgos, who involved Dr. Virk in editing and adding details to the website’s content.

“Not only is this project a great resource for learning about radiology, it also serves as a great tool to review pathophysiology and management of these diseases,” Dr. Virk said. “I believe this site can be of great benefit to students rotating through clerkships and who want some exposure to radiology. It may also attract some students to radiology as a career.”

## Project has Global Reach

Because a primary goal is making the website available to as many students as possible, organizers are notifying medical educators and spreading the word through organizations including AMSER, the Association of Program Directors in Radiology and the Society of Chairs of Academic Radiology Departments. Facebook and Twitter will also be used to spread the word, Dr. Amorosa said.

*Continued on Page 18*

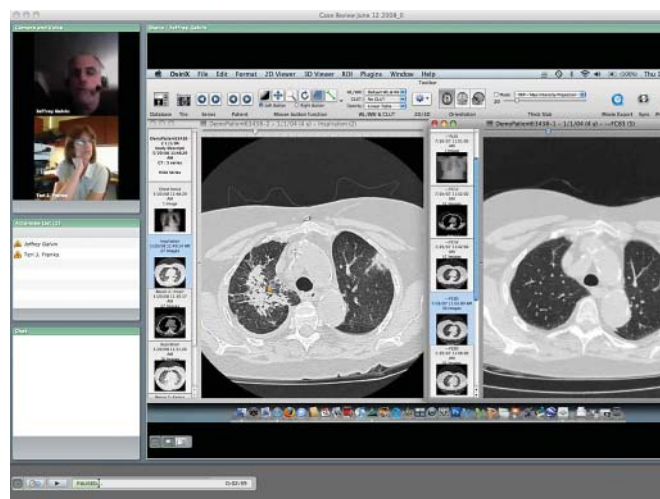
## Journal Highlights

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

### Collaborative Radiologic and Histopathologic Assessment of Fibrotic Lung Disease

IDIOPATHIC INTERSTITIAL PNEUMONIAS (IIPs) are a seemingly disconnected collection of diseases usually associated with the presence of pulmonary fibrosis. Categorization of IIPs continues to be problematic despite recent attempts to refine the diagnostic criteria and suggests that rather than separate diseases, these pneumonias represent a spectrum of injury and abnormal repair of the alveolar wall.

In the June issue of *Radiology* (RSNA.org/Radiology), Jeffrey R. Galvin, M.D., of the Armed Forces Institute of Pathology in Washington, D.C., and colleagues describe the collaborative diagnostic process in which data from radiologic and histologic assessments are combined, allowing a more reliable identification of the predominant



Screen captures of radiologic images demonstrate a real-time collaborative diagnosis rendered using the Adobe Connect Web-based application.

(*Radiology* 2010;255:3:692-706)  
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## Radiology

pathways leading to pulmonary fibrosis. Specifically, the authors discuss distribution of cysts and smoking-related interstitial lung disease. "Histopathologic process combined with the distribution as assessed with radiologic imaging provides important

information regarding the likely etiology, especially in cigarette smokers, in whom there is often a combination of cystic change related to emphysema and associated fibrosis," the authors concluded.

A "How I Do It" video demonstration of the procedures and techniques described in this article is available at [RSNA.org/Radiology](http://RSNA.org/Radiology).

### Pediatric Liver Masses: Radiologic-Pathologic Correlation—Part 1. Benign Tumors

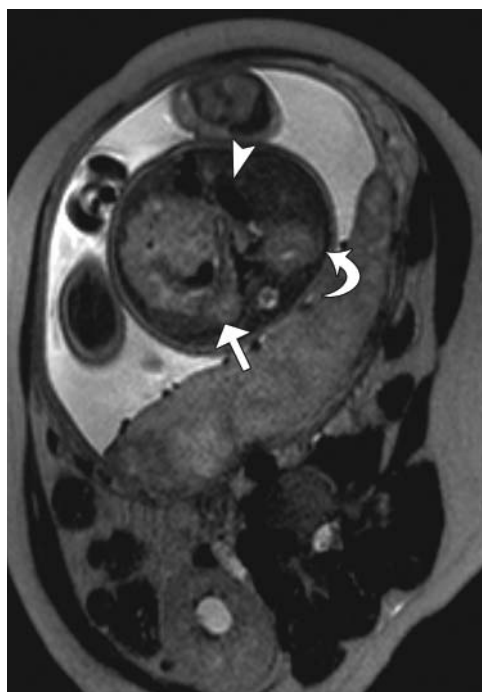
ALTHOUGH MOST primary liver tumors in children are malignant, one-third of such lesions are benign. Among the most common benign pediatric tumors are infantile hemangioendothelioma, focal nodular hyperplasia, mesenchymal hamartoma, nodular regenerative hyperplasia and hepatocellular adenoma.

In the May-June issue of *RadioGraphics* (RSNA.org/RadioGraphics), Ellen M. Chung, Col., M.C., of the Uniformed Services University of the Health Sciences in Bethesda, Md., and colleagues review the clinical, pathologic, and imaging features of these benign liver masses in children with an emphasis on radiologic-pathologic correlation. Specifically, the authors:

- Describe an age-appropriate differential diagnosis for a liver mass in a child
- Describe how to distinguish benign liver tumors from other hepatic tumors on the basis of clinical and imaging data

"Knowledge of the pathologic spectrum of hepatic lesions in children and how their pathologic features are represented at imaging helps the radiologist direct proper evaluation and treatment of children with focal liver masses," the authors state.

