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RSNA News

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Abstract Deadline for RSNA 2005 April 15, 2005

March 2005

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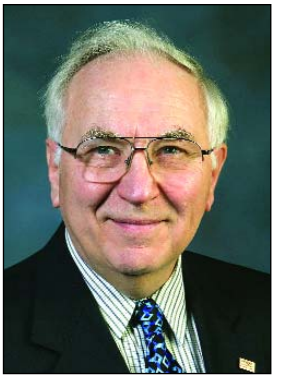
ECR Awards Honorary Memberships, Gold Medals

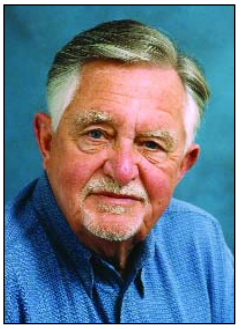

Brian C. Lentle, M.D.

RSNA Past-President **Brian C. Lentle, M.D.,** was named an honorary member of the European Congress of Radiology (ECR) during ECR 2005 this month in Vienna, Austria. Honorary membership was also awarded to **Joseph T. Ferrucci, M.D.,** of Boston, **Ricardo D. Garcia-Mónaco, M.D.,** of Buenos Aires, and **Man Chung Han, M.D., Ph.D.,** of Seoul, South Korea.

The ECR gold medal was awarded to **Wolfgang W.M. Dihlmann, M.D.,** of Hamburg, Germany, **Hans G. Ringertz, M.D., Ph.D.,** of Stockholm, Sweden, and **Jacqueline Vignaud, M.D.,** of Vouzon, France.

IN MEMORIAM:

Harald O. Stolberg, M.D.


Harald O. Stolberg, M.D.

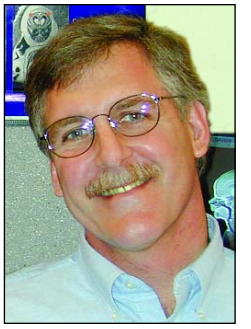
Accomplished cardiac-thoracic radiologist and longtime patient care advocate **Harald O. Stolberg, M.D.,** died in January at the age of 79.

Dr. Stolberg was considered a pioneer in evidence-based radiology and was the father of most of the standards of practice held by the Canadian Association of Radiologists (CAR). He was born in Austria and moved to Canada in the mid-1950s where he completed his radiology residency at Toronto General Hospital, and later practiced at Hamilton General Hospital and taught at McMaster University Medical School.

"Dr. Stolberg was a leading force in the practice, research and teaching of radiology over the past four decades in Hamilton and in Canadian radiology," said CAR President Lawrence Stein, M.D.

An RSNA member for 40 years, Dr. Stolberg earned several prestigious awards including the CAR gold medal and the Queen's Jubilee Medal.

Barkovich Earns Peter Emil Becker Award


A. James Barkovich, M.D.

A. James Barkovich, M.D., a professor in the Department of Radiology at the University of California, San Francisco, will receive the prestigious Peter Emil Becker award next month at the annual meeting of the German-Swiss-Austrian Society of Pediatric Neurology. The award is given to "outstanding individuals who have contributed on an international level to child neurology."

New HHS Secretary


Michael O. Leavitt

Michael O. Leavitt is the new secretary of the U.S. Department of Health and Human Services (HHS).

Prior to his position at HHS, Leavitt served as administrator of the U.S. Environmental Protection Agency and also served three terms as Utah governor during which his state was recognized six times as one of America's best managed states.

"Americans deserve the healthcare of the 21st century. We've earned it. That includes modern medical technology, modern information technology and modern, consumer-focused delivery systems," Leavitt said during his confirmation hearing. "I see a world that is rapidly moving toward personalized medicine. People will own their own health savings, health insurance and health records."

Leavitt has a bachelor's degree in economics and business from Southern Utah University.

Dean Joins Government Relations Firm


Donna J. Dean, Ph.D.

The founding/acting director of the National Institute of Biomedical Imaging and Bioengineering (NIBIB) has joined a government relations firm in Washington, D.C.

Donna J. Dean, Ph.D., is the new senior science advisor for Lewis-Burke Associates L.L.C. She will develop strategies and provide advice to universities and others seeking federal financial support for biomedical and other related research initiatives.

RSNA News Send your submissions for *People in the News* to *rsnanews@rsna.org*, (630) 571-7837 fax, or *RSNA News*, 820 Jorie Blvd., Oak Brook, IL 60523. Please include your full name and telephone number. You may also include a non-returnable color photo, 3x5 or larger, or electronic photo in high-resolution (300 dpi or higher) TIFF or JPEG format (not embedded in a document). *RSNA News* maintains the right to accept information for print based on membership status, newsworthiness and available print space.

AMI Presents Two Awards

TWO LEADERS in molecular imaging are the recipients of 2005 awards from the Academy of Molecular Imaging (AMI).

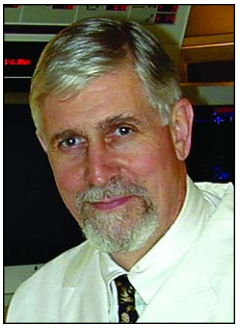
At the AMI annual conference this month in Orlando, the Peter Valk Distinguished Clinical Scientist Award was presented to **Anthony Shields, M.D., Ph.D.,** from Wayne State University in Detroit. Dr. Shields' research focuses on the development of new imaging technologies to measure tumor response to therapy, particularly using positron emission tomography (PET).

Anthony Shields, M.D., Ph.D.

Joanna Fowler, Ph.D.

Joanna Fowler, Ph.D., director of the PET program at Brookhaven National Laboratory in New York, received the Distinguished Basic Scientist Award. Dr. Fowler and colleagues designed and synthesized 18F-FDG, a radiotracer widely used to study brain function and in cancer diagnosis and treatment planning. She also developed the radiotracer 11C-cocaine, providing the tools for the first documentation that cocaine movement in the human brain parallels its behavioral effects.

Thrall Joins E-Z-EM Board of Directors



James H. Thrall, M.D.

James H. Thrall, M.D., has been appointed to the board of directors of E-Z-EM, a leading manufacturer of contrast agents for gastrointestinal radiology.

Dr. Thrall is the Juan M. Taveras Professor of Radiology at Harvard Medical School and radiologist-in-chief at Massachusetts General Hospital. He is also the perspectives editor for *Radiology* and serves on the RSNA Research & Education Foundation Board of Trustees.

Rost Named CEO of Radiology Group

Raymond C. Rost Jr., M.D.

Raymond C. Rost Jr., M.D., is the new president and chief executive officer of Professional Radiology, Inc., one of the largest radiology groups in the greater Cincinnati area. He succeeds **Terry D. Traiforos, M.D.**

Ultrasound Training Center Opens in Belgrade

THE Jefferson Ultrasound Research and Education Institute (JUREI) at the Thomas Jefferson University in Philadelphia was instrumental in the establishment of an ultrasound training center in Belgrade, the capital of Serbia and Montenegro.

(from left) **Serbia's Prince Alexander, Hedvig Hricak, M.D., Ph.D., Barry B. Goldberg, M.D., Alexander Margulis, M.D., and Serbia's Princess Katherine.**

The center was dedicated in October in honor of native Serbian Alexander Margulis, M.D., former chairman of radiology at the University of California, San Francisco. Over the past 10 years, Dr. Margulis has worked tirelessly to advance radiology worldwide.

JUREI, under the direction of Barry B. Goldberg, M.D., is also dedicated to advancing radiology, especially in emerging nations. This is the 65th affiliated ultrasound training center for JUREI.

The Belgrade center was also the beneficiary of a grant from Lifeline, a charity run by Serbia's Princess Katherine, and 30 ultrasound units donated by Siemens.

Medical Imaging Company News:

- **Eastman Kodak Company** has entered into an agreement to acquire OREX Computed Radiography Ltd., for $50.5 million in cash.
- **AliMed, Inc.,** has acquired Arista Surgical Supply Company. AliMed manufactures and supplies products ranging from diagnostic imaging and operating room accessories, to orthopedic rehabilitation equipment and ergonomic workplace solutions.

Pioneer Award Program Opens

NOMINATIONS ARE being accepted until April 1 for the 2005 NIH Director's Pioneer Award.

"The Pioneer Award supports scientists of exceptional creativity who take innovative approaches to major challenges in biomedical research," said NIH Director Elias A. Zerhouni, M.D. "We look forward to adding a new cohort of visionary thinkers to the outstanding group of scientists chosen in the first year of this program."

Unlike other NIH grants, which support research projects, the Pioneer Award supports individual scientists. The award gives recipients the intellectual freedom to pursue new research directions and highly innovative ideas that have the potential for unusually great impact.

For more information, go to *nihroadmap.nih.gov/pioneer.* The complete Pioneer Award announcement is available at *grants1.nih.gov/grants/guide/notice-files/NOT-OD-05-021.html.*

FDA Offers Patient Information on Recently Approved Devices

The U.S. Food and Drug Administration's Center for Devices and Radiological Health has created consumer information Web pages for two recently approved medical devices. The pages briefly describe the devices, explain what they are intended to do, and tell how they should and should not be used.

One device is the Endologic PowerLink® System for treating abdominal aortic aneurysms *(www.fda.gov/cdrh/mda/docs/p040002.html).* The second is the Charité™ Artificial Disc for treating pain associated with degenerative disc disease *(www.fda.gov/cdrh/mda/docs/p040006.html).*

NEMA Releases Code of Ethics

The National Electronic Manufacturers Association (NEMA) has approved a voluntary code of ethics for manufacturers of medical imaging and radiation therapy equipment. The code provides recommended practices on interactions between suppliers of medical imaging equipment and healthcare providers. These practices address such issues as product training, educational conferences and consultation.

To review the code, go to *www.nema.org/media/pr/upload/NEMA%20CodeofEthics.FAQ.adopted.pdf.*

NIH Posts Information for New Investigators

The Office of Extramural Research (OER) at the National Institutes of Health (NIH) has added Web pages that provide new researchers with a better understanding of how NIH works. The Web site describes current policies, data related to the influx of new investigators, resources that new investigators can use, and helpful hints that might be useful in constructing a first application for NIH support. The information can be found at *grants.nih.gov/grants/new_investigators/index.htm.*

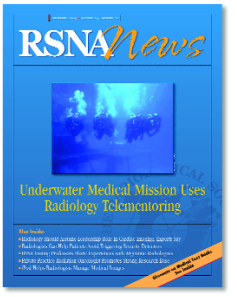
LETTER TO THE EDITOR

TO THE EDITOR:

The otherwise excellent article in the December *RSNA News,* "Radiologists Can Help Patients Avoid Homeland Security Crisis," did not address the subject of patient confidentiality and HIPAA compliance. It would be a violation of HIPAA if the only provision for verification of the treatment of a patient was a simple telephone call to a hospital administrator.

The patient must give consent for release of this information. The consent should be in writing. If no consent form is on file, any administrator releasing the information would be doing so without the patient's authorization. Perhaps the argument would be made that confidential patient information was released in the interest of national security, but the patient could contest that assertion.

Also, the hospital must confirm that the caller is who he says he is. The administrator cannot release confidential patient information to anyone who happens to call asking for it. Picture the celebrity patient who has received radioisotope therapy. Someone calls the hospital asking if Mr. Doe has been treated with I-131 for thyroid cancer. Do we want to confirm that to any caller?



No, of course not. The identity of the caller should be confirmed and the patient's consent to release this information should be obtained and documented.

GREGORY R. WEAVER, M.D.
CHIEF, DEPARTMENT OF MEDICAL IMAGING
BAPTIST HOSPITAL
NASHVILLE, TENN.

RSNA News welcomes Letters to the Editor. Let us know what's on your mind. Send your letter by mail to *RSNA News,* 820 Jorie Blvd., Oak Brook, IL 60523, by fax to (630) 571-7837, or by e-mail to *rsnanews@rsna.org.* Please include your full name and telephone number. Letters may be edited for purposes of clarity and space.

IHE Guides Development of Electronic Health Record System

THE Integrating the Healthcare Enterprise (IHE) initiative is playing a crucial role in the dialog to develop a national health information network.

Established six years ago by RSNA and the Healthcare Information and Management Systems Society (HIMSS), IHE was among 13 health and information technology organizations that, in January, presented the Bush administration with recommendations for establishing an electronic national patient health record. In an unprecedented collaboration, the health and information groups worked to create a common framework supporting improved health information exchange in the United States while protecting patient privacy.

During a healthcare information technology summit at the Cleveland Clinic on January 27, President Bush said: "We've got fantastic new pharmaceuticals that help save lives, but we've got docs still writing records by hand. … So the fundamental question is, how do we encourage information technology in a field like healthcare that will save lives, make patients more involved in decision-making, and save money for the American people?"

He pointed to the new National Coordinator for Health Information Technology, David J. Brailer, M.D., Ph.D., who has set a goal that every American will have an electronic medical record in 10 years.

It was a request by Dr. Brailer late last year that brought together IHE and the other 12 groups to help devise a national health information infrastructure. One of the group's recommendations was connectivity built on the Internet and other existing networks.

"IHE is recognized as a very good process model and has taken a leadership role in establishing integrated technology solutions that affect real-world practice," said David S. Channin, M.D., a member of the RSNA Electronic Communications Committee (ECC). "Radiology can be very proud that it was integral in the process and is a core contributor to the collaborative response."

