CT Artwork Offers Unique Slice of Radiology

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Contrast Debate Promises Stimulating RSNA 2010 Session
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In all, five foreign associates and 65 new members were inducted during the Institute’s 2010 annual meeting.

The first radiologist elected as an IOM foreign associate, Dr. Reiser is a 2009 RSNA Honor Member and serves on the RSNA Public Information Advisors Network.

Dr. Weissleder is a director of the Center for Systems Biology at Massachusetts General Hospital in Boston. Dr. Weissleder received the 2008 RSNA outstanding Researcher Award and is a past-chair of the RSNA Molecule imaging Committee. Dr. Ehman, known for his research into nuclear MR, received the 2006 RSNA outstanding Researcher Award. He chairs the RSNA Research Development Committee and is a member of the RSNA Research & Education Foundation Board of Trustees.
RSNA Joins Effort to Stop Medicare Cuts

RSNA is among 65 national physician organizations to sign on to an effort, led by the American Medical Association, calling on Congress to take immediate action to stop the 30 percent Medicare payment cuts slated for the end of 2010. Signatory organizations of a recent letter to Congress also included medical societies representing 50 states and the District of Columbia. The letter notes the “Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010” stabilized Medicare physician payments only until November 30—the last day of Medicare and TRICARE payments for physician services will be cut by more than 25 percent, with another 6.5 percent cut to follow on January 1, 2011. Policy makers simply cannot absorb cuts of this magnitude in programs as important as Medicare and TRICARE, the letter states. “Congress must break the cycle of forestalling a crisis in patient access to physician care for only a few months at a time, and take action on legislation to provide stability and predictability for the program at least through 2011.” Read the letter to Congress in its entirety at www.rsna.org.

Dunnick Named ASTRO Honorary Member

RSNA Board Liaison for Science N. Reed Dunnick, M.D., has been named Honorary Member of the American Society for Radiation Oncology (ASTRO), the highest honor the Society bestows upon distinguished cancer researchers and leaders in disciplines other than radiation oncology, radiation physics or radiobiology. Dr. Dunnick was recognized at ASTRO’s annual meeting.

Currently the Fred Jenner Hodges Professor and chair of the Department of Radiology at the University of Michigan in Ann Arbor, Dr. Dunnick previously held academic appointments at Duke University Medical Center in Durham, N.C., the National Institutes of Health in Bethesda, Md., and Stanford University School of Medicine in Stanford, Calif. The current American Board of Radiology president, Dr. Dunnick is a past-president of the Academy of Radiation Research, American Roentgen Ray Society (ARRS), Association of University Radiologists, Michigan Radiological Society and the Society of Uroradiology (SUR). Dr. Dunnick’s accolades include the Gold Medal for Distinguished Service from ARRS and the SUR Gold Medal. Dr. Dunnick serves as a reviewer for Radiology.

RSNA Board of Directors Report

At its September meeting, the RSNA Board of Directors approved discounted rates for RSNA members serving in the U.S. military, as well as members living in developing countries. The Board also appointed volunteers to RSNA committees for the coming year.

RSNA 2011 Clustered Programming Pilot Approved

With the RSNA 2010 opening session just weeks away, the Board is already starting to plan for RSNA 2011. Among the new offerings slated for next year is a pilot of clustered programming in pediatric radiology. All pediatric content—including refreshers and multisession courses and oral and digital presentations—will be offered in a designated area of McCormick Place, allowing for intense educational activity in nonadjacent halls and classrooms. More information will be published in RSNA 2011 meeting materials and on the RSNA 2011 website.

IHE® Representatives Named

The Board continued its RSNA’s longstanding support of the Integrating the Healthcare Enterprise (IHE®) project by appointing David S. Mendelson, M.D., as RSNA representative to the IHE International board and Dr. Mendelson, David Artinian, M.D., and RSNA Assistant Executive Director for Scientific Assembly and Informatics Steve Drew as RSNA representatives on the IHE USA board. Established more than a decade ago by RSNA and the Healthcare Information and Management Systems Society (HIMSS), IHE seeks to improve patient care by standardizing the way health systems exchange information.