This article meets the criteria for 1.0 AMA PRA Category 1 Credit™.



Congenital hepatic vascular malformation (GLUT1 negative) in a 3-month-old girl. The prenatal MR image shows a large hyperintense mass (straight arrow) in the left hepatic lobe (the fetus is in cephalic presentation) with a large adjacent flow void (arrowhead). Curved arrow = right kidney.

(*RadioGraphics* 2010;30:801-826) ©RSNA, 2010. All rights reserved. Printed with permission.

### RadioGraphics Readers Urged to Explore Interactive Literature

In a continuing effort to expand the online experience for journal readers, *RadioGraphics* (RSNA.org/RadioGraphics) is featuring two articles in the July issue that invite readers to explore the potential of interactive radiology literature.

In the articles, "Acute Traumatic Aortic Injuries: Posttherapy Multidetector CT Findings" and "Imaging Evaluation of Penetrating Neck Injuries," readers will be able to navigate the full dynamic dataset allowing identification of all findings as they explore the original image data, multiplanar reformations and even prebuilt volume-rendered models. *RadioGraphics* Editor William Olmsted, M.D., and Associate Editor Adam Flanders, M.D., selected the articles.

Technical requirements do not differ from those needed to use any of the journal's current online offerings.

"These articles represent a potential technologic leap forward in advancing the online experience by offering a new dimension in interaction with educational material," writes Eliot L. Siegel, M.D., and colleagues in a July editorial introducing the articles.



## Radiology in Public Focus

A press release has been sent to the medical news media for the following article appearing in the latest issue of *Radiology*.

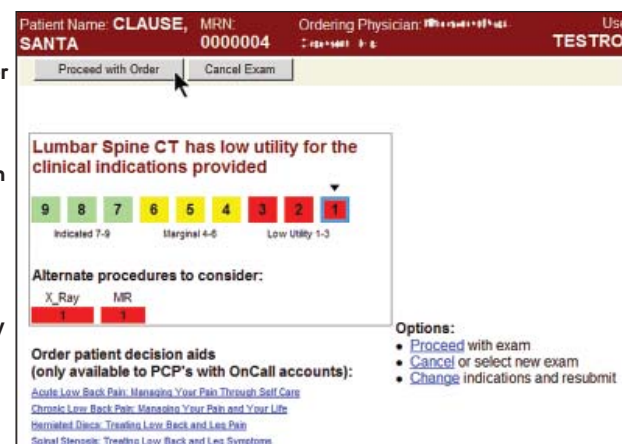
### Increasing the Appropriateness of Outpatient Imaging: Effects of a Barrier to Ordering Low-Yield Examinations

A simple change in the business logic of the order entry system resulted in a substantial decrease in the rate of low-yield imaging and a large increase in the percentage of tests personally ordered by clinicians.

In a retrospective, Health Insurance Portability and Accountability Act-compliant study, Vartan M. Vartanians, M.D., of Harvard Medical School, and colleagues discovered that modifying the outpatient electronic radiology order-entry (ROE) system to require that all examinations with low-yield decision support scores be personally authorized by the responsible clinician resulted in an overall decrease (5.43 to 1.92 percent) in the fraction of low-yield CT, MR imaging and nuclear medicine examinations ultimately performed. The probability that a low-yield request would be cancelled or abandoned increased 3.5-fold after the policy change, the study showed.

"This relatively simple and minimally disruptive alteration in the architecture of the ROE systems can enhance the effectiveness of decision support and improve patient care by decreasing the use of low-yield examinations," the authors concluded.

A decision support feedback screen shows a low utility score. After hard stop on red (HSOR) intervention, nonclinician support staff users who click on "Proceed With Exam" are taken to the screen indicating the examination has been locked. MRN = medical record number, PCP = primary care physician.



## Other Radiology Headlines

### New Emergency Approaches Promise Faster, Safer, Cheaper Answers

Radiologic techniques that could eliminate the need for X-rays in trauma patients with possible spinal fractures and expedite triaging of patients with indeterminate chest pain were the subject of studies presented last month at the annual meeting of the American Roentgen Ray Society.

CT spine reformatting after scans of the chest, abdomen and pelvis can lower cost and overall patient radiation exposure, said Viesha Ciura, M.D., lead author of the study that looked at trauma patients who had both reformatted CT data and X-rays of the thoracic and/or lumbar region of the spine. The study, conducted at the University of Calgary Foothills Medical Centre, included 897 trauma CT scans with spine reformats.

"In patients with spinal fractures detected on the CT spine reformats, the X-rays provided no additional information, and in fact, some of these fractures were not seen on the X-rays," Dr. Ciura said. Researchers' calculations, she added, suggest that in every 1,000 trauma patients, added radiation dose from potentially unnecessary spine X-rays is 170 mSv; the additional cost per 1,000 trauma patients is nearly \$20,000.