IHE is recognized as a very good process model and has taken a leadership role in establishing integrated technology solutions that affect real-world practice.

David S. Channin, M.D.

Under IHE, participating healthcare professionals work to improve the way computer systems in healthcare share information. Since 1998, IHE has expanded from radiology and IT infrastructure to include nuclear medicine, radiation oncology, cardiology and clinical laboratory and pathology.

White House photo by Paul Morse

President George W. Bush gets a demonstration on healthcare information technology at the Cleveland Clinic.

IHE Connectathon

One part of the equation is providing medical technology vendors a neutral space and project leadership in testing equipment to solve integration problems. The centerpiece of the IHE testing process is the Connectathon, a weeklong interoperability testing event that takes place every 12 to 15 months at RSNA Headquarters in Oak Brook, Ill. The 2005 Connectathon was held January 17-21.

The Connectathon allows participating companies to test their IHE capabilities with corresponding systems from industry peers. During the event, their systems exchange information with systems from other vendors, performing all of the transactions required for selected roles, called IHE Actors, in support of defined clinical functions, called IHE Integration Profiles.

"They've worked out the issues on paper but vendors have to work out real-world bugs when they take equipment to the hospital for installation," said David W. Piraino, M.D., an ECC member and chairman of the IHE Strategic Development Committee. "The Connectathon leads to huge cost savings for companies selling medical equipment because they won't have to do extensive, independent testing in each hospital setting."

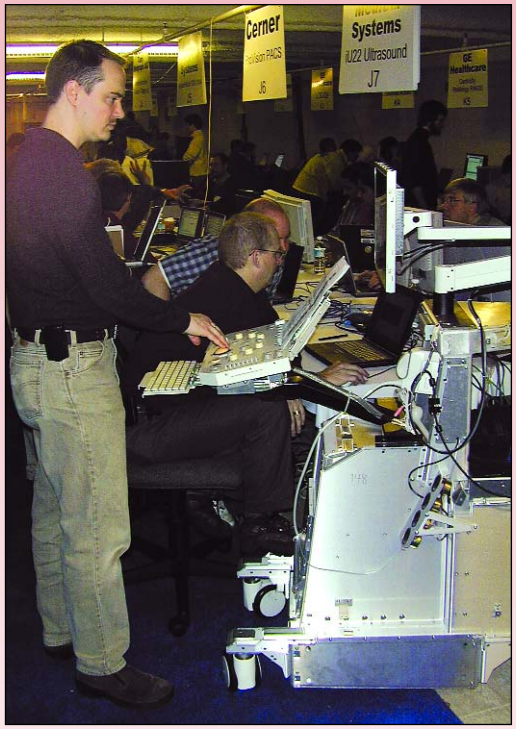
This year's Connectathon was the first comprehensive, multi-domain meeting in North America. Forty-five companies and three non-commercial entities participated. Thousands of tests were conducted among rows of laptop computers stretching throughout the lower level of the RSNA Headquarters building.

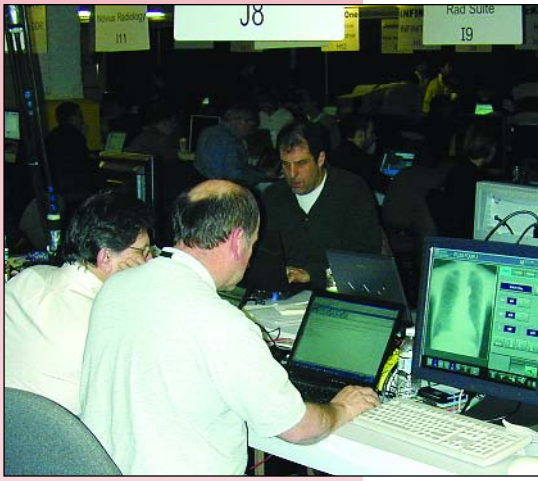
"It's like a beehive with engineers busily moving around, testing, exchanging messages to confirm they can share information and make appropriate use of it," said Christopher Carr, RSNA's director of informatics.

"It's a unique situation," added Dr. Channin. "Vendors participate and learn together. They are willing to help their competitors in the interoperability domain because, in turn, it facilitates how they'll get the information they need. It's tremendous."

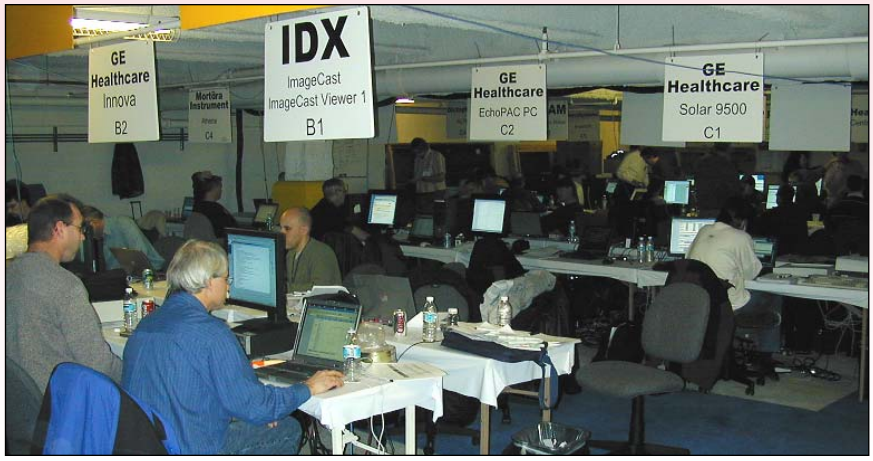
During the Connectathon, vendors set up their equipment and begin running a series of tests. Independent project managers review log files and walk around checking off steps to verify each company's progress.

Connectathon organizers have created real-world testing scenarios so that participants can run through them to demonstrate interoperability. One scenario features a patient suffering from abdominal pain. The testing sequence follows him to his primary care physician and a gastroenterologist who orders a CT scan. The patient's history, exam results and laboratory findings are stored in an electronic patient record available to the patient and medical professionals.





Forty-five companies and three non-commercial entities participated in the IHE Connectathon at RSNA Headquarters.



"We want to make sure the vendors can complete the scenarios from start to finish in real time and in sequence," explained Carr. "We do this to prepare them for implementation and also to prepare them for public demonstrations that are based on this event."

This is the first year cardiology was included in the Connectathon.

Troy Wollman, a systems architect for GE Healthcare brought a data management system to be tested. "I love it," said Wollman. "The great thing about the Connectathon is that we work with our own products. It's nice to be able to come here and connect with Philips and Cerner and other vendors to ensure that our systems talk the way they are supposed to when they're in the hospital."

Veteran participants also responded overwhelmingly in favor of the event, saying the IHE process addresses important issues in their product development plans.

The 2005 Connectathon test results are available at *www.ihe.net.* They also include a comprehensive record of successful test results at all previous Connectathon events. The table lists each

Continued on page 10

Paperless Environment Improves Radiologist Efficiency

THE TRANSITION from a film-based to a paperless environment is responsible for a significant improvement in a radiologist's efficiency, but many radiology departments still use paper to alert radiologists to completed studies.

In addition, upgrades for picture archiving and communication systems (PACS), such as integrated dictation and integrated clinical information, may be as important as PACS itself in improving the workflow of the reading room.

Jonathan L. Mates, M.D., formerly of Henry Ford Hospital in Detroit, now with the University of Pittsburgh Medical Center (UPMC), presented the findings of a new study during a scientific paper session at RSNA 2004.

Dr. Mates and his UPMC colleagues conducted a workflow analysis that involved videotaping three radiologists dictating during their normal workload. Two of the radiologists were from Henry Ford Hospital; one was from UPMC.

UPMC has both a paperless and a seldom used paper-driven system, while Henry Ford Hospital has a partially integrated dictation system using a voice recognition application (Powerscribe) as well as an older, completely unintegrated dictation system using RTAS.

The researchers said they watched the videotapes and then categorized and classified the various dictation tasks. The four categories for dictation were:

- Session-level steps
- Patient or study ID steps
- Preparatory steps
- Dictation/interpretation steps

"We identified those steps which were most affected by the change to a paperless environment and measured the mean case dictation time and compared them between the various methods," Dr. Mates explained.

The researchers found that radiologists at the two institutions spent a similar amount of time interpreting images, but associated tasks took significantly less time in the more integrated environments. "There is less time spent on items like typing in patient information or dictating patient data. And that's just on the radiologist's side—we didn't even begin to discuss the improvements for the technologists," said co-author Barton Branstetter, M.D.

"We found that efficiency was improved when the integration between the dictation system and PACS was leveraged to automatically communicate information that was previously the responsibility of the radiologist," Dr. Mates said. "In other words, in the unintegrated, paper-driven systems, the radiologist had to barcode or type the study number into the dictation system and PACS separately. With an integrated, paperless system, the dictation system 'knows' from the PACS all the important study information."

I believe the real benefits go well beyond the radiologist and include very real improvements in efficiency, patient throughput, accuracy and patient safety throughout the department.

Paul Chang, M.D.

As an example, Dr. Mates said that changing from a barcode and type system to a paperless system could save 19 seconds per case. A radiologist who reads 200 cases a day could be finished an hour earlier each day. At UPMC, they use their paperless system to read over 600,000 cases per year, theoretically saving enough time to account for nearly two full-time radiologists.

Jonathan L. Mates, M.D.
University of Pittsburgh Medical Center

"With this type of robust, reliable integration, radiologists no longer have to act as a bridge between the two systems, and they can spend their time on the most important part of the workflow—interpreting the images," Dr. Mates said.

Co-author Paul Chang, M.D., said the impact of the paperless environment could be much broader, "I believe the real benefits go well beyond the radiologist and include very real improvements in efficiency, patient throughput, accuracy and patient safety throughout the department."

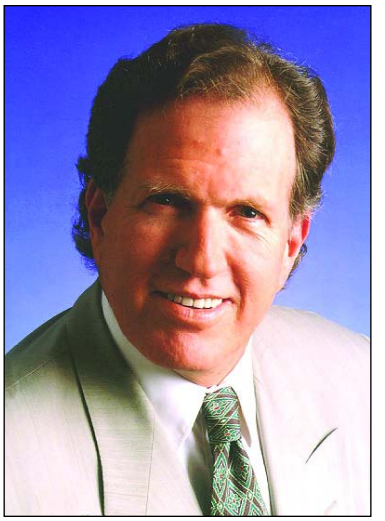
Dr. Mates cautioned that going paperless all by itself is not enough. The way in which it is done determines whether a department solves problems or creates new ones. "Worklist creation,

Continued on page 10

New Stroke Prevention Therapy as Effective as Invasive Surgery

NEW RESEARCH demonstrates two important radiographic findings about stroke. In one study, angioplasty and stenting were found to be as successful as surgery in treating carotid stenosis. In a second study, gender differences were found in carotid stenosis response and treatment.

Gianluca Piccoli, M.D.
Santa Maria della Misericordia Hospital, Udine, Italy



Barry T. Katzen, M.D.
Baptist Cardiac & Vascular Institute, Miami

Angioplasty and Stenting

Gianluca Piccoli, M.D., an interventional radiologist at the Santa Maria della Misericordia Hospital of Udine in Italy, presented the findings of his study at RSNA 2004.

Directed by Daniele Gasparini, M.D., the researchers studied 222 patients with carotid artery disease who underwent angioplasty and stenting. They found that these patients had a lower rate of complication and approximately the same outcome as patients who underwent the more invasive carotid endarterectomy.

The accumulation of plaque in the carotid artery can lead to stroke either by decreasing the blood flow to the brain or by having plaque break free and lodge in arteries supplying the brain or other areas of the head. The American Stroke Association reports that stroke is the third leading cause of death in the United States behind heart disease and cancer. Stroke is also a leading cause of serious, long-term disability with an estimated direct and indirect cost of $53.6 billion in 2004.

In August 2004, the FDA approved the first carotid stenting system for use in the United States. A second system is under review.

It's essential that only experienced interventional experts perform these procedures.
Gianluca Piccoli, M.D.

Dr. Piccoli said use of a protective filter is essential for reducing the risk of embolization.

"Although the filter is static, the carotid artery changes diameter so the filter cannot protect the entire diameter of the carotid but probably can transform a major stroke or fatal stroke to a minor stroke," he said. In surgery they usually clamp the carotid artery to prevent embolization, but this is a problem because you see ischemia in the lateral part of the brain because you have no flow during the intervention."

Dr. Piccoli's study showed that patients who underwent carotid angioplasty and stenting had a lower rate of acute complications (2.2 percent) than those undergoing surgery (3.0 percent). Six months later, his team found the angioplasty/stenting group had a four percent rate of restenosis, which is about the same as patients treated with surgery.

Because the procedure is relatively new, Dr. Piccoli stressed the importance of a multidisciplinary approach. "It's essential that only experienced interventional experts perform these procedures," he explained. "Radiology needs to work with angiology and neurology to help quickly recognize a complication and focus medical therapy."

The cost of the materials used in carotid angioplasty and stenting is high, but the overall price of the procedure is similar to surgery once the cost of an operating room and a longer hospital stay are included. Dr. Piccoli pointed out the advantages of the less invasive procedure, including shorter hospital stays, use of local anesthesia and no need for an incision in the neck.