Education Initiatives Supported

RSNA is a charter member of the Image Wisely™ campaign to increase understanding of adult radiation protection among radiologists, referring practitioners, medical physicists and radiologic technologists. The Board approved the proposed three-step process for an individual to fully participate in Image Wisely: signing a pledge, pursuing accreditation, and participating in a dose registry. RSNA attendees can sign the Image Wisely pledge at one of three locations at RSNA 2010. See Page 25 for more information.

In addition, the Board approved funding to update the radiobiology educational program for radiology residents on RSNA 2011.

Discounted Membership Rates Offered

In recognition of current RSNA members who want to keep their membership current, but whose circumstances pose a challenge, the Board voted to provide special member dues. RSNA members who are currently serving in the U.S. military and are deployed overseas will pay only half the regular rate during deployment.

RSNA members in developing nations will also pay a reduced rate to access all online member benefits, including Radiology and Radiographics. Printed copies of the journals and RSNA News are not included, nor is free registration for the annual meeting.

Questions about the new membership rates can be directed to the RSNA Membership Department, membership@rsna.org. 1-877-RSNA-MEM (776-2656) or 1-630-571-7873 (within the U.S. or Canada). More information is also available at RSNA.org/membership.

R&E Officers, Trustees Named

The Board appointed 2010 RSNA President Hodget Heyck, M.D., F.R.C.R., as treasurer of the 2011 R&E Foundation Board of Trustees and E. Russell Rossnagel, M.D., as president of R&E. Drs. Heyck and Rossnagel are currently serving in the U.S. military and are deployed overseas. They replace David R. Price, M.D., as treasurer of the 2011 R&E Foundation Board of Trustees and O. Ruth Cameron, M.D., as president of R&E. Mr. Price and Dr. Cameron are both currently serving in the U.S. military and are deployed overseas. The Board also appointed volunteer representatives to RSNA committees in consultation with the committee chairs. The Board thanks the hundreds of exceptional and dedicated volunteers who help RSNA to meet its mission.

Point of Care CME Offered

A new feature on myRSNA allows RSNA members to earn CME credit as a result of researching procedures in the course of their work. RSNA’s new Point of Care (PoC) online tracking mechanism meets the American Medical Association (AMA) guidelines for the three-step process for an individual to properly claim AMA PRA Category 1 Credit. To take advantage of PoC CME, members use the mySearch function on myRSNA to research a clinical question, then select the most relevant literature from resources identified on the PoC-CME tab. Clicking the PoC link and answering every question after reading the article(s) allows the user to obtain CME credit.

RSNA 2009 Named Among Gold List

Along with ranking 32nd among the 100 shows in 2009 that set the gold standard for the trade show industry by Trade Show Executive magazine, RSNA 2009 also received the magazine’s “Highest Economic Impact of 2009,” award for its $123 million impact on Chicago and the local economy. The magazine honored the organizers of the 100 largest trade shows at a September summit held in Napulg, Calif.

RadiologyInfo.org™ Wins Award

On the heels of its recent redesign, the RadiologyInfo.org, a public information website has received a Medical Standard of Excellence Award for Outstanding Achievement in Web Development from the Web Marketing Association.

RadiologyInfo.org is a joint project of RSNA and the American College of Radiology. In addition to a new look and simplified navigation tools, RadiologyInfo.org now offers more video presentations to enhance explanation of radiology procedures and a version of the website for mobile devices. Users can sign up to receive updates about new developments, safety updates and more. In addition, pediatric content throughout the site is now identified with a special icon.

RadiologyInfo.org draws more than 600,000 visitors a month and is available in Spanish.

Numbers in the News

3.1 Percent increase in the median salary of diagnostic radiologists in 2009 to $460,205, according to a recent survey. Interventional radiologists reported a median salary of $473,878, representing no increase at all from the year before. (See “Radiology Salaries Remained Flat in 2009,” Page 17.)