In another study, researchers at the University of Maryland in Baltimore found that emergency department use of 256-slice CT angiography

Continued on Page 18

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**Sonya L. & Heratch O. Doumanian, M.D.**  
**Paul E. Dybbro, M.D.**  
**Timothy G. Dyster, M.D.**  
**Elia & Roque I. Ferreyro, M.D.**  
**David P. Fessell, M.D.**  
**Lesa Brooks & Howard Francois, M.D.**  
**Hubert R. Franke, M.D.**  
**Harvey D. Friedman, M.D.**  
**Melinda & Joshua W. Garrett, M.D.**  
**Glenn C. Gaviola, M.D.**  
**Ayca Gazelle, M.D. & G. Scott Gazelle, M.D., Ph.D.**  
**Hilary W. Gentile**  
*In memory of my mother Mrs. Moira Wilde*  
**Diane Pappas, M.D. & Laurence D. Goldstein, M.D.**  
**G. C. Hammet, M.D.**  
**Charles I. Heller, M.D.**  
**Joseph L. Higgins Jr., M.D., Ph.D.**  
**Stephen Hulse, M.D.**  
**Uchenna J. Ikokwu, M.B.B.Ch. & Chibeze Ikokwu**  
**Deborah D. & Hugo E. Isuani, M.D.**  
**Diego Jaramillo, M.D., M.P.H.**

**Mohammad I. Jilani, M.D.**  
**April & Tom Joseph, M.D.**  
**Delia M. Keating, M.D.**  
**Kevin J. Kelly, M.D.**  
**Elizabeth & Jay L. Korach, M.D.**  
**Mary W. & Stanton S. Kremsky, M.D.**  
**Wendy D. Kriegel, M.D.**  
**Anthony L. Kudirka, M.D.**  
**Harold L. Kundel, M.D.**  
**Kent T. Lancaster, M.D.**  
**Ott Le, M.D.**  
**Peter C. Levisay, M.D.**  
**Michael Licata, M.D.**  
**Mark D. Little, M.D.**  
**Jocely M. Gonzalez & Juan A. Lopez, M.D.**  
**Kenneth P. Lynch III, M.D.**  
**Loralie D. Ma, M.D., Ph.D.**  
**Dale M. MacCurdy, M.D.**  
**Eriko Maeda, M.D.**  
**Dalia Araceli R. Martinez, M.D.**  
**Nadine & Alistair McBean, M.B.B.S.**  
**Carrie C. Morrison, M.D.**  
**Charles C. Mulry, M.D.**  
**Anna Nidecker, M.D.**  
**Margaret J. & John D. Noonan, M.D.**  
*In memory of James McCort, M.D.*  
**Lisa M. Oakley, M.D.**  
**Roberta K. Yang, M.D. & Jon Oda**  
**Julietta Oneto, M.D.**  
**Anal C. Patel, M.D. & Rajesh Patel**  
**Joey G. Philip, M.D.**

**Melissa Price, M.D.**  
**Lidia I. Reyes, M.D.**  
**Marshall Rowen, M.D.**  
**Anthony M. Sajewicz, M.D.**  
**Josefina C. Santiago, M.D.**  
**Najmus Saqib, M.D.**  
**Susann E. Schetter, D.O.**  
**William W. Scott Jr., M.D.**  
**R. K. Shelton, M.D.**  
**Charles J. Singer, M.D.**  
**Sudha P. Singh, M.D. & Pradumna P. Singh**  
**Constantinos T. Sofocleous, M.D., Ph.D.**  
**Suzanne & Richard N. Southard, M.D.**  
**Nicholas G. Stephani, M.D.**  
**Todd R. Stephens, D.O.**  
**Ralph L. Stevens, M.D.**  
**Chie & Kazuro Sugimura, M.D.**  
**Ronald D. Sullivan, M.D.**  
**Cher Heng Tan, M.B.B.S.**  
**Elizabeth L. Tan, M.D.**  
**James F. Tustin, M.D.**  
**Carl N. Valentin, M.D.**  
**Cornelis F. van Dijke, M.D., Ph.D.**  
**Claude T. Vezina, M.D.**  
**Cristina G. Ortega & Cesar C. Victorino, M.D.**  
**David L. Weiss, M.D.**  
**David C. Wells, M.D.**  
**Karen Gomes Ordovas, M.D. & Antonio C. Westphalen, M.D.**

## Radiology in Public Focus

### Media Coverage of Radiology

In April 2010, media outlets carried 183 RSNA-related news stories. These stories reached an estimated 110 million people. News releases promoted findings from a study on extracolonic cancers detected with CT colonography (*Radiology* 2010;255:83-88) and a study on predicting H1N1 prognosis using chest X-ray findings (*Radiology* 2010;255:252-259).

April coverage included *The Washington Post*, *Times of India*, *Crain's Chicago Business*, *St. Louis Post-Dispatch*, *Health & Medicine Week*, *Cancer Weekly*, *Tradeshow Week*, *Healthcare Informatics*, *Occupational Health & Safety*, *IDEA Fitness Journal*, Gannett News Service, KLFY-TV (Lafayette, La.), WDTN-TV (Dayton, Ohio), Market-Watch Radio Network, *MicrobeWorld* (radio program), Yahoo! News, Medscape, Science Daily, Science Blog, Medical News Today, Doctor's Guide, *Market-Watch.com*, *WashingtonPost.com*, *BusinessWeek.com* and *FoodConsumer.org*.