He said his results are encouraging and demonstrate a need for further, randomized tests. "I think our results are in line with bigger studies," he said.

Continued on next page

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"Our research is going forward and, in 2005, we hope to present more data and have more information about the patients we discussed today."

ACT I Trial

Patient enrollment is expected to begin early this year in a separate study—the asymptomatic carotid trial (ACT I). The multicenter, randomized trial will compare carotid artery stenting to carotid artery surgery in asymptomatic patients. It will involve up to 50 hospitals and as many as 1,500 patients in the United States.

Carotid Artery Disease in Men vs. Women

Meanwhile, research presented at the recent Annual International Symposium on Endovascular Therapy (ISET) in Miami Beach, Fla., showed that carotid artery disease in men should be treated differently than carotid artery disease in women.

Anthony Comerota, M.D., director of the Jobst Vascular Center in Toledo, Ohio, said that blood flow velocities in the carotid arteries of women are generally about nine percent higher than they are in men.

"For stenoses above 50 percent, the difference was 15 percent increased velocity in women compared to men," explained Dr. Comerota, who is also a clinical professor of surgery at the University of Michigan, Ann Arbor. "This means that women naturally have higher blood flow velocities in their carotid arteries than men do, so we ought to recognize this and revise our diagnostic standards. If we use the same standards, we'll be over-diagnosing disease in women. Many people undergo surgery based on the non-invasive test alone, so you can see how important this becomes."

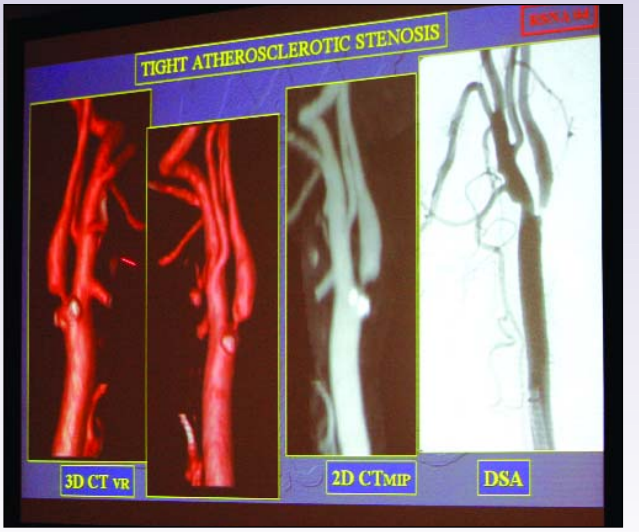
He added that at his clinic, they generally treat carotid disease when the carotid duplex shows a 50-percent stenosis in symptomatic patients and an 80-percent stenosis in asymptomatic patients.

"It's important to realize that the diagnostic criteria were established in patient populations in which women were underrepresented, such as patients at the Veterans Administration and in university hospitals with predominantly male populations," he explained.

Some of the differences that have been found in men and women include:

- At any age, the risk for stroke is greater in men than in women
- At similar degrees of carotid stenosis, the risk for stroke is higher in men than in women
- After carotid endarterectomy, the risk for stroke is higher in women with asymptomatic disease than in men with asymptomatic disease
- After carotid endarterectomy, women have a higher incidence of carotid restenosis than do men

Dr. Comerota said the data add even further weight to the evidence that non-invasive velocity criteria should be adjusted in women to more accurately reflect the underlying disease and offer a better fit with their risk for carotid atherosclerosis as well as the risks and benefits of intervention.



Tight atherosclerotic stenosis imaged with 3D volume-rendered CT, 2D CT MIP image and digital subtraction angiography.

Cautious Reaction from Interventional Radiology

Barry T. Katzen, M.D., an interventional radiologist who was the program director for ISET, said radiologists should be aware of the information but the results need to be confirmed by a prospective study. "I think it would be premature to start recalibrating our duplex criteria before this study is confirmed. It was a retrospective study with different qualities of angiography over a 10-year period, and the ability to correlate that with high-quality imaging is not the same as if you did a prospective study today," he said.

"When you see a woman with increased velocities, you definitely want to make sure she's in a critical category before you do anything," said Dr. Katzen, the founder and medical director of the Baptist Cardiac & Vascular Institute in Miami. "It's probably not reasonable to treat asymptomatic women in the 60 to 80 percent occlusion range, and it's even more imperative that we wait until they get to that critical category of over 80 percent. I do think there's enough in all of this that we should increase the baseline on which we operate on asymptomatic women, but we need to be very cautious about raising the bar on which women we treat." □

The Piccoli story was adapted from an article that appeared in the RSNA 2004 Daily Bulletin.

Medical X-Rays Added to Government's Carcinogen List

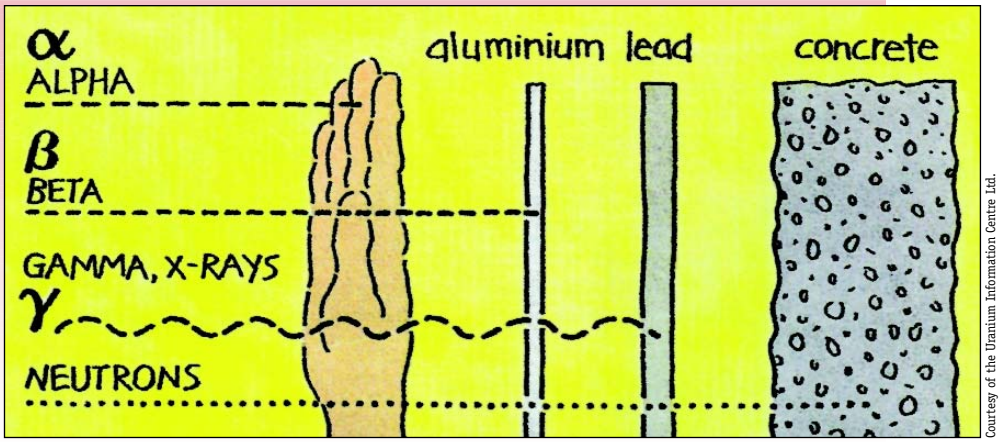
IT CAME AS no great surprise to radiologists, medical physicists and other members of the radiologic community when, in late January, ionizing radiation was added to the Department of Health and Human Service's (HHS) list of carcinogens.

The 11th Report on Carcinogens (RoC) added six substances under the category "known human carcinogens" and 11 under the category "reasonably anticipated to be human carcinogens." For the first time, the "known" list includes viruses—hepatitis B virus, hepatitis C virus and some human papillomaviruses. It also includes x-radiation, gamma-radiation and neutrons. Lead and lead compounds, compounds found in grilled meats, and a host of substances used in textile dyes, paints and inks were added to the "reasonably anticipated" list.

RSNA issued a press release within two hours of the report's release clarifying for the public the benefits of medical x-rays. The Society also sent an E-News Alert to members.

The RoC, a biennial report prepared for HHS by the National Toxicology Program (NTP) at the National Institute of Environmental Health Sciences, said x-radiation and gamma-radiation were listed "because human studies show that exposure to these kinds of radiation causes many types of cancer including leukemia and cancers of the thyroid, breast and lung."

The report added that exposure to x-radiation and gamma radiation has been shown to cause cancer of the salivary glands, stomach, colon, bladder, ovaries, central nervous system and skin. It also stated that 55 percent of worldwide exposure is from low-dose medical diagnosis such as bone, chest and dental x-rays.



Courtesy of the Uranium Information Centre Ltd.

NTP Associate Director Christopher Portier, Ph.D., said the decision to list ionizing radiation as a carcinogen follows valid research. "We no longer rely on atom bomb survivors for our data on the effects of ionizing radiation," he said. "There's a lot of mechanistic work that has been done. There have been follow-up studies on animals that match what we've seen in Hiroshima and Nagasaki. There have also been a number of studies since the early days of x-ray use for medical diagnosis that looked at radiologists and radiologic technologists and their cancer risk from radiation exposure."

It would be a tragedy if someone did not have a medical imaging procedure that might save his or her life or alter the course of treatment solely because of concern over the effects of radiation.

G. Donald Frey, Ph.D.

While Dr. Portier wants the public to be aware that ionizing radiation carries some risk, he said that the benefits of medical care and intervention outweigh those risks.

For decades, physicians and medical physicists have been concerned about the risks of radiation exposure, said G. Donald Frey, Ph.D., a professor of radiology at the Medical University of South Carolina and immediate past-president of the American Association of Physicists in Medicine, "The crucial thing for people to understand is that it would be a tragedy if someone did not have a medical imaging procedure that might save his or her life or alter the course of treatment solely because of concern over the effects of radiation."

What Radiologists Can Do

"First," said Dr. Frey, "radiologists should be aware of the amount of radiation that is given for higher-dose procedures, such as CT, and then they should be prepared to explain to the public the value of the procedures and what protective measures they are taking."

Donald P. Frush, M.D., chief of pediatric radiology at Duke University Medical Center, said radiologists also

Continued on next page

Continued from previous page

need to be aware that the research data linking cancer to low-levels of ionizing radiation—levels produced by the majority of medical procedures—are debatable. "It really comes down to no risk versus potential risk," he said. "Researchers are trying to figure out if there's a linear dose response with no threshold for the development of cancer or if there is a threshold for the development of cancer. In my opinion, and most physicians and scientists who are familiar with this topic will agree, patient safety always comes first and we are vigilant to avoid unnecessary radiation."

The Report on Carcinogens is available online at *ntp-server.niehs.nih.gov/index.cfm?objectid=BAEDD944-F1F6-975E-7A044FCBA50624E5.*

RSNA's press release stressing the benefits of medical x-rays is available at *www2.rsna.org/pr/target.cfm?ID=236.*

Dr. Frush said it is important that radiologists, through organizations such as RSNA, do everything possible to inform the public about this topic and use only the necessary amount of radiation for medical imaging.

"Radiologists, by virtue of our training in physics, are really the gatekeepers with regard to optimal use of the technology," he said. "We also have the responsibility to educate other physicians—those who order the examinations—including emergency room physicians, pediatricians, surgeons, internists and cardiologists. They are not always aware of the technical side of examinations that utilize radiation and don't always understand the potential risks."

The National Council on Radiation Protection and Measurements (NCRP) is taking the RoC in stride. NCRP Executive Director David A. Schauer, Sc.D., said the report is consistent with the radiation protection programs already in place worldwide as represented by the work of NCRP and the International Commission on Radiological Protection.

NCRP has been active in the areas of radiation protection and measurements since its inception in 1929. "Overall, NCRP agrees with the assessment that ionizing radiation is a known carcinogen," said Dr. Schauer. "However, we feel that the medical uses of radiation must be put into a benefit versus risk context, while bearing in mind that the patient voluntarily submits to these medical procedures under conventional rules of informed consent."

Dr. Frey recommends that patients ask questions, seek out accredited sites and review the information on *RadiologyInfo.org,* the patient education Web site developed by RSNA and the American College of Radiology that offers quick access to easy-to-understand information about radiology procedures and treatments. It describes what to expect, what the equipment is going to look like, what a patient will feel, what preparations would be appropriate, why the procedure is being done and what risks may be involved. □

IHE Guides Development of Electronic Health Record System

Continued from page 5

vendor and the IHE Actors and Integration Profiles their systems successfully performed.

Next Steps for IHE

While this year's Connectathon represents a 20 percent growth from the previous event held in late 2003, participants in the 2006 event can expect to push their systems even farther. "Each year additional capabilities are tested, and the process moves incrementally. We create new integration profiles, new interpretations of standards to address specific clinical needs," said Carr.

Sharing of health information in the acute care and ambulatory environments was featured at the HIMSS annual conference last month in Dallas. This month, IHE will be demonstrated at the American College of Cardiology annual meeting in Orlando. The demonstration will target clinical cardiologists, cardiology administrators and information services staff. For many, it will be their first exposure to IHE.

Meanwhile, Dr. Brailer used some of the information presented to him from IHE and the other health and information groups during the annual World Health Care Congress in late January. He served as a panelist alongside international healthcare experts in the session titled, "In Pursuit of the Electronic Medical Record." □

Paperless Environment Improves Radiologist Efficiency

Continued from page 6

for example, can make or break you," he said. "Worklist creation in the paper-driven environment consists of someone in the back room organizing a stack of papers. In the paperless workflow, this task has been given to the radiologist when he or she chooses studies from the worklist."

A poorly designed worklist could force a radiologist to spend an inordinate amount of time hunting through all the studies he or she is supposed to read. "This can lead to problems with efficiency, because of longer dictation times; morale, because of frustrated radiologists; and patient care, because of unread, overlooked studies," Dr. Mates concluded. □

This story was adapted from an article that appeared in the RSNA 2004 Daily Bulletin.

CT Screenings Predict Smoker's Lung Cancer Risk

RESEARCHERS can now predict a smoker's chance for developing lung cancer based on age, how much has been smoked and when the smoker quit.

The International Early Lung Cancer Action Project (I-ELCAP) is the largest study of its kind showing annual CT screenings can identify a high percentage of Stage I lung cancer in habitual and social smokers.

"The mission of the research is to advance policy-relevant research on early diagnosis of lung cancer," explained principal investigator Claudia I. Henschke, Ph.D., M.D., during a scientific paper session at RSNA 2004. "Data were pooled across 33 international institutions using the same regimen of screening. Since 1993, 27,701 men and women have undergone CT screenings to evaluate the usefulness of CT as a diagnostic tool and to foster translation of up-to-date evidence for guidelines for practice."