15.3 Average reduction, in hours, in repeat turnaround time of a group of radiologists using speech recognition software. Despite these findings, however, more physicians must “buy in” to the software and require training to maximize its effectiveness, according to researchers. (See “Human Factors Critical to Speech Recognition Technology Success,” Page 19.)

28.8 Total, in millions of dollars, of grants awarded recently by the Agency for Healthcare Research to three prior recipients of RSNA Research & Education (R&E) Foundation funding. (See “Former R&E Grant Recipients Receive NHS Grants,” Page 15.)

24 Patients at risk for Type 2 Diabetes who underwent MR imaging and MR spectroscopy to assess visceral adipose tissue and hepatic lipids, as part of a study to discover predictive factors for improving insulin sensitivity and can be significantly reduced during lifestyle intervention. (See “Radiology in Public Focus,” Page 16.)

RSNA News

November 2010 | Volume 28, Number 11 | RSNA 2011 Clustered Programming Pilot Approved | With the RSNA 2010 opening session just weeks away, the Board is already starting to plan for RSNA 2011. Among the new offerings slated for next year is a pilot of clustered programming in pediatric radiology. All pediatric content—including refreshers and multisession courses and oral and digital presentations—will be offered in a designated area of McCormick Place, allowing for intense educational activity in nonadjacent halls and classrooms. More information will be published in RSNA 2011 meeting materials and on the RSNA 2011 website.

I am excited about what’s in store for next year, but even more excited about what’s right around the corner. I look forward to seeing all of you at this year’s annual meeting.

George S. Bisset III, M.D. Chairman, 2010 RSNA Board of Directors

R&E Officers, Trustees Named

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CT Artwork Offers Unique Slice of Radiology

Exploring interior views of the human body inspired Kai-hung Fung, M.B.B.S., F.R.C.R., to apply that one-of-a-kind perspective to creating radiology artwork that has captured the imagination of artists, scientists and the public at large since 2003.

“Imagine myself as a traveler in virtual space, visiting every corner of the human anatomy and exploring the beautiful scenery that Mother Nature has created in normal and diseased states,” said Dr. Fung, a diagnostic radiologist at Pamela Youde Nethersole Eastern Hospital in Hong Kong. “There are so many anatomical variants one can explore using this method. Individuals may look similar, but humans differ from one another in detail.”

Dr. Fung is one among several artists who use radiologic images to create art, enchanting physicians and non-physicians alike.

Using images of the human body based on data acquired from CT scanners, Dr. Fung creates artwork that has grown in scope and reputation since its debut seven years ago. Since 2008, Dr. Fung’s work has been featured regularly in the Illuminations section of RadioGraphics (see sidebar). For example, the July 2010 issue featured Dr. Fung’s image “Van Gogh Remembered,” which uses a 3D CT rendering of an aortic stent-graft to capture the deep colors and rich textures made legendary in the Dutch artist’s sunflower paintings. “Imagine the joy van Gogh would have experienced with digital media and all of its possibilities!” proclaims the legend under the image.

The innovative artwork has left a lasting impression on the journal and its readers, according to RadioGraphics Editor William W. Olmsted, M.D. “Dr. Fung’s beautiful clinical artwork contributes immensely to the look and appeal of RadioGraphics,” Dr. Olmsted said.

In just a few short years, the list of publications featuring Dr. Fung’s artwork has grown to include Radiologic Technology, Leonardo, GEO, Discover RadioGraphics, “Van Gogh Remembered,” left, in 2010.

The aesthetic effect shares similarity with pointillism except that I use color lines instead of color dots to create the picture. As with pointillism, when colorful lines are amassed together, the color effect is enhanced,” Dr. Fung said. “On the other hand, when lines are relatively spaced apart, as in a close-up view, the colorful lines add to the 3D contour effect, enhancing resolution.”

Using rainbow rendering, the surface behaves like a colorful Venetian blind, making objects on either side of the surface clearly visible, Dr. Fung said. This work, “What Lies Behind Our Nose?”, was awarded first prize in the photography category in the 2007 5th Annual International Science and Engineering Visualization Challenge, sponsored by Science, the journal of the American Association for the Advancement of Science, and the National Science Foundation.