### June Outreach Activities Focus on Interventional Radiology

In June, RSNA's 60-Second Checkup radio program focuses on minimally-invasive interventional treatments.

## New Website is Critical Companion to Medical Students

Continued from Page 14

The global reach closely aligns with the vision of Lucy Frank Squire, M.D., a radiology pioneer who became a mentor to generations of students, including Dr. Amorosa.

"She had a vision to incorporate imaging into the practice of medicine by teaching radiology to medical students at a time when radiology was considered an ancillary service," Dr. Amorosa wrote in her final grant report. "She wrote the first radiology book for medical students which has been translated into many languages and has been read all over the world. Therefore, this project is dedicated to Dr. Squire."

"The RSNA R&E Foundation Grant allowed me as member of AMSER to bring Dr. Squire's vision into the 21st century: to create learning materials for medical students available on the Web with eventual global dispersion.

"I will make sure that this learning material will be a constantly changing and improving resource for medical students and physicians under the guardianship of AMSER and RSNA."

Go to [RSNA.org/medstudents.cfm](http://RSNA.org/medstudents.cfm) to access the Clerkship Companion.

## New Emergency Approaches Promise Faster, Safer, Cheaper Answers

Continued from Page 16

(CTA) can help physicians triage patients with indeterminate chest pain without the need for additional—potentially costly and time consuming—tests.

Of 11 patients who underwent 256-slice CTA for the evaluation of their indeterminate chest pain, seven were found to have a negative CTA and a final clinical diagnosis of insignificant chest pain. Two patients had insignificant coronary plaque and two had moderate coronary disease but were given presumptive final diagnoses of non-cardiac chest pain. Two pulmonary findings and one breast mass were found incidentally. "Overall, the diagnostic concordance of 256-slice CTA was 100 percent," said study lead author Minh Lu, M.D.

In the U.S., more than five million patients a year come to the emergency room with a chief complaint of chest pain. "Traditional management of chest pain may require observation prior to a radionuclide stress study or stress echocardiogram before discharge, increasing the length of hospital stay and cost," Dr. Lu said. "In contrast, 256-slice cardiac CTA can be performed safely and early in the observation period with rapid and accurate results."

(Source: American Roentgen Ray Society)

**NAME:** Judith K. Amorosa, M.D

**GRANTS RECEIVED:** RSNA R&E Foundation Grants totaling \$150,000, awarded from 2005 to 2007; sponsored by GE Healthcare.

**STUDIES:** "Developing a Radiology Clerkship Companion for Medical Students," "Developing a Radiology Clerkship Companion for Medical Students, Stage II."

**CAREER IMPACT:** The grant gave Dr. Amorosa a unique opportunity to observe how medical students learn by helping to develop materials that incorporate their understanding and skill sets and encouraged her to create additional materials for medical students and other healthcare providers.

**CLINICAL IMPLICATIONS:** Dr. Amorosa's development of the online tool, the Clerkship Companion, allows medical students to explore the basic principles of diagnostic imaging while accessing information to aid in diagnosing and caring for patients in everyday practice.



**GRANTS IN ACTION**

For more information on all Foundation grant programs, go to [RSNA.org/Foundation](http://RSNA.org/Foundation) or contact Scott Walter, M.S., Assistant Director, Grant Administration at 1-630-571-7816 or [swalter@rsna.org](mailto:swalter@rsna.org).

## For Your Benefit

### RSNA PoC Learning Tool Enables On-the-Job CME

RSNA members researching procedures while at work can earn CME at the same time, with a new myRSNA tool to facilitate point of care (PoC) learning.

To ensure physicians can properly claim *AMA PRA Category 1 Credit*<sup>™</sup>, RSNA has created an online tracking mechanism that meets the American Medical Association (AMA) guidelines for the three-step PoC Learning cycle:

**1** Using your mySearch function on your personal myRSNA page, perform your search on the clinical question at hand. Among the search results will be a subset of resources, identified on the PoC CME tab, yielded by peer-

reviewed literature identified by RSNA as having content integrity.

**2** From among the resources identified on the PoC CME tab, select the most relevant piece(s) of literature applied to your finding.

**3** After reviewing the article, click the PoC link and answer every question in order to claim your credit.

PoC learning is entirely self-directed and driven by the needs of the individual physician's practice—important

components of adult learning. Because it is structured, PoC learning also conforms to AMA standards. The structure tracks the original clinical questions, relevant sources identified from among those consulted and the application of the findings to practice.

While a simple query on a search engine such as Google yields many sources of no use to the physician learner,

RSNA's search tool "pre-filters" results by listing first those from appropriate, evidence-based, peer-reviewed literature. RSNA's PoC tool also offers a step-by-step form to ensure credit can be claimed, enables the user to instantly print a CME certificate and files the credit in the RSNA CME Credit Repository for access at any time.

Go to [myrsna.org](http://myrsna.org) to get started.



## MemberSpotlight



### RSNA Grant Writing, Clinical Trials Workshop Furthered Academic Career

A part of every academic radiologist's life, good grant writing requires a lot of training. The University of California in San Francisco (UCSF) was very supportive and I first took the RSNA Advanced Grant Writing Course as part of a T-32 National Institutes of Health training grant. Although I cannot say I am an experienced grant writer, I certainly feel less anxious with the idea of having to work on a proposal.