Annual CT screenings have been shown to identify a high percentage of Stage I diagnoses of lung cancer in its most curable form. "Our study found that deaths from Stage I lung cancer were surprisingly low after surgery, but only if treatment is pursued quickly," said Dr. Henschke, a professor of radiology and division chief of chest imaging at New York Hospital/Cornell Medical Center in New York City.

Calling the study a diagnostic-prognostic trial in which everyone is screened initially, she added, "This is the first time we are reporting our prognostic mission for estimated cure rates of screen-diagnosed resected lung cancers without lymph node metastasis in this pool cohort."

The results showed less than 15 percent had a positive result for lung cancer in the initial or baseline screening. Less than six percent required further work-up following the annual repeat screening. Of those with a positive screening in either baseline or repeat, more than 80 percent were diagnosed in Stage I.

When it comes to translating the research into guidelines for practice, Dr. Henschke said it is important to treat each case individually. "When you are meeting a patient who wants to be screened, you can answer his or her questions based on the likelihood of finding cancer in that round of screening, the likelihood that early intervention would cure the cancer and the likelihood of avoiding death by another cause," she said.

> *This is the first time we are reporting our prognostic mission for estimated cure rates of screen-diagnosed resected lung cancers without lymph node metastasis in this pool cohort.*
>
> **Claudia I. Henschke, Ph.D., M.D.**

I-ELCAP showed for those between 40 and 49, for every 1,000 people screened, you will find two cases of lung cancer averaged over all pack years. The number of cases increased to 15 for every 1,000 for people aged 50 to 74 years and 28 out of every 1,000 for those over 75.

The number of smokers developing lung cancer also increased by the total number of cigarettes smoked: 28 smokers out of every 1,000 were diagnosed with lung cancer if they smoked three packs a day for 20 years or more. Fifteen smokers per 1,000 developed lung cancer among those smoking three packs a day for 10 to 20 years.

Claudia I. Henschke, Ph.D., M.D.
New York Hospital/Cornell Medical Center

Lung cancer remains the major cause of cancer death in women and men, killing more people than breast, prostate and colon cancers combined, according to the American Cancer Society.

Future of I-ELCAP

Dr. Henschke said I-ELCAP researchers will continue to update the regimen of screening in accordance with advances in knowledge and technology. They will follow the screen-diagnosed cases of lung cancer to establish the fatality rate with and without early intervention. They will also develop guidelines for post-primary lung cancer screening and participate in the assessment of alternative treatments for early screen-diagnosed lung cancers. □

This story was adapted from an article that appeared in the RSNA 2004 Daily Bulletin.

Taking Care of Your Financial Health

Estate Planning for Physicians

PART 2 OF 3

THIS SECOND PART of a three-part series on estate planning focuses on how wills and trusts benefit you, your loved ones and the work of charitable organizations you support.

Legal Documents Provide Peace of Mind

About 70 percent of the people who die each year in the United States do not have a will, according to Alan L. Cates, J.D. Some of the deceased have other legal means for passing on property, such as joint tenancy, but many do not.

"They just didn't think about the financial futures of their loved ones or they kept putting it off until it was too late," said Cates, the 2004 president of the Chattanooga Bar Association and a shareholder with the firm of Shumacker, Witt, Gaither & Whitaker in Chattanooga, Tenn.

"If someone is satisfied with the laws governing the disposition of assets in his or her state, a will is not needed," he said. "However, a will lets your heirs know exactly how you want your assets divided, who should receive your assets and when they should receive them." This important legal document can also reduce court costs and other expenses.

What is a Will?

A will is simply a set of operating instructions upon death. It directs the transfer of assets and sets the stage for probate. Probate is the process by which assets are collected, bills are paid and property is divided among heirs.

"When there is no contractual arrangement, such as joint tenancy for a home or a beneficiary designation in an insurance policy or pension, then the will directs the transfer of the assets," said Brian T. Whitlock, J.D., C.P.A., partner-in-charge of the Wealth Transfer Service Group at Blackman, Kallick, Bartlestein, L.L.P., in Chicago. He is also the chairman of the Illinois C.P.A. Society.

Probate is a necessary process for young, active medical professionals because they are frequently signing agreements and contracts. They can take advantage of the probate process in order to limit the claims of potential creditors.

Brian T. Whitlock, J.D., C.P.A.

"Frequently, people read about the 'evils of probate.' It can be an expensive process, particularly in some jurisdictions," he explained. "However, probate is a necessary process for young, active medical professionals because they are frequently signing agreements and contracts. They can take advantage of the probate process in order to limit the claims of potential creditors."

The Probate Process

Whitlock said a will must be presented to the local probate court to make sure it meets the statutory requirements of the state. Several questions are raised:

- Is it a valid will?
- Does the will name an executor?
- Does that executor need to pay a bond or has the deceased waived that right in the will?

The executor then publishes a notice in the county where the deceased lived calling on creditors to come forward within a four- to six-month period if they have any claims against the estate. For example, a physician who ordered supplies before his or her death may not have paid for them. This is the time for any unpaid bills to be paid. After the four- to six-

Will
A will provides for the distribution of property owned by you at the time of your death in any manner you choose, subject to the forced heirship laws of some states.

Intestate
If you die intestate (without a will), your state's laws of descent and distribution will determine who receives your property by default.

Trust
The term trust describes the holding of property by a trustee (one or more persons or a corporate trust company or bank) in accordance with the provisions of a written trust instrument. A person may be both a trustee and a beneficiary of the same trust.

Testamentary Trust
A trust created by your will is called a testamentary trust and the trust provisions are contained in your will.

Source: American Bar Association

month period, no financial claims can be made against the estate.

These limits also apply to potential malpractice claims. "Probate provides certainty and limitation of claims. That's one of the most positive aspects of probate," Whitlock said.

What is a Trust?

A trust is a contractual arrangement for the holding and disposition of assets. Unlike a will, which takes effect upon death, a trust takes effect as soon as an asset is registered in the trust.

A trust can manage assets during lifetime due to incapacity or the inability to manage assets, such as for children who lose their parents. Trusts can last for many years beyond the life of the person who created it, even over multiple generations.

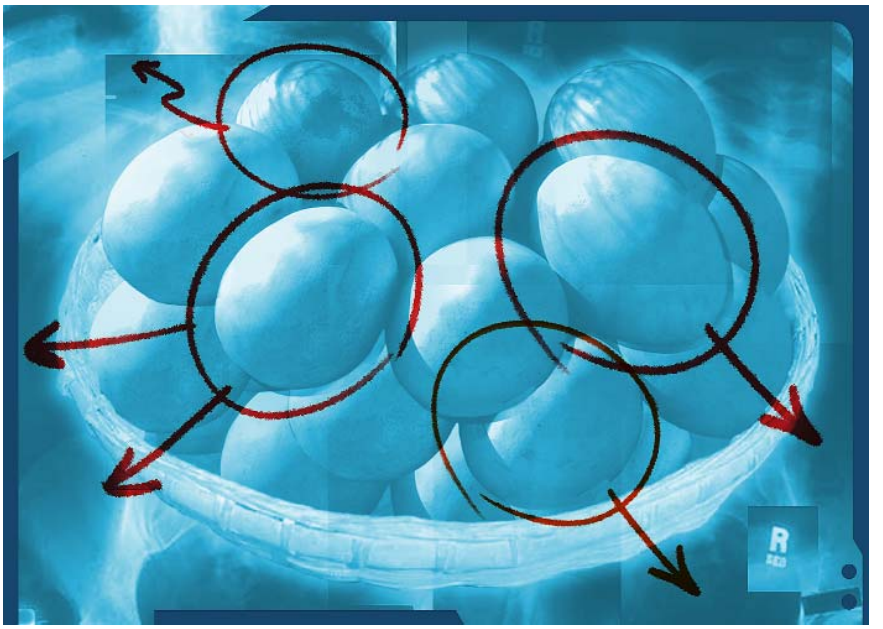
"A trust can provide protection from creditors," said Whitlock. "For example, when a physician's spouse dies, the spouse leaves his or her assets to the physician. If the spouse had the assets in a trust for the physician and their children, the assets would be protected from the physician's creditors."

Whitlock added that physicians can set up trusts for their children to protect family assets from the claims of legal creditors, malpractice suits and even from the children's spouses in the event of divorce.

Trusts can also organize the process to create estate tax savings. "The trust creator sets the rules," said Whitlock. "You can decide how narrow or broad to organize your financial wishes."

Another advantage to a trust is that it is a private document. While a will is a public document filed in county court and open to view, a trust is private. Whitlock said the only time it could possibly be made public is in the event of a legal dispute where the beneficiaries of the trust might take the trustee to court in order to argue over the tears or management of the trust.

When choosing a trustee, Whitlock said consider a bank. "You don't need to have a professional trustee. Most people are more comfortable with a family member. However, banks are very good at this and have a lot of experience," he said.



Charitable Donations

If someone dies without a will (intestate), the state essentially writes a will for you and gives your assets to the closest living relatives. Assets go first to a spouse, then to children, grandchildren and other relatives. Court costs will eat up a lot of those assets.

What if you wanted to leave money to a favorite charity? "There are no adequate provisions in state laws addressing a person's thoughts about charitable contributions. A will specifies your intentions," Cates explained.

There are many ways to leave gifts to charity while first providing for the financial needs of your family. You can designate:

- Specific amount to be transferred to one or more charities
- Specific percentage of your estate
- Amount left over after other gifts to family and friends have been made

"You can support the financial needs of your family and still help support a charitable organization that was important to you in your lifetime," said Deborah Kroll, managing director of fund development for the RSNA Research & Education Foundation.

Along with a will, Kroll suggested setting up a living trust to help accomplish estate planning objectives. "Special trusts can be used to help reduce or eliminate state and federal taxes on capital gains," said Kroll. "The assets you can designate include cash, personal property, stocks, bonds, retirement plans, life insurance, livestock, real estate and a family business."

Consult with an attorney or professional tax advisor for more information on wills and trusts.

For more information about contributing to the Foundation, contact Kroll at (630) 368-3742 or at *dkroll@rsna.org.* □

Estate Donations to the RSNA R&E Foundation

Eighteen members have notified RSNA that the R&E Foundation is included in their estate plans. The donations total more than $3.3 million. Another member has designated the Foundation to receive 30 percent of their residual estate.

Funding Radiology's Future Celebrating 20 Years

Next month: Insurance and Planned Giving

Product News

NEW PRODUCT

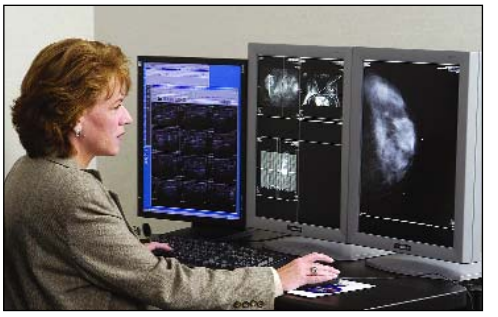
Multimodality Breast Imaging Workstation

THE Synapse® Multimodality Breast Imaging Workstation configuration, by FUJIFILM Medical Systems *(www.fujimed.com)*, is now available in the United States.

Designed for any facility performing full-field digital mammography (FFDM) and other modalities such as breast MR or ultrasound, the workstation provides all the functionality of Fuji's innovative Synapse PACS to add consistency and efficiency to the interpretation of breast imaging studies.

Unlike other dedicated FFDM diagnostic stations for mammography images, the Synapse workstation configuration can be used as a full-featured diagnostic workstation for any imaging exam, thereby providing additional workflow improvements.

"Synapse is cleared for the viewing of FFDM, our DryPix™ line of dry laser imagers are cleared for printing FFDM, and now we have the multimodality



workstation configuration for diagnosis," said Andrew Vandergrift, Fuji's national program manager for women's healthcare imaging.

NEW PRODUCT

Laptop Tray Attachment for Angle Chair

HealthPostures *(www.healthpostures.com)* has taken another step into the "Reading Room of the Future" by adding a laptop tray attachment to its Stance® angle chair.

In collaboration with GE Healthcare, HealthPostures demonstrated the chair at RSNA 2004 in the *info*RAD showcase exhibit.

Radiologists sometimes sit in one static position for 12 hours a day. The angle chair allows radiologists to move freely—from neutral sitting, to kneeling, to reclined sitting. Improved ergonomics can help decrease repetitive stress disorder while increasing accuracy, productivity and job satisfaction.

NEW PRODUCT

Speech Recognition Solution

Crescendo *(www.crescendo.com)* of Canada has released its Crescendo Speech Processing solution for radiology. The solution, powered by SpeechMagic™ from Philips, includes a professional recognition vocabulary for radiology terminology.

Crescendo Speech Processing is a background netware component that works during the dictation process.

"Radiology is typically the most dictation-intensive department in a hospital," said Costa Mandilaras, president of Crescendo Systems Corporation. "Radiologists can keep dictating the way they are used to, using their preferred input device, while the SpeechMagic voice recognition system automatically adapts to their specific dictation characteristics and is constantly optimized through repeated use."