Art Springs from Everyday Artifacts

Another physician whose artwork has captured a sizeable audience began his Radiology Art project in 2007 for educational as well as aesthetic reasons. “When I began creating this artwork, I was thinking ‘How can people learn from these images?’” said Satre Stuelke, M.D., an intern at the University of Pittsburgh Medical Center, whose work is featured on his website, radiologyart.com, and exhibited everywhere from pediatrics’ offices to the National Institutes of Health and the Ellen Powell Tiberino Museum in Philadelphia.

“I would like patients to feel more comfortable with the radiology procedures that can often be intimidating,” Dr. Stuelke said.

Before earning his medical degree from Weill Cornell Medical College (WCMC), Dr. Stuelke—who also holds a master of fine arts degree from the School of the Art Institute of Chicago—worked as an artist and art professor. As a first-year medical student in 2007, Dr. Stuelke began using CT scanner time donated by WCMC’s Biomedical Imaging Center to capture images of dozens of everyday objects.

Using a four-slice CT scanner to acquire the DICOM images, Dr. Stuelke processed the scans using OsiriX Mac software which allowed him to assign different color to areas of varying density. The resulting collection of more than 50 images ranging from elephants and giraffes to objects like toaster, telephones and TV dinners, have earned him recognition and media coverage in the New York Times and the “Today Show,” among others.

Radiology Demystified

Although Dr. Stuelke still maintains his website and will provide high-resolution prints of his artwork upon request, he now concentrates full time on his medical career. Especially when it is displayed in pediatrics’ offices, he believes his artwork can help young patients understand that imaging procedures allow doctors to see the inner workings of the body in order to diagnose and treat them.

Radiology Salaries Remained Flat in 2009

The changing face of healthcare and the faltering economy are among factors contributing to impact radiology salaries, which hovered just above the rate of inflation or flattened altogether in 2009. Nevertheless, experts say those numbers should begin rebounding in 2010.

“I expect compensation to gradually start picking up again, but the days of double-digit increases are behind us at this point,” said Brad Vaudrey, M.B.A., C.P.A., a director with RSM McGladey’s Health Care Consulting Group, which administered the 2010 American Medical Group Association (AMGA) 22nd Annual Medical Group Compensation and Financial Survey. “I don’t see a lot of groups planning to significantly increase their physician compensation just yet, but I still expect the future trend to be a little bit above inflationary rates when taking into consideration increases in productivity.”

AMGA’s findings are the result of the survey sent to more than 2,700 medical groups in January 2009. RSM McGladey received responses from 248 medical groups representing 47,700 providers.

Cardiothoracic surgeons were the highest paid specialty, with a median salary of $553,084, while orthopedic surgeons ranked second with a salary of $500,672; compensation for both increased 5.1 percent.

Of the 30 specialties surveyed, interventional radiologists scored third highest and diagnostic radiologists finished fifth highest salary for 2009.

With a median salary of $454,205, diagnostic radiologists’ compensation increased by 5.7 percent in 2009, while interventional radiologists reported a median salary of $478,000, which was unchanged from the year before.

Specialties with the highest compensation increases from 2008 to 2009 were pulmonary medicine at 10.4 percent, dermatology at 7 percent and urology at 6.4 percent. Median salaries for the specialties were $267,348 for pulmonary disease, $344,847 for dermatology and $383,029 for urology.

The survey’s finding of an overall weighted average increase in compensation of 3.4 percent was slightly lower than the 4.1 percent increase averaged over the last four years, Vaudrey said. “Radiology wasn’t the only profession with a slower pace. It’s an ebb and flow.”

The steady increase in salaries for diagnostic radiologists was in keeping with the overall consistency of the specialty, Vaudrey said. “It will probably keep going up but at a much slower pace. It’s an ebb and flow.”

The specialty trended up in average work RVUs, jumping 6.68 percent in 2009, while the average increase in work RVUs was 1.2 percent for the specialties surveyed, Vaudrey said.

Primary care remained fairly flat, while other medical specialties increased by 2.7 percent and surgical specialties went up an average of 3.0 percent, he said.