During this time, I submitted one of my projects to RSNA as part of my application for the Clinical Trials Methodology Workshop. My goal was to improve this project and submit it for funding, which proved to be a good strategy as the project was eventually funded by the Research & Education (R&E) Foundation.

Both experiences were extremely valid and worth every bit of effort I put into them. I currently have a Career Development (K) Award and I am enrolled in the master's program in clinical research at the Department of Epidemiology and Biostatistics at UCSF. This progress would not have happened without these RSNA programs that offer unique opportunities to have your work reviewed and critiqued in a constructive way rarely available in our home institutions.

See Page 20 for more information on these RSNA programs.

An RSNA member since 2003, Antonio C. Westphalen, M.D., is an assistant professor of radiology in the Department of Radiology and Biomedical Imaging at the University of California in San Francisco.

## Member Question of the Month

Who do you consider the most influential figure in radiology, past or present?

E-mail us your answer at [tellus@rsna.org](mailto:tellus@rsna.org). Respondents featured in an upcoming issue of *RSNA News* will receive a small gift featuring the new RSNA logo.

[Previous question: Who inspired you to join RSNA and why?]

When I was a resident in radiology (the first) at Rose Memorial in Denver from 1955 to 1958, Dr. Morris Levine was head of radiology. He took me to the RSNA [annual meeting] one year and we had lunch with Dr. Ben Felson. I joined as a resident member. You published my first paper in *Radiology* in April 1958.

Robert F. Ellzey, M.D.  
Austin, Texas

## Education and Funding Opportunities



### RSNA Hosts Comparative Effectiveness Research Workshop

More than 30 experts gathered at the RSNA/NIBIB Workshop on "Comparative Effectiveness Research (CER) for Diagnostic Radiology" held recently at RSNA Headquarters in Oak Brook. The goal of the workshop—devoted exclusively to CER for the evaluation of diagnostic imaging—was to discuss the main methodologic issues and possibilities involved with CER and to examine concrete examples of studies that address CER aims.

### RSNA Derek Harwood-Nash International Fellowship

International radiologists three to 10 years beyond training are invited to apply for this six- to 12-week fellowship at a North American institution. One or two fellows will be selected.

The application for this program is available at [RSNA.org/international/CIRE/dhnash.cfm](http://RSNA.org/international/CIRE/dhnash.cfm). For more information, contact Fiona Miller at [fmiller@rsna.org](mailto:fmiller@rsna.org) or 1-630-590-7741.

**RSNA Education**

### RSNA/AUR/ARRS Introduction to Academic Radiology Program

Sponsored by RSNA, the American Roentgen Ray Society (ARRS) and Association of University Radiologists (AUR), the Introduction to Academic Radiology program introduces second-year residents to academic radiology, demonstrates the importance of research in diagnostic radiology, illustrates the excitement of research careers and introduces residents to successful clinical radiology researchers. Successful applicants will be assigned to either a seminar held during RSNA 2010 or the ARRS annual meeting in 2011.

More information and an application/nomination form are available at [RSNA.org/Research/educational\\_courses.cfm](http://RSNA.org/Research/educational_courses.cfm).

### RSNA Advanced Course in Grant Writing

Applications are now being accepted for this course designed to help participants, generally junior faculty members, prepare and submit a National Institutes of Health (NIH), National Sciences Foundation (NSF) or equivalent grant application by the October 2011 deadline. The course, to be held at RSNA Headquarters in Oak Brook, Ill., will consist of four multiday sessions: October 15-16; January 28-29, 2011; March 25-26, 2011; and May 20-21, 2011.

For more information and an application, go to [RSNA.org/Research/educational\\_courses.cfm](http://RSNA.org/Research/educational_courses.cfm) or contact Fiona Miller at 1-630-590-7741 or [fmiller@rsna.org](mailto:fmiller@rsna.org).

## MedicalMeetings

July – October 2010

**JULY 18–22**

American Association of Physicists in Medicine (AAPM), 52nd Annual Meeting, Pennsylvania Convention Center, Philadelphia

• [www.aapm.org/meetings/2010AM](http://www.aapm.org/meetings/2010AM)

**AUGUST 11–14**

American Society of Emergency Radiology (ASER), Annual Scientific Meeting, Grand Hyatt Seattle

• [www.erad.org](http://www.erad.org)

**SEPTEMBER 8–11**

Academy of Molecular Imaging (AMI), 2010 World Molecular Imaging Congress (WMIC), International Conference Center, Kyoto, Japan

• [www.wmicmeeting.org](http://www.wmicmeeting.org)

**SEPTEMBER 9–11**

European Society of Head and Neck Radiology (ESHNR) 23rd Annual Meeting, Hoersaalzentrum AKH Wien, Vienna, Austria

• [www.eshnr2010.org](http://www.eshnr2010.org)

**SEPTEMBER 9–12**

17th European Symposium on Urogenital Radiology (ESUR), Oud Sint-Jan, Bruges, Belgium

• [www.esur2010.be](http://www.esur2010.be)