NEW PRODUCT

Wipe Test Fixture for Advanced Survey Meter

Cardinal Health, Inc. *(www.cardinalhealth.com)* has announced the availability of a wipe test fixture for its Victoreen® Advanced Survey Meter ASM 990 Series. The wipe test fixture enables the ASM 990 to detect removable radioactive contamination (wipe testing).

"The ASM 990 Series Wipe Test Fixture … not only conducts surveys, manages survey data and interfaces with software, but now also functions as an efficient wipe test counter," said Jim Prout, sales manager for the radiation safety product line.

He added that the product can also more accurately measure Tc-99m than a Geiger-Mueller pancake probe and can be calibrated to various other isotopes, expanding its role as a wipe test counter.

RSNA News 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.

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The following publishers are pleased to offer discounts of at least 10 percent to RSNA members on the purchase of popular medical books and products. Specific discounts and direction on obtaining the discount are indicated in the Publisher Partners section of *RSNA.org*

The product descriptions have been submitted by the publishers.

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Stephen J. Pomeranz, MD, edited by Richard J. Rolfes, MD

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A three-volume, anatomic reference detailing not only commonly referenced structures throughout the body, but also spaces, areas between joints and less frequently imaged anatomic locations.

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Details not only commonly referenced structures in the brain and spine, but also the larynx, neck spaces, and cranial nerves. 229 pp.

Vol. II – Total Body Atlas Ortho
Details not only commonly referenced structures in the musculoskeletal axis, but also areas between the joints in the extremities. 326 pp.

Vol. III – Total Body Atlas Body
Details not only commonly referenced structures in the chest, abdomen and pelvis, but also the brachial plexus, uterus and testes. 213 pp.

RSNA Member Prices	
Volumes I, II, III Text Set	**$630.00**
Individual Text Volumes	**$225.00**
CD-ROM 3-Volume Set	**$450.00**
Individual CD-ROM Volumes	**$162.00**

BOOK

Gamuts & Pearls Ortho MRI
Stephen J. Pomeranz, MD

The third edition of Stephen Pomeranz's *Gamuts* text Ortho volume, completed with contributions from Timothy Jenkins, Judge King, Mark Paluszny and Eric Shields, considerably expands on the orthopedic portion of the second edition and includes many more lists and diagrams, as well as a complete index. Subdivided into shoulder, elbow, hand & wrist, hip & thigh, knee, foot & ankle, musculoskeletal system and protocols & predicaments chapters, there is a wealth of information here for the busy imager at an extremely affordable price. You'll want this volume readily at hand on your reference shelf! 396 pp.

RSNA Member Price **$85.50**

BOOK

Gamuts & Pearls Neuro MRI
Stephen J. Pomeranz, MD and Peter J. Smith

The third edition of Stephen Pomeranz's *Gamuts* text Neuro volume was undertaken with Peter Smith. Several lists, diagrams and a full index are just a few highlights to this new addition. Subdivided into brain, spine, head & neck and protocols & predicaments chapters, there is a wealth of information here for the busy imager at an extremely affordable price. You'll want this volume readily at hand on your reference shelf! 396 pp.

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BOOK

The Pocket Arrhythmia Consultant
Theodore Chow, MD

New! *The Pocket Arrhythmia Consultant* provides an overview of the management of cardiac arrhythmias. This 192-page book is designed to be a resource for internists, general cardiologists and students. Written by a clinical electrophysiologist, this book provides more detailed coverage of arrhythmia topics than found in internal medicine texts, but focuses more directly on the practical aspects of patient management than comprehensive electrophysiology textbooks. Therefore, this book fills a void between the two extremes, which should be useful for the non-cardiac arrhythmia specialist who cares for patients with arrhythmias. 192 pp.

RSNA Member Price **$36.00**

BOOK

Teleradiology Step by Step
John P. Mulloy, MD

This inclusive text written by John P Mulloy and edited by Stephen J Pomeranz with contributions by John Carrino, does what many thought undoable—encapsulates the history, development and current state of the art of teleradiology. A wealth of diagrams, tables and figures enhance the author's easy-to-read style and allow you insight into this confusing and often excessively complex subject. Included are a full index, a list of those bizarre acronyms and even current ACR standards and legal and financial issues. 278 pp.

RSNA Member Price **$67.50**

BOOK

Pitfalls and Variations
Stephen J. Pomeranz, MD

A best-seller! The majority of the material for this text was carefully selected from more that 5,000 teaching file cases and from everyday practice (including a large number of referrals). The cases are arranged primarily on an anatomic basis by location. Diagrams and summaries are included with certain cases to emphasize key points. 595pp.

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Richard J. Rolfes, MD, Stephen J. Pomeranz, MD, and Tae W. Kim, MD

Experts Richard J. Rolfes, MD, Stephen J. Pomeranz, MD and Tae W. Kim, MD, have collaborated on selecting hundreds of case-appropriate captioned images. This comprehensive reference is a clinically valuable text for any clinician who works with advanced foot and ankle imaging as a diagnostic tool or academic resource. This 200+page text is broken down into chapters on ligaments, tendons, fractures, arthropathy, coalitions, osteochondral defects, osteonecrosis, impingement, tarsal tunnel and neural entrapment, achilles, masses, infections, plantar fasciitis and parts & accessories. Fully indexed for ease of use, the hard cover volume is built to assist readily in daily practice and study of this complex and often difficult area. 200+ pp.

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BOOK

Bone Dysplasias An Atlas of Genetic Disorders of Skeletal Development Second Edition

Jurgen W. Spranger, Paula W. Brill and Andrew K. Poznanski

Many advances have been made in understanding skeletal dysplasias since the first edition of this classic text appeared in 1974. The second edition has been completely renovated, with the help of two new coauthors, to incorporate these advances. The book's format is similar to the original but the number of conditions covered has almost doubled and molecular information has been added wherever available. The number of figures has been increased to the limit of economic wisdom. As in the first edition, the illustrations have been selected and sequenced to illustrate both the degree of variability of a given disorder and its changs with age.

This book is designed for physicians involved in the evaluation and treatment of patients with skeletal dysplasias, including radiologists. Its main goal is to assist in the diagnosis of specific conditions and the care of affected individuals. Though mutations of specific genes can produce dysplasias with very different phenotypes and prognoses, the primarily clinical aim of this book dictated a phenotypic classification in general, with compromises on etiologic grounds where necessary. Hardback, 632 pp., 2002

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BOOK

Review of Nuclear Medicine Technology

Ann M. Steves, MS, CNMT, FSNMTS and Patricia C. Wells, MAE, CNMT

The *Review of Nuclear Medicine Technology* and its companion book, *Preparation for Examinations in Nuclear Medicine Technology,* have been helping nuclear medicine technology students prepare for national certification examinations for 12 years. Now these two books have been newly updated and combined into one invaluable reference.

A detailed overview of nuclear medicine technology—updated and expanded to cover patient care, instrumentation, nuclear oncology, electrocardiography, interventional drugs and new therapeutic agents—is complemented by hundreds of self-evaluation questions and answers mirroring the structure of national certification examinations. A proven performance booster! Softcover, 252 pp., 2004

RSNA Member Price **$62.10**

BOOK

Clinical Practice of Molecular Radiotherapy

Published in January 2005, the *Clinical Practice of Molecular Radiotherapy* supplement offers a collection of reviews on targeted radionuclide therapy, providing a snapshot of the current status of modern clinical applications of therapeutic nuclear medicine. Earn CME, VOICE, and CPE credit(s) by reading and taking the exams for selected articles. CE credit exams are available online at *www.snm.org/ce_online.*

The supplement, edited by Steven M. Larson, M.D., and Eric P. Krenning, M.D., Ph.D., includes:

- A fundamental summary of suggested patterns of practice for common radionuclide therapies.
- A forecast of near-term opportunities likely to determine practice in the next few years. Softcover, 206 pp., 2005

RSNA Member Price **$48.60**

BOOK

Nuclear Cardiac Imaging: Terminology and Technical Aspects

Elpida S. Crawford, MS, CNMT and Syed Sajid Husain, MD, MS, MAS

This newly released book is an educational resource for those learning nuclear cardiology or a reference tool for clinicians who have already incorporated nuclear cardiology into their practices. This authoritative book is a must-have technical resource that focuses on the basic principles and technical aspects of all nuclear cardiac imaging studies, including normal and abnormal scan patterns. Softcover, 130 pp., 2003

RSNA Member Price **$72.00**

BOOK

PET/CT: Imaging Function and Structure

Published in January 2004, this state-of-the-science overview of the new field of positron emission tomography fused with computed tomography (PET/CT) features current information from the experts. Earn up to 10 category 1 CME credit hours by reading and taking the test for each article at *www.snm.org/education/ce_online.html.* Softcover, 103 pp., 2004

RSNA Member Price **$45.00**

BOOK

A Clinician's Guide to Nuclear Medicine

Andrew Taylor, MD, David M. Schuster, MD, and Naomi Alazraki, MD

This book builds on and expands the basic concepts found in *Fundamentals of Nuclear Medicine.* This introduction to the diagnostic and therapeutic uses of nuclear medicine procedures is a must have for clinicians, residents, interns, medical students and referring physicians. It reviews nuclear medicine procedures, available alternatives, advantages and limitations of each, and provides patient information to aid in preparing patients. Softcover, 410 pp., 2000

RSNA Member Price **$40.50**

BOOK

A Tabulated Summary of the FDG PET Literature

Sanjiv S. Gambhir, MD, PhD, Johannes Czernin, MD, Judy Schwimmer, MBA, MA, Daniel H.S. Silverman, MD, PhD, R. Edward Coleman, MD, and Michael E. Phelps, PhD

This supplement to *The Journal of Nuclear Medicine* provides a comprehensive literature review of the use of FDG PET in oncology, cardiology, and neurology. This supplement has proven useful for health care providers, administrators, and health economists who wish to better understand the role of FDG PET in the medical management of patients. Softcover, 93 pp., 2001

RSNA Member Price **$13.50**

BOOK

Self-Study Program III: Nuclear Medicine Cardiology

Series Editor: Elias H. Botvinick, MD

Whether you're a nuclear medicine resident preparing for your board exams or a veteran clinician, the *Nuclear Medicine Self-Study Program Series in Nuclear Medicine Cardiology* will meet your self-assessment needs. Each book includes an extensive list of annotated references, questions and answers with critiques, along with an authoritative syllabus review of the topic.

Topic 1: Physical and Technical Aspects of Nuclear Cardiology
Softcover, 95 pp., 1997
RSNA Member Price **$31.50**

Topic 2: Pharmacologic Stress
Softcover, 195 pp., 1998
RSNA Member Price **$56.70**

Topic 3: Cardiac PET Imaging and Topic 4: Radionuclide Assessment of Congenital Heart Disease
Softcover, 127 pp., 1998
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Topic 5: Myocardial Perfusion Scintigraphy—Technical Aspects
Softcover, 218 pp., 2001
RSNA Member Price **$107.10**

Topic 6: Myocardial Perfusion Scintigraphy—Clinical Aspects
Softcover, 396 pp., 2001
RSNA Member Price **$163.80**

BOOK

Self-Study Program IV: Oncology

Series Editor: Thomas P. Haynie, MD

This new anthological volume demonstrates the interplay of nuclear medicine with oncology and the pro-

gression of the field in the last eight years. Each topic is presented in a consistent format: educational material, annotated reference list, multiple-choice test and answers—with explanations—to the test questions. Qualifies for Category 1 continuing education credit. Softcover, 416 pp., 2004

RSNA Member Price **$56.70**

BOOK

Guide for Diagnostic Nuclear Medicine and Radiopharmaceutical Therapy

Jeffry Siegel, PhD

Combination reference manual for nuclear medicine professional who want to bring their departments and institutions into compliance with the recently revised requirements of 10 CFR Part 35. This guide surveys the Nuclear Regulatory Commission (NRC) regulations and radiation protection policies applicable to diagnostic and therapy nuclear medicine and includes interpretations and specific, step-by-step measures that practitioners may use to facilitate implementation and ongoing compliance. Softcover, 110 pp., 2004

RSNA Member Price **$49.50**

CD-ROM

Basic Science Module

The *Basic Science Module* CD-ROM offers 22 hours of education toward the requirement mandated by the Nuclear Regulatory Commission for program requirements for residency education in nuclear medicine. This training module covers the basic science associated with the field of nuclear medicine including radiation science, radiation detection and instrumentation, the operation of the gamma camera, emission tomography, radiochemistry and radiopharmacy, radiation biology and radiation safety.

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JOURNAL

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BOOK & CD-ROM

Intensity-Modulated Radiation Therapy: The State of the Art

Jatinder Palta and T. Rockwell Mackie, eds.

Presents a snapshot of the current IMRT planning and delivery technology. Discusses issues that confront safe implementation of IMRT and encourages reflection on its future. A "handbook" that will aid both experienced radiation oncology physicists and newcomers to the field.

RSNA Member Price **$80.00**

BOOK

The Expanding Role of Medical Physics in Diagnostic Imaging

G. Donald Frey and Perry Sprawls, eds.

Provides a broad-based review of the status of radiographic and fluoroscopic imaging and emphasizes the expanding functions that medical physicists are providing in the transition from the traditional imaging environment to the fully digital imaging environment. 583 pp.

RSNA Member Price **$60.00**

BOOK

Practical Digital Imaging and PACS

Anthony Seibert, Larry Filipow and Katherine Andriole, eds.

Emphasizes the new advances in imaging technology, covering all of the inherently digital imaging modalities such as computed radiography, CT, MRI, ultrasound and nuclear medicine. 577 pp.

RSNA Member Price **$50.00**

BOOK

General Practice of Radiation Oncology Physics in the 21st Century

Almon Shiu and David Mellenberg, eds.

Includes specifications, performance expectations, quality-assurance testing, works-in-progress/ futures and general philosophies and is designed to enable readers to begin the implementation of these technologies at their facilities. 368 pp.

RSNA Member Price **$60.00**

BOOK

Accreditation Programs and the Medical Physicist

Robert Dixon, Priscilla Butler and Wlad Sobol, eds.

Provides a broad overview of the accreditation programs currently available, as well as some programs in development. Illustrates the physical principles related to an image and what is required to provide acceptable images. 364 pp.

RSNA Member Price **$65.00**

BOOK

Intravascular Brachytherapy / Fluoroscopically Guided Interventions

Stephen Butler, Rosanna Chan, Thomas Shope, eds.

Explores the techniques involved in the use of fluoroscopic guidance in minimally invasive therapeutic procedures, using intravascular brachytherapy as an example of such a procedure. 930 pp.

RSNA Member Price **$95.00**

BOOK

Biological & Physical Basis of IMRT & Tomotherapy

Bhudatt Paliwal, et. al., eds.

Presents the current status of the biological, physical/technical and clinical aspects of volume effects on time, dose and fractionation schemes for radiation treatment of cancer patients and the several parametric models (Both explanatory and predictive) of the effects thereof, with regard to optimization of treatment planning. 390 pp.

RSNA Member Price **$80.00**

BOOK

Recent Developments in Accurate Radiation Dosimetry

Jan Seuntjens and Paul Mobit, eds.

The dramatic advances in absorbed-dose-to-water standards and in Monte Carlo ion chamber response calculations that have been made in the last 10 years and their application in accurate radiation dosimetry are summarized. 365 pp.

RSNA Member Price **$70.00**

BOOK

Clinical Ultrasound Physics: Workbook for Physicists, Residents, and Students

James Kofler Jr., et. al.

An instructor's manual to assist physicists in teaching ultrasound physics concepts to non-physics personnel (residents, sonographers, graduate students, etc.) 85 pp.

RSNA Member Price **$40.00**

BOOK

Nuclear Medicine Instrumentation Laboratory Exercises for Radiology Residency Training

R.J. Van Tuinen, et. al.

These exercises provide residents with insight into each instrument, its capabilities and limitations and the value of quality control testing. 88 pp.

RSNA Member Price **$30.00**

BOOK

Workbook on Dosimetry and Treatment Planning for Radiation Oncology Residents

R.K. Wu, et. al.

Provides a guide for second and third-year residents in radiation oncology for their one-month physics and dosimetry training. 32 pp.

RSNA Member Price **$6.00**

BOOK

Specifications, Performance Evaluation and Quality Assurance of Radiographic and Fluoroscopic Systems in the Digital Era

Lee Goldman and Michael Yester, eds

Reviews the state-of-the-art of radiographic and fluoroscopic systems, the principles of image quality analysis, the technology and digital receptors, and techniques available to evaluate and maintain the clinical performance of these systems. 300 pp.

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BOOK

PACS and Image Informatics: Basic Principles and Applications

H. K. Huang

This second edition addresses the latest in picture archiving and communication systems (PACS), from the electronic patient record to the full range of topics in digital imaging. In contrast to the previous edition, this updated text uses the framework of image informatics, not physics or engineering principles, to explain PACS. This book is the only resource that thoroughly covers the critical issues of hardware/software design and implementation in a systematic and easily comprehensible manner. Hardcover, 649 pp., 2004

RSNA Member Price **$116.10**

BOOK

Reeder and Felson's Gamuts in Radiology: Comprehensive Lists of Roentgen Differential Diagnosis

Maurice Reeder

Since 1975, radiologists the world over have used *Reeder and Felson's Gamuts in Radiology* to ensure that every diagnostic possibility is considered. For the Fourth Edition, Dr. Maurice M. Reeder has assembled an all-new board of section editors who have completely revised and updated their respective sections. These editors are among the world's authorities

Continued on next page

Continued from previous page

in their respective specialties, and they have given this classic the most complete revamping it has ever had. New features in the fourth edition include: Over 250 new gamuts in the areas of ultrasound, magnetic resonance body imaging, and head and neck imaging; More than 80 percent of the previously existing gamuts have been updated, and an entire new section on obstetrical ultrasound has been added. Hardcover, 998 pp., 2003

RSNA Member Price **$116.10**

BOOK

PET: Molecular Imaging and Its Biological Applications

Michael E. Phelps

This book is a comprehensive guide to PET and PET CT and serves as a valuable resource for practicing physicians and residents. The text covers topics ranging from the basic principles of physics, molecular assays, preparation of molecular imaging probes, and biochemistry relevant for PET. Hardcover, 621 pp., 2004

RSNA Member Price **$152.10**

BOOK & CD-ROM

Atlas of Ultrasound in Obstetrics and Gynecology.

Peter M. Doubilet

This four-color atlas, with accompanying CD-ROM, depicts key elements of sonography, including its dynamic real-time aspect. Intended to complement existing textbooks in the field, the atlas serves as a tutorial for the use of ultrasound in both normal and abnormal OB/GYN imaging. The CD-ROM offers realtime video, interventional procedures, a complete review of OB/GYN, and more. The book can be used as a clinical reference, while users can go to the CD-ROM to see how procedures are performed and how scans appear in actual, day-to-day practice. Hardcover, 352 pp., 2003

RSNA Member Price **$144.00**

BOOK

Aunt Minnie's Atlas and Imaging Specific-Diagnosis

Thomas L. Pope

Atlas is an excellent study tool for the oral radiology board examination. It features over 600 images and over 250 cases representing "Aunt Minnies"—diseases with unique radiographic features that allow a confident, immediate diagnosis. Each case is presented in an easy-to-follow format and includes crucial take-away points called "Aunt Minnie's Pearls." The cases represent all modalities and cover the ten subspecialties tested on the oral boards—pediatrics, musculoskeletal system, interventional radiology, ultrasound, nuclear medicine, neuroradiology, cardiopulmonary imaging, mammography, gastrointestinal radiology, and genitourinary radiology. This edition includes new cases in each area. Hardcover, 464 pp., 2003

RSNA Member Price **$89.10**

BOOK

MRI of the Shoulder

Michael B. Zlatkin

Now in its Second Edition, this resident-friendly reference explains the basics of MRI...then walks readers easily through the radiologic evaluation of shoulder disorders, particularly rotator cuff disease and shoulder instability. Written in an inviting, easy-to-follow style and illustrated with more than 600 scans, this long-awaited new edition will be a favorite practical reference for residents, practicing radiologists, and orthopaedic surgeons. The book features contributions from expert radiologists and orthopaedic surgeons. Chapters review MRI techniques and shoulder anatomy, describe and illustrate MRI findings for a wide variety of conditions, and explain how abnormalities seen on MR images relate to pathophysiology and clinical signs. Hardcover, 306 pp., 2003

RSNA Member Price **$134.10**

BOOK

Physics and Radiobiology of Nuclear Medicine

Gopal B. Saha

Supplemented with tables and illustrations throughout the book, each chapter provides the reader with well-delineated descriptions of the different aspects of physics and radiation biology related to nuclear medicine. The last edition was successful and highly acclaimed, as Dr. Saha made many complex concepts readily understandable for residents, students and practitioners in nuclear medicine. The book serves as an excellent text for nuclear medicine residents and technology students to prepare for their Board and Registry examinations. Hardcover, 253 pp., 2001

RSNA Member Price **$62.95**

BOOK

Imaging of the Head and Neck

Mahmod F. Mafee

The key features of this book are: organization according to anatomic regions; extensive illustrations to help the reader distinguish between normal and pathologic findings; imaging findings correlated to sections from cadavers; an extended chapter on MRI and MRA techniques in the temporal bone; a new chapter on the orbit and globe; new material on the anatomy and pathology of the paranasal sinuses for functional endoscopic surgery; and state-of-the-art approaches to neck pathology. It is an excellent reference book for both experienced practitioners and residents. Hardcover, 700 pp., *due 11/04

RSNA Member Price **$224.95**

BOOK

Diagnostic Medical Sonography: Obstetrics and Gynecology

Mimi C. Berman

The goal of this book is to provide a comprehensive discussion of each topic including anatomy, pathophysiology, sonographic theory, and sonographic technique along with representative ultrasonographic images. This text is intended to serve as both an introduction to obstetrical/gynecologic ultrasound and as a long-term on-your-shelf reference. Hardcover, 701 pp., 1997

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BOOK

Magnetic Resonance Imaging of the Brain and Spine. 2 Volume Set

Scott W. Atlas

Now in a new, Third Edition, the still unparalleled *Magnetic Resonance Imaging of the Brain and Spine* delivers cutting-edge information on nearly every aspect of clinical neuroradiology. Leading neuroimagers, innovative MRI physicists, and veteran clinical neurospecialists show how to generate state-of-the-art images and delineate crucial clinical/pathologic MR imaging correlations. This edition features brand-new chapters on diffusion MRI, perfusion MRI, task activation functional MRI, epilepsy, and psychiatric disorders and major revisions to existing chapters. Updated images ensure the clearest state-of-the-art views. Differential diagnosis tables have been reformatted for greater clarity. The book has been divided into two manageable volumes for easier use. Hardcover 2040 pp., 2002

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By Maurice M. Reeder, M.D., with MRI Gamuts by William G. Bradley Jr. and Ultrasound Gamuts by Christopher R. Merritt

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- Over 4,000 new images have been added. *Gamuts* 4.0 now totals over 5,000 teaching images, making it the ultimate teaching resource for radiologist and resident training, and board review.
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CD-ROM

Essentials of Radiology

By Judith Korek Amorosa, M.D.

The *Essentials of Radiology* is designed to teach the basics of current radiology practice. It is useful for medical students (starting at any level), residents of all specialties, clinical colleagues, physician assistants, nurse practitioners, nurses, technologists, hospital administrators, managed care administrators, lawyers and lay support groups. This CD-ROM contains over 330 interactive cases using the well-established teaching methods of Dr. Lucy Squire. In all, there are over 900 questions included in the course and over 2,300 images (including x-ray, CT, HRCT, MRI, nuclear imaging, static ultrasound, real-time ultrasound and real-time fluoroscopy). This is truly a comprehensive overview of the essentials of radiology and represents over 50 hours of radiology instruction for the beginning student.

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Journal Highlights

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

Perfusion Imaging of the Liver: Current Challenges and Future Goals

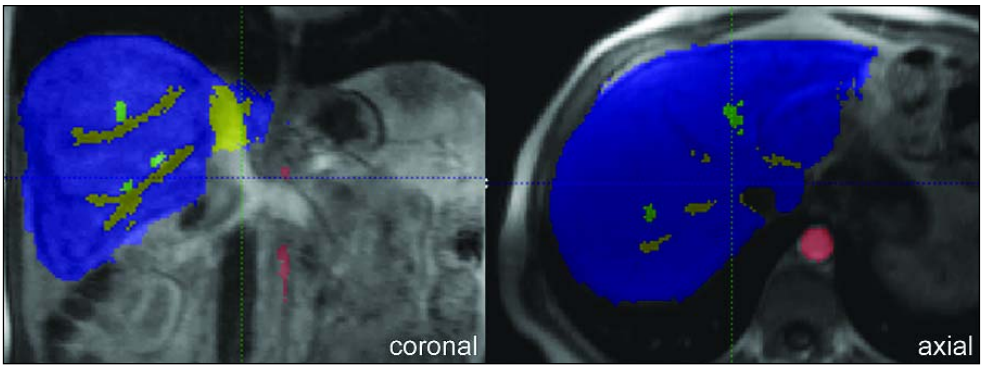
IMPROVED THERAPEUTIC options for hepatocellular carcinoma and metastatic disease are placing greater demands on diagnostic and surveillance tests for liver disease.

Existing diagnostic imaging techniques provide limited evaluation of tissue characteristics beyond morphology; however liver perfusion imaging has the potential to improve this shortcoming.

Radiology

In a review article in the March issue of *Radiology (rsna.org/radiologyjnl)*, Pari V. Pandharipande, M.D., from New York University Medical Center, and colleagues review the physiologic and structural basis for perfusion imaging of the liver as well as discuss the goals, techniques and future challenges.

The article also includes "Essentials" or highlighted points to help busy readers recognize important information at a glance.



Sample color segmentation demonstrated with representative coronal and transverse images from dynamic three-dimensional gradient-echo whole-liver perfusion MR imaging studies in a 39-year-old man without cirrhosis (transverse and coronal imaging studies were performed independently). Semiautomated segmentation algorithms enable efficient color-based discrimination of aorta (red), portal vein and its branches (green), liver parenchyma (blue), and hepatic veins and inferior vena cava (dark yellow). Region-of-interest analyses of aortic, portal venous, and liver parenchymal enhancement on the basis of semiautomated segmentation algorithms subsequently can be used for compartmental modeling.

(*Radiology* 2005;234:661-673) © 2005 RSNA. All rights reserved. Printed with permission.