**SEPTEMBER 23–SEPTEMBER 26**

Australasian Society for Ultrasound in Medicine (ASUM), Gold Coast Convention Centre, Queensland, Australia

• [www.asum.com](http://www.asum.com)

**SEPTEMBER 26–OCTOBER 2**

International Skeletal Society (ISS), 37th Annual Meeting, Athens, Greece

• [www.iss2010.org](http://www.iss2010.org)

**OCTOBER 3–5**

North American Society for Cardiac Imaging (NASCI), 38th Annual Meeting, The Westin Seattle Hotel

• [www.nasci.org](http://www.nasci.org)

## Tip of the Month

**IMAGE QUALITY** CR imaging plates can suffer damage

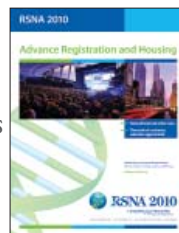
over time and cause artifacts. A good quality control program includes exposing the plates to a uniform radiation source and looking for artifacts as well making sure the exposure indicators are reasonably consistent among the plates.

**AA** American Association of Physicists in Medicine

## Annual Meeting Watch

### Course Enrollment Begins June 30

The Advance Registration, Housing and Course Enrollment brochure will be available online and in print starting June 30. RSNA will mail the brochure to all RSNA/AAPM members and all non-member registrants as of June 7, except those who "opted out" of a printed copy at the time of online registration. The brochure can be viewed and printed from [RSNA.org/register](http://RSNA.org/register).



Use this brochure to make the most of your RSNA 2010 experience. RSNA has organized the information in the course brochure to help you complete your enrollment in just a few steps. Find the courses you need, build your schedule and enroll quickly and easily online or via the print form.

#### Guarantee Your Seat!

Tickets are required for various meeting components, including refresher, multisession and financial courses, informatics workshops and RSNA tours and events.

**New at RSNA 2010:** All ticketed courses must be confirmed prior to November 24 to guarantee a seat. RSNA ticketed courses fill up fast, so ensure you get the courses you need by enrolling at [RSNA.org/register](http://RSNA.org/register). Onsite course ticketing has been eliminated. Registrants without tickets will be allowed entrance into a course after all ticketed registrants have been seated.

**CME UPDATE:** Earn up to 92.75 AMA PRA Category 1 CME Credits at RSNA 2010

### Check out Session Information in Enhanced Online Program

**NEW!** The *RSNA Meeting Program* online has been enhanced for RSNA 2010: More content earlier: Information on hundreds of refresher and multisession courses and informatics workshops will be available by the end of June (ticketed offerings), with details about scientific presentations and education exhibits (non-ticketed offerings) to be added later this year

- Easier and more useful search: Use the briefcase tool to organize all your meeting events in one location, including your confirmed ticketed offerings
  - Customized downloads of content and personal schedules to mobile devices
- The *RSNA Meeting Program* online is being enhanced as the big, 1,200-page printed program is replaced with a "mini program." Abstracts and learning objec-

tives will not be published in the printed program but will instead be available online only. The mini program will list titles for all presentations and author names and include other meeting information such as honoree biographies and RSNA Research & Education (R&E) Foundation activities.

Go to [RSNA2010.RSNA.org](http://RSNA2010.RSNA.org) and click Meeting Program to get started with the new and improved *RSNA Meeting Program*.

### Save on This Year's Airfare, Enter to Win Next Year's

RSNA attendees who book air travel through Gant Travel by October 1 will be entered into a drawing to receive a \$500 (USD) travel credit good toward their RSNA 2011 airfare on United Airlines. Benefits of using Gant Travel for RSNA 2010 include:

- Up to a 15 percent discount on available fares on United Airlines
- Fare-checker technology (checking for lower fares until your return flight home)
- Seat-checker technology (checking for best available seats per your preference)
- Emergency assistance available by phone

For more information, contact Gant Travel at 1-877-613-1192, international +1 011 630-227-3873, or [RSNA@ganttravel.com](mailto:RSNA@ganttravel.com).

### Chicago Stars at RSNA 2010

RSNA will once again offer a series of exciting Chicago tours and events during RSNA 2010; enrollment begins June 30. Get your tickets soon as many of the popular evening symphony and theater events sell out quickly.

## Product News

#### FDA CLEARANCE

### X-ray Technology Provides Soft Tissue Image

Riverain Medical ([www.riverainmedical.com](http://www.riverainmedical.com)) has received FDA clearance for its SoftView Enhanced Chest Imaging technology that uses existing X-ray equipment to provide a soft tissue image for digital chest X-rays.

SoftView suppresses ribs and clavicles on chest X-rays to produce a soft tissue image that increases clarity and improves detection of lung nodules. SoftView delivers no additional radiation dose to the patient and does not require any additional patient procedures or specialized equipment.

SoftView uses image processing and pattern recognition technologies to suppress bone in the chest X-ray. The resulting soft tissue image improves the visibility of tissue within the lung.



#### PRODUCT UPGRADE

### Mobile Applications Offer Workflow, Business Access

Integrated Document Solutions' ([www.idssite.com/mobile](http://www.idssite.com/mobile)) new Smartphone applications offer medical staff the freedom to perform numerous critical and time-sensitive tasks using iPhone®, BlackBerry®, Android® and Windows Mobile® devices.