Imaging Evaluation of Pulmonary and Abdominal Complications following Hematopoietic Stem Cell Transplantation

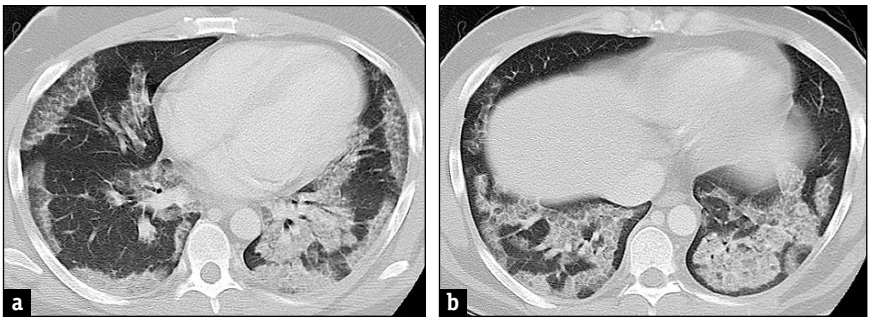
PATIENTS WHO UNDERGO the potentially life-saving therapy of hematopoietic stem cell transplantation are at risk for infectious and immune-mediated complications. Timely, accurate diagnosis is essential because these complications ultimately determine the success or failure of the transplantation, and radiology serves as the cornerstone for diagnostic evaluation.

RadioGraphics

In a review article in the March-April issue of *RadioGraphics (rsna.org/radiographics)*, David L. Coy, M.D., Ph.D., from the University of Washington in Seattle, and colleagues review the imaging characteristics, risk factors and usual time course of common pulmonary and abdominal complications of hematopoietic stem cell transplantation.

Discussion includes:

- Differences between conventional myeloablative and nonmyeloablative hematopoietic stem cell transplantation.
- Typical radiologic manifestations of specific pulmonary and abdominal complications of stem cell transplantation.
- Time course and risk factors for specific posttransplantation complications.



Secondary alveolar proteinosis following stem cell transplantation. CT scans obtained at different levels show geographically distributed ground-glass attenuation and interlobular septal thickening.

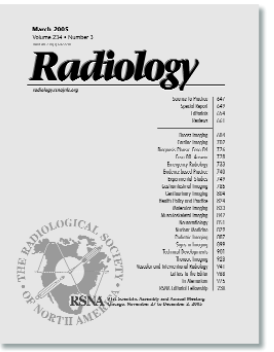
(*RadioGraphics* 2005;25:305-318) © 2005 RSNA. All rights reserved. Printed with permission.

This article meets the criteria for 1.0 category 1 CME credit.

Radiology in Public Focus

A press release has been sent to the medical news media that combines information from the following articles appearing in the March issue of *Radiology (rsna.org/radiologyjnl):*

Early-Stage Hepatocellular Carcinoma in Patients with Cirrhosis: Long-term Results of Percutaneous Image-guided Radiofrequency Ablation



RADIOFREQUENCY (RF) ablation is an effective first-line treatment for cirrhotic patients with early-stage hepatocellular carcinoma (HCC) who were excluded from surgery.

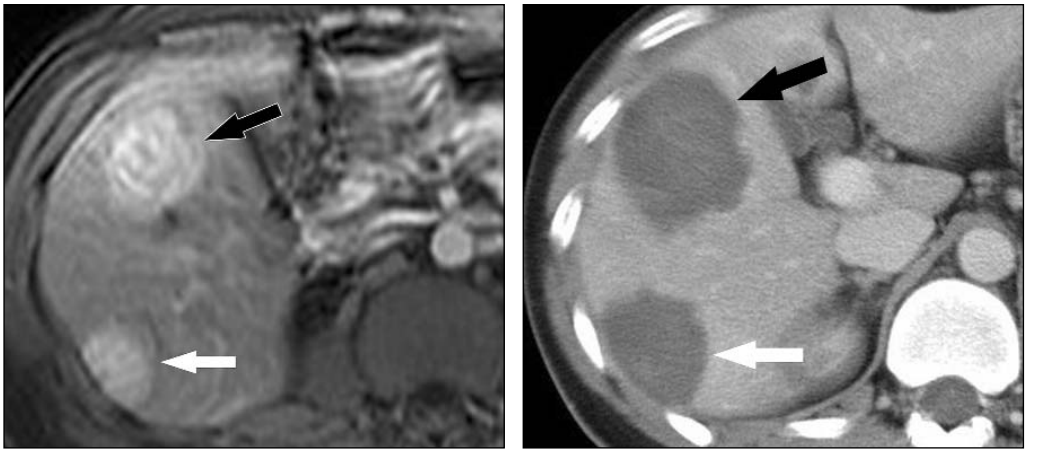
Riccardo Lencioni, M.D., and colleagues from the University of Pisa, Via Roma in Italy performed RF ablation on 187 patients who had Child class A or B cirrhosis with HCC.

One year following treatment, 97 percent of the patients were alive. At year three, 71 percent were alive and at year five, 48 percent of patients were alive.

The researchers write: "Findings from our study indicate that RF ablation can be currently considered as the first-line treatment of choice for patients with early-stage HCC who were excluded from surgery. Ethanol injection and segmental transarterial chemoembolization, however, may still have a valuable role for those patients who are not suitable candidates for RF ablation because of an unfavorable tumor location. Appropriate use of each treatment technique can be accomplished only when the therapeutic strategy is decided by a multidisciplinary team and is tailored to the individual patient and to the features of the disease." (*Radiology* 2005;234:961-967)

Radiofrequency Ablation of Hepatocellular Carcinoma: Treatment Success as Defined by Explant Pathology

IN A SECOND STUDY featured in the press release, David S.K. Lu, M.D., and colleagues from the University of California, Los Angeles School of Medicine retrospectively evaluated the effectiveness of RF ablation of HCC using pathologic examination of the explanted liver.



Images of a 33-year-old man with chronic hepatitis B.
(a) Contrast-enhanced transverse spoiled gradient-recalled-echo MR image obtained before ablation shows two hypervascular lesions in segments V (black arrow) and VI (white arrow). (b) Contrast-enhanced transverse CT image obtained 3 weeks after ablation shows hypoattenuating, nonenhancing coagulation defects at the treatment sites (arrows) with no abnormal nodular enhancement suggesting residual tumor.

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Forty-seven HCC nodules in 24 patients were treated with RF ablation in single or double sessions prior to liver transplantation.

Based on histology, 35 of the 47 (74 percent) ablated tumors were found to be successfully treated after a mean ablation-transplantation interval of 7.5 months. These included 29 of 35 (83 percent) tumors less than three centimeters. (*Radiology* 2005;234:954-960)

RSNA press releases are available at *www.rsna.org/media.*

Working For You

Top Stories in *RSNA News* as Viewed on *RSNA.org*

RSNA News is available online two weeks prior to the mailing of the print version. A review of the stories accessed online in 2004 shows the following 10 as being the most popular:

ARTICLE TITLE	ISSUE	PAGE VIEWS IN 2004*
iPod Helps Radiologists Manage Medical Images	December 2004	40,936
Scientific Program Reflects RSNA 2004's Role as a Global Forum	October 2004	6,422
Salaries Rise for Radiologists in 2002	October 2003	6,085
Radiologist Assistants will Share the Workload in Diagnostic Imaging	February 2004	5,994
Radiologist Shortage Easing, Physician Shortage Growing	April 2004	5,469
Diagnostic Radiology Earns Highest Four-Year Pay Increase	October 2004	4,517
Medical-Legal Jury Trial at RSNA 2004	September 2004	3,997
RSNA 2004 to Feature Focus Session on Medical Simulators	October 2004	3,911
Interventional Radiology Carries Occupational Risk for Cataracts	June 2004	3,738
RSNA Eases Way for MOC Requirements	May 2004	3,568

* The number of page views is for the 2004 calendar year only.

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UNDER THE leadership of Director Kolleen Klein, the Membership & Subscriptions department comprises nine people. They handle all customer service inquiries from members, potential members, radiology program directors and radiology program coordinators. Inquiries range from membership status and dues payments, to journal subscriptions and online member services. The Membership & Subscriptions Department reports to RSNA Assistant Executive Director Mark Watson, C.P.A.

(seated from left) **Laurie May, Director Kolleen Klein and Hilary Gentile.** *(standing from left)* **Carolyn Gibson, Glenn Domingo, Rajshree Dave, Marta Osadzinski and Barbara Hanson.** *(not pictured)* **Helen Chantos.**

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 Subscription Department at (877) RSNA-MEM [776-2636] (U.S. and Canada), (630) 571-7873 or *membership@rsna.org*.

Program and Grant Announcements

RSNA Award Deadlines Approach

THE DEADLINE IS April 15, 2005, to submit an application for the 2005 **Roentgen Resident/Fellow Research Award.** This award recognizes and encourages residents and fellows who have played an active role in radiologic research in the past year. Participating North American residency programs receive an award plaque with room for each year's nominee. The Foundation provides a personalized, crystal award for the department to present to the selected resident or fellow.

The deadline is June 15, 2005, to submit an application for the 2005 **Outstanding Researcher and Outstanding Educator awards.** These awards recognize and honor senior physicians or scientists who have made a career of significant contributions to the field of radiology or radiologic sciences through research and/or education. The awardees will be announced during the opening session of RSNA 2005.

For more information, including an application, go to *www.rsna.org/research/foundation/application.html.*

NEW!

IGI Supplemental Awards

The Image-Guided Interventions (IGI) Branch of the Cancer Imaging Program (CIP) at the National Cancer Institute (NCI) has teamed up with the NCI Cancer Centers Program and Specialized Programs of Research Excellence (SPOREs) to offer IGI supplemental awards aimed at stimulating translational research in oncologic image-guided interventions at the Cancer Centers and SPOREs. The awards are available to cancer center investigators and SPORE directors, as well as their co-investigators and clinical and basic scientists in other departments.

The deadline is May 1, 2005, to submit a letter of intent. Applications are due June 1, 2005.

For more information, contact: Keyvan Farahani, Ph.D., at *farahani@nih.gov.*

NEW!

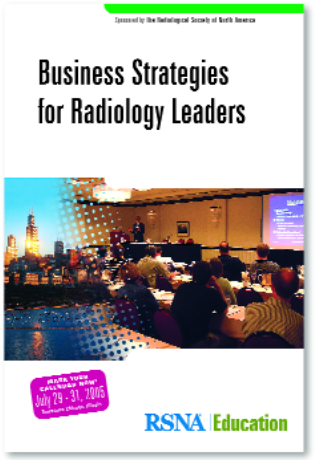
Medical Communications and Health Reporting Conference

The American Medical Association hosts an annual conference to enhance the communications skills of physician spokespersons, medical experts and public relations professionals. This year's conference will be held April 14–16 at the Wyndham Washington, D.C.

For more information, including a full course listing, go to *www.ama-assn.org/go/hrc2005.*

Business Strategies for Radiology Leaders

RSNA is sponsoring this three-day course designed for radiologists in leadership positions in academic and private practice. The course, directed by Lawrence R. Muroff, M.D., is also for radiology business managers. It will be held July 29–31 at the Hotel Inter-Continental in Chicago.



21 CME credits available

Course topics include:

- Strategic Planning
- Radiology Department Budgeting
- Business Infrastructure
- Contracting with Managed Care Entities
- Contracts Between Radiology Groups and Their Group Members and Hospitals
- Turf Battles in Radiology
- Joint Ventures Between Hospitals and Radiology Groups
- Self-Referral in Diagnostic Radiology
- Marketing a Radiology Practice

The course also explores obstacles facing today's radiology practices—financial issues, strategic planning, billing, compliance, contracts and legal matters—any ways to successfully navigate these challenges.

For more information, contact the RSNA Education Center at (800) 381-6660 x 3747 or at *ed-ctr@rsna.org.*

Planning for the Filmless Transition

RSNA and the Society for Computer Applications in Radiology (SCAR) are sponsoring this one-day course that will be held on June 1 at the Orlando World Center Marriott in Florida. Topics include:

- Changing Expectations
- Workflow Analysis
- Assembling the PACS Team
- Practical Guide to Vendor Selection and PACS Purchase
- Design Considerations for the Filmless Imaging Department
- Survival Guide for Teleradiology and PACS Security
- Developing an Enterprise-wide PACS Solution

RSNA Education

For more information, go to *www.scarnet.net/2005RadiologyCourse.html*.

6.5 CME credits available

Methods in Clinical Cancer Research

THIS LIMITED-ATTENDANCE workshop provides the essentials of effective clinical trial design. Sponsored by the American Society of Clinical Oncology and the American Association for Cancer Research, the workshop is designed for clinical fellows and junior faculty clinical researchers in all subspecialties including radiology and radiation and surgical oncology. The workshop will be held July 30–August 5 at the Vail Marriott Mountain Resort in Vail, Colorado.

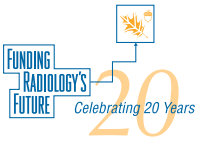
For more information, go to *www.aacr.org/4300m.asp*.

RSNA MEMBER BENEFITS

RSNA Counselors Meet at RSNA 2004

RSNA Counselors are appointed annually by the Board of Directors to help promote and interpret membership. They review new member applications, coordinate the preparation of obituaries to be printed in *Radiology,* and also provide input from the membership concerning the Society's educational programs.

(seated, from left) **Teresita L. Angtuaco, M.D., Deborah A. Baumgarten, M.D., M.P.H., RSNA President David H. Hussey, M.D., Mihra S. Taljanovic, M.D., and Gael J. Lonergan, M.D.** *(standing, from left)* **Carlos Bazan III, M.D., Richard Pershing Moser Jr., M.D., Gerald M. Mulligan, M.D., Mark L. Redick, Ph.D., M.D., John B. Whitaker, M.D., Adolfo Escobar-Prieto, M.D., Joseph A. Ronsivalle, D.O., and Terence T. Chan, M.D. To see a full list of counselors, go to *www.rsna.org/about/whoswho/counselor.html*.**



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For more information on Foundation activities, a quarterly newsletter, *Foundation X-aminer*, is available online at *www.rsna.org/research/foundation/newsletters/x-aminer/x-aminer.pdf.*

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News about RSNA 2005

Submit Abstracts for RSNA 2005

Abstract submission is under way for RSNA 2005. Abstracts are required for scientific papers, scientific posters, education exhibits, *info*RAD exhibits and radiology informatics.

The deadline to submit an abstract for consideration is April 15, 2005.

To submit an abstract, go to *rsna.org/abstracts.*

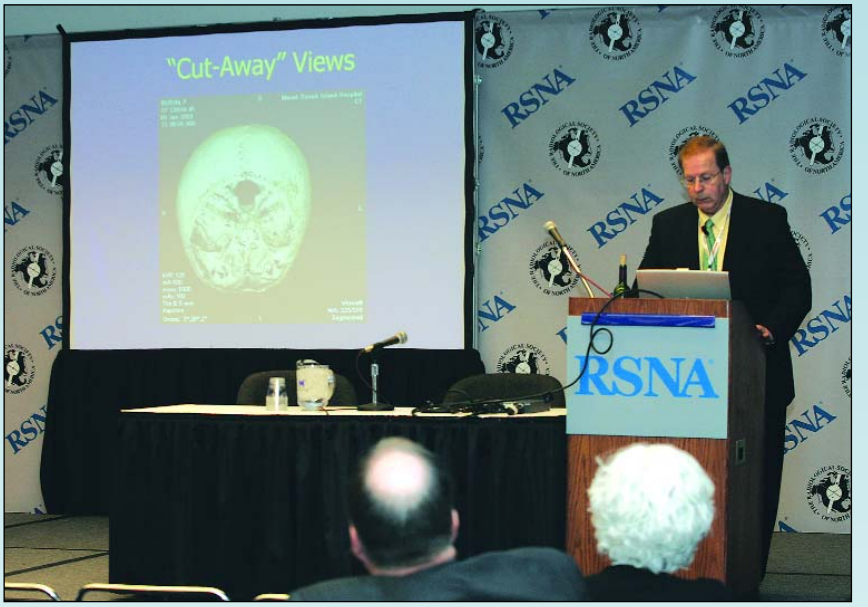
For more information about the abstract submission process, contact RSNA at (877) RSNA-ABS [776-2227] within the United States or (630) 590-7774 outside of the United States.

Important Dates for RSNA 2005

April 15	Deadline for abstract submission
April 25	Registration opens for RSNA and AAPM members
May 23	General registration opens
June 20	Course enrollment opens
Nov. 11	Final advance registration deadline
Nov. 27–Dec. 2	RSNA 91st Scientific Assembly and Annual Meeting

RSNA2005
Connecting for Lifelong Learning

91st Scientific Assembly and Annual Meeting
November 27 – December 2, 2005
McCormick Place, Chicago



Media Coverage of RSNA 2004

MORE THAN one billion people worldwide had access to print, broadcast and Internet news reports about studies presented at RSNA 2004.

More than 180 reporters attended the meeting or participated in Webcasts, resulting in more than 2,500 stories on topics including fMRI for lie detection, CT screening for lung cancer, stem-cell treatment of incontinence and CT examination of the remains of St. Croix settlers.

Some of the major coverage was by *The New York Times, USA Today, Wall Street Journal,* NBC Nightly News, CNN, Voice of America, National Public Radio and ABC Radio Network.

RSNA 2005 Exhibitor News

Advertising at RSNA 2005

MANY OPPORTUNITIES exist for companies to promote their exhibit at RSNA 2005—the world's largest annual medical meeting. For more information, go to *www.rsna.org/advertising/index.html* or contact:

- **Jim Drew**
  Director of Advertising
  (630) 571-7819
  jdrew@rsna.org
- **Judy Kapicak**
  Senior Advertising Manager
  (630) 571-7818
  jkapicak@rsna.org

Exhibitor Prospectus

The RSNA 2005 Exhibitor Prospectus will be mailed at the end of this month. To achieve the maximum available space and assignment points, your completed application must be received at RSNA Headquarters by April 11, 2005. The first-round space assignment deadline is May 5.

Exhibitor Planning Meeting

Representatives from 50 companies exhibiting at RSNA 2004 attended the RSNA 2005 Exhibitor Planning Meeting last month near O'Hare International Airport. The meeting included a statistical summary of the 2004 technical exhibition, an analysis of the technical exhibition by an outside consulting firm, and new features and plans for 2005.

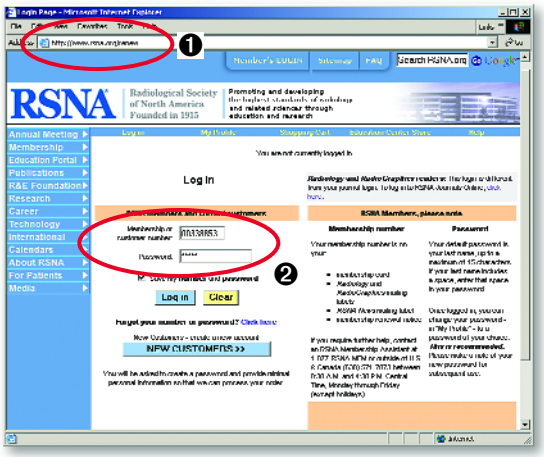
Important Exhibitor Dates for RSNA 2005

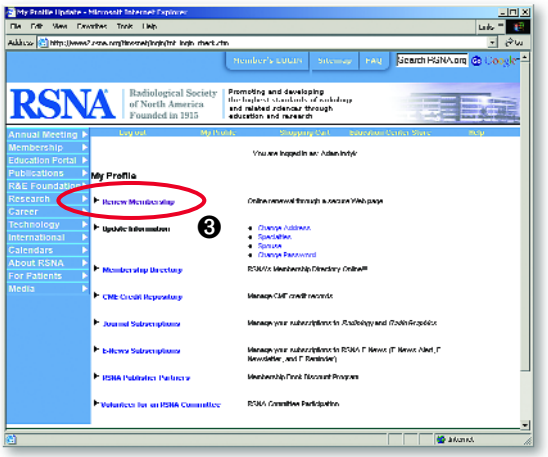
March 30	Exhibitor Prospectus mails
May 5	First-round space assignment deadline
June 28	Exhibitor Planning/Booth Assignment Meeting
July 5	Technical Exhibitor Service Kit available online
Nov. 27–Dec. 2	RSNA 91st Scientific Assembly and Annual Meeting

RSNA2005
Connecting for Lifelong Learning

■ For more information, contact RSNA Technical Exhibits at (800) 381-6660 x7851 or e-mail: *exhibits@rsna.org.*

RSNA.org





Renew Your Membership Online

RSNA MEMBERS who haven't already paid their 2005 dues can do so quickly and easily online through a secure server.

Go to *www.rsna.org/renew.* ❶

Log in with your member number (found on your *RSNA News* address label) and password ❷ and then click on Renew Membership. ❸

For more information or to renew by phone, contact the RSNA Membership & Subscriptions Department toll free at (877) RSNA-MEM or at (630) 571-7873, or send an e-mail to *membership@rsna.org.*

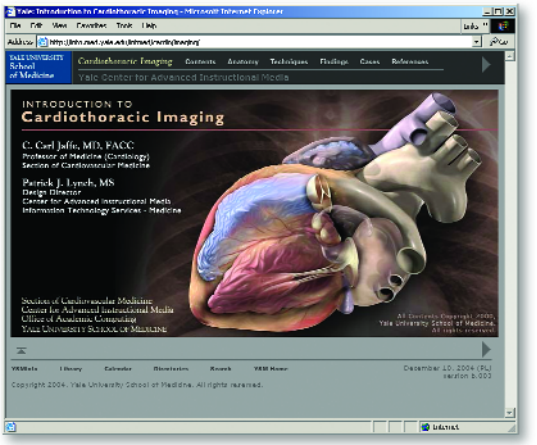
OTHER WEB NEWS:

Teaching Module on Cardiothoracic Imaging

Yale University is offering a comprehensive, self-teaching module on cardiothoracic imaging available via the Web.

The site, at *info.med.yale.edu/intmed/cardio/imaging/*, was developed by a team led by C. Carl Jaffe, M.D., chief of the Diagnostic Imaging Branch of the Cancer Imaging Program at the National Cancer Institute, and award-winning medical illustrator Patrick J. Lynch, M.S.

Users are free to incorporate elements of the site, with permission, for non-commercial educational use.



eConnections Your online links to RSNA

RSNA.org
www.rsna.org

***Radiology* Online**
rsna.org/radiologyjnl

***Radiology* Manuscript Central**
rsna.org/radiologyjnl/submit

***RadioGraphics* Online**
rsna.org/radiographics

RSNA News
rsnanews.org

Education Portal
rsna.org/education

CME Credit Repository
rsna.org/cme

CME Gateway
CMEgateway.org

RSNA Medical Imaging Resource Center
rsna.org/mirc

RSNA Career Connections
rsna.org/careers

RadiologyInfo™
RSNA-ACR patient information Web site
radiologyinfo.org

RSNA Press Releases
rsna.org/media

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CALENDAR

Medical Meetings
April – May 2005

APRIL 7–8
6th National Forum on Biomedical Imaging in Oncology, Bethesda Hyatt Regency Hotel, Bethesda, Md. • *cancer.gov/dctd/forum*

APRIL 9–14
American College of Radiology (ACR), Annual Meeting and Chapter Leader Conference, Hilton Washington, Washington, D.C. • *www.acr.org*

APRIL 14–16
American Medical Association, 25th Annual Medical Communications and Health Reporting Conference, Wyndham Washington, D.C. • *www.ama-assn.org/go/hrc2005*

APRIL 19–22
10th International Conference on Occupational Respiratory Diseases (10th ICORD), Occupational Respiratory Hazards in the 21st Century: Best Practices for Prevention and Control, Beijing, China • *www.ICORD2005.com*

APRIL 21–24
Sociedade Paulista de Radiologia e Diagnóstico por Imagem (SPR), 35th São Paulo Radiology Meeting, ITM Convention Center, São Paulo, Brazil • *www.spr.org.br*

APRIL 28–30
European Society of Gastrointestinal and Abdominal Radiology (ESGAR), 3rd Hands-on Workshop: CT-Colonography, Brugge, Belgium • *www.esgar.org*

MAY 3–7
Society for Pediatric Radiology (SPR), 48th Annual Meeting, Sheraton New Orleans, New Orleans • *meeting.pedrad.org*

MAY 4–7
Association of University Radiologists (AUR), 53rd Annual Meeting, Fairmont Queen Elizabeth Hotel, Montreal, Quebec • *www.aur.org*

MAY 4-7
Deutscher Röntgenkongress 2005, 86th German Radiology Congress, Berlin, Germany • *www.drg.de*

MAY 6–8
Section for Magnetic Resonance Technologists (SMRT), 14th Annual Meeting, Miami Beach Convention Center •*www.ismrm.org/smrt*

MAY 7–13
International Society for Magnetic Resonance in Medicine (ISMRM), 13th Scientific Meeting and Exhibition, Miami Beach Convention Center • *www.ismrm.org*

MAY 11–14
Japanese Society of Angiography & Interventional Radiology, 34th Annual Meeting and 9th International Symposium on Interventional Radiology & New Vascular Imaging, Awaji Yumebutai International Conference Center, Hyogo, Japan • *www.isir-jsair2005.jp*

MAY 15–20
American Roentgen Ray Society (ARRS), 105th Annual Meeting, New Orleans Hilton Riverside Hotel and Towers, New Orleans • *www.arrs.org*

MAY 21-26
American College of Medical Physics, Annual Meeting, Wyndham Orlando Resort, Orlando • *www.acmp.org*

MAY 21–27
American Society of Neuroradiology (ASNR), 43rd Annual Meeting, Metro Toronto Convention Centre, Toronto, Ontario • *www.asnr.org*

MAY 25–28
56th Nordic Radiological Congress, 17th Nordic Congress of Radiographers, 33rd Annual Meeting of Nordic Society of Neuroradiology, Radisson SAS Scandinavia Hotel, Oslo, Norway • *www.congrex.no/radio2005*

MAY 25–28
Society of Breast Imaging (SBI), 7th Postgraduate Course, Vancouver Convention and Exhibition Centre, Vancouver, British Columbia • *www.sbi-online.org*

JULY 29–31
Business Strategies for Radiology Leaders, RSNA, Hotel Inter-Continental in Chicago
• *www.rsna.org/education/offerings/index.html*

NOVEMBER 27–DECEMBER 2
RSNA 2005, 91st Scientific Assembly and Annual Meeting, McCormick Place, Chicago • *rsna2005.rsna.org*

RSNA News

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