New applications are Mobile AbbaDox, a workflow and sign-off tool allowing radiologists to review and electronically sign reports, listen to the original voice dictation and scroll through various workflow bins, and Mobile CRM, a business analytics and referral management tool that provides live reporting data on referring physician ordering patterns, the effectiveness of the organization's ability to turn around reports and detailed notes about previous interactions with providers.

#### FDA APPROVAL

### Wireless HD Video Technology

NDS Surgical Imaging ([www.ndssi.com](http://www.ndssi.com)) has received FDA clearance for ZeroWire Duo, a class II medical-grade wireless high-definition (HD) video technology for minimally invasive surgery, gastrointestinal and interventional suites.

The system provides reliable communication with less than 1 frame latency and the image quality required for today's multi-modality imaging environments, delivering full high-definition surgical video in real-time utilizing the Ultra-wideband frequency spectrum. This wireless system has been developed to improve clinical efficacy and safety by eliminating downtime from disconnected or damaged cables and reducing the cleaning time between procedures.



#### NEW PRODUCT

### Remote-controlled Radiology Table

Apelem ([www.dms.com](http://www.dms.com)), a division of the DMS Group, has released the Platinum, a new remote-controlled table for increased physician productivity and workflow. From technology and mechanics to ergonomics and design, all the elements of this table have been conceptualized to fit together in a seamless, yet powerful and reliable package capable of performing all radiology applications.

The Platinum includes independent movement of the X-ray tube and the detector block, a brushless motor with absolute encoders for fast and accurate positioning, as well as a generator fully integrated into the table's control panel. The Platinum also integrates an innovative control system based on PC server technology that permits monitoring and automatic control of the table and the collimator.



## RSNA 2010 Registration

#### How to Register

There are four ways to register for RSNA 2010:

- 1 INTERNET**  
Go to [RSNA.org/register](http://RSNA.org/register)
- 2 FAX (24 hours)**  
1-800-521-6017  
1-847-996-5401
- 3 TELEPHONE**  
(Mon.-Fri. 8:00 a.m. - 5:00 p.m. ct)  
1-800-650-7018  
1-847-996-5876
- 4 MAIL**  
Experient/RSNA 2010  
568 Atrium Drive  
Vernon Hills, IL 60061 USA

#### Registration Fees

	BY NOV. 5	ONSITE	
\$ 0	\$100	RSNA/AAPM Member	
0	0	RSNA/AAPM Member Presenter	
0	0	RSNA Member-in-Training, RSNA Student Member and Non-Member Student	
0	0	Non-Member Presenter	
150	250	Non-Member Resident/Trainee	
150	250	Radiology Support Personnel	
680	780	Non-Member Radiologist, Physicist or Physician	
680	780	Hospital or Facility Executive, Commercial Research and Development Personnel, Healthcare Consultant and Industry Personnel	
300	300	One-day registration to view only the Technical Exhibits	

#### Important Dates

June 30	Course enrollment opens
October 22	International deadline to have full-conference materials mailed in advance
November 5	Final discounted advance registration, housing and course enrollment deadline to have full-conference materials mailed in advance
Nov. 28 - Dec. 3	RSNA 96th Scientific Assembly & Annual Meeting

For more information about registering for RSNA 2010, visit [RSNA2010.RSNA.org](http://RSNA2010.RSNA.org), e-mail [reginfo@rsna.org](mailto:reginfo@rsna.org) or call 1-800-381-6660 x7862.

Information for *Product News* comes 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](mailto:rsnanews@rsna.org). Information may be edited for purposes of clarity and space.

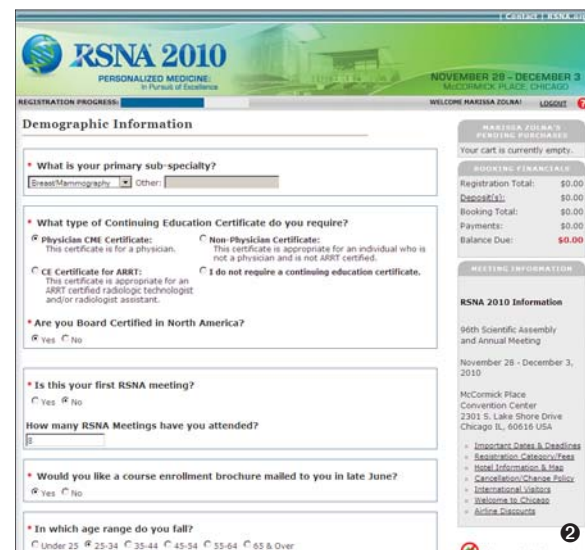
RSNA.org

# RSNA 2010 Registration

Registration for RSNA 2010 is underway. To register, go to [RSNA.org/register](http://RSNA.org/register).

- Information from the Profile page will be used to create your name badge and send your materials prior to the meeting.
  - On the Demographic Information page, select various demographics including subspecialty and continuing education certificate needs.
  - Booking your hotel reservations during registration gives you a choice of more than 70 hotels offering the lowest rates in Chicago and access to RSNA's free shuttle to McCormick Place. Indicate your arrival and departure dates to see a list of hotels meeting your criteria.
- On the Payment Information page, enter your credit card information. A meeting confirmation will appear on the page and a complete e-mail confirmation of your arrangements will be sent to you within 24-48 hours.

Course enrollment for RSNA 2010 and Chicago tours begins June 30. For more information, see Annual Meeting Watch on Page 21.



## FDA Launches Radiological Health Transparency Site

The U.S. Food and Drug Administration (FDA) has launched the Center for Devices and Radiological Health **Website-ing** [fda.gov/AboutFDA/CentersOffices/CDRH/CDRHTransparency](http://fda.gov/AboutFDA/CentersOffices/CDRH/CDRHTransparency), as part of its ongoing transparency campaign to provide information on medical devices and radiation-emitting products.

The site also features a searchable database that integrates pre- and post-market medical device information from multiple data sources into a single snapshot and includes a feedback feature allowing the FDA to collect input and suggestions from the public.

## COMING IN JULY

From Twitter and Facebook to any number of radiology-oriented blogs, social networking forums are offering radiologists new ways to network, interact and stay connected to others within the specialty. Next month, *RSNA News* will examine the impact of social media on radiology, including RSNA's contribution to the ever-evolving online revolution.

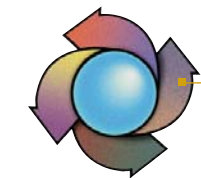


# 20 Retrospective

Celebrating 20 Years of *RSNA News*

## Headlines

Remembering radiologic topics that made the news. This month's feature: the emergence of RSNA and radiology on the Web.

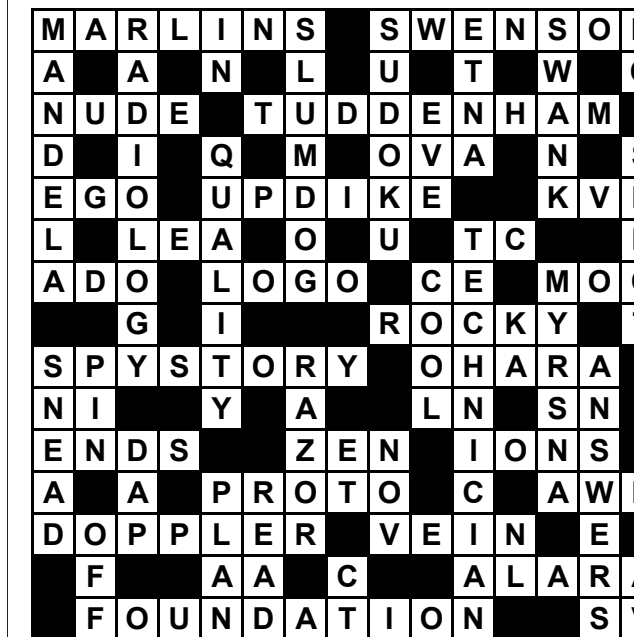


- Summer 1995\*** RSNA Home Page Brings Society News via the "Electronic Highway"
- Summer 1996** RSNA Members Can Now Register On-line for Annual Meeting
- December 1997** *Radiology* and *RadioGraphics* to Add Online Editions
- October 1999** RSNA and ACR Launch Public Information Web Site, Radiology Resource
- July 2000** RSNA Education Center Launches InteractED: Educational Opportunities on the Internet
- November 2001** Radiologists Readily Use Internet
- July 2002** *RadiologyInfo*™ Ready for Prime Time
- July 2005** Understanding Web Design is Important for Radiologists
- September 2006** Podcasts Reinforce Diagnosis and Treatment Information
- January 2008** User Patterns Improve Radiology Search Engine
- May 2008** myRSNA™ Makes *RSNA.org* Practical and Personal
- August 2008** E-Mentoring Program Offers Real-Time Global Radiology Education
- January 2009** In 10th Year, Online Journals Stay on Technology's Edge
- March 2009** *RadiologyInfo*™ Uses Sound to Amplify Success

\* *RSNA News* was published quarterly from Fall 1991 until September 1996, when monthly publication began.

## Crossword Answer

Here are the answers to the 20th anniversary crossword from our May 2010 issue. Missed the puzzle and still want to give it a try? Go to [rsnanews.org](http://rsnanews.org) to try an interactive version, complete with timer and optional clues. A new puzzle will be published in print and online with the July 2010 issue of *RSNA News*.



## Flashback: 2001

### Supported by RSNA, Effort to Increase Mammography Access Still Fails

A bill introduced into the U.S. Senate in March 2001 sought to remedy problems with Medicare reimbursement for mammography, many of them identified during a teleconference organized by RSNA during the 2000 annual meeting. Decrying a reimbursement rate that fell far short of the real cost of mammography, teleconference participants spoke of many centers shutting their doors completely, leaving remaining centers to deal with a backlog of patients while operating at a loss. "We are not in a crisis at the moment, but all this does not portend well for the future," said panelist Dieter R. Enzmann, M.D. The Assure Access to Mammography Act of 2001 proposed increasing Medicare reimbursement for screening mammography by 30 percent, boosting Medicare graduate medical education funding for radiology residency slots and adding money to allied health profession loan programs in order to increase the supply of qualified radiologic technicians available to perform mammography. The bill did not become law at that time, nor did it pass when introduced in subsequent sessions of Congress.

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