Outlook Relatively Bright

Although radiology salaries were essentially stagnant in 2009, the specialty will “continue to do well in the long term,” said Vaudrey. “There is an increased competition from other specialists including cardiologists and neurologists, said Stephen Chan, M.D., an academic radiologist at New York’s Columbia University and a member of RSNA’s Professionalism Committee. Dr. Chan received a 2001 Education Scholar grant from the RSNA Research & Education (R&E) Foundation for graduate study in educational information to develop a program in radiology management.

“With the contracting healthcare dollar, radiologists can expect to face more competition,” Dr. Chan said. “Nevertheless, we have always had this concern. In 1993, we started worrying about healthcare reform under the Clinton administration, in the late 1990s no one was hiring and we worried about the future of our profession,” he continued.

“Next, we worried about the growing number of subspecialists. All those worries were followed by a radiology job boom in 2008. Despite a lackluster year salary-wise, the future bodes well for radiology given the significant increase in imaging volume and anticipated physician shortages,” Dr. Chan said.

“Radiologists are well placed,” Dr. Chan said. “As long as we are valued by the people who send us patients, I have full confidence we will continue to thrive. Wherever we maintain robust connections within the medical structure, our practices will continue to remain strong.”

CT Artwork Offers Unique Slice of Radiology

Continued from Page 6

People can be frightened and mystified about radiology exams,” Dr. Stutts said. “It’s ultimately not that scary or mysterious. If I can show that through my art work, maybe that can help alleviate fears over getting an MRI, a CT scan or even just a normal X-ray.”

Medical imaging is a humankind subject is also a goal of Dr. Fung, who anticipates using his imaging techniques on objects both large and microscopic.

“As long as we are valued by the people who send us patients, I have full confidence we will continue to thrive. Wherever we maintain robust connections within the medical structure, our practices will continue to remain strong.”

Brad Vaudrey, M.B.A., C.P.A.
Although voice recognition software has been shown to dramatically improve radiology report turnaround time, factors including human behavior and financial incentives can play a pivotal role in the overall success of the technology, according to new research.

In a study conducted at the University of North Carolina (UNC), Chapel Hill, researchers found that implementing speech recognition software—which essentially substitutes a person’s voice for keyboard entry on a personal computer—decreased report turnaround time for the department overall and for 28 of the 30 individual faculty members included in the research, as expected. But the improvement correlated with work habits, researchers found.

“That human element has never been addressed or documented by data until this research,” said Joseph K.T. Lee, M.D., a Distinguished Professor of Radiology at UNC, immediate past-chair of the Department of Radiology at UNC and co-author of the study published in the September edition of the American Journal of Roentgenology. “What our research taught us is not to underestimate the human role. Everybody uses technology, but we’re still humans. Technology is just an enabling tool. You also have to let the buy-in from the users.”

Dr. Lee and colleagues collected information in two timeframes: the nine-month period prior to implementation of speech recognition software and the nine-month period afterward, following a six-month training period.

Attending radiologists—full-time faculty members throughout the research period—were divided into three groups based upon the predominant pattern of their work habits. Type 1 faculty were those who reviewed, revised and finalized trainee reports at the time of image review; Type 2 faculty reviewed images with the trainee and verified reports in several batches daily after the trainee made corrections; Type 3 faculty members also worked in batches but verified reports less frequently (once daily or less often).

While all but two of the participants showed improved turnaround time, researchers discovered the original rank order of the radiologists did not change.

“We found the people who demonstrated Type 1 and Type 2 behavior had a statistically significant improvement over the people who continued with the Type 3 behavior,” said Arun Krishnaraj, M.D., the study’s lead author. “When you change the manner in which you are generating and signing reports, it causes a lot of disruption. Even those who did well during the first study period were fighting the system somewhat in the beginning.”

Training is Critical

Echoing the findings of the UNC researchers, David Hirschorn, M.D., director of radiology informatics at New York’s Staten Island University Hospital, found that getting hospital staff to believe in the new process is one of the major hurdles in implementing speech recognition technology.

“There is frustration and aggravation in the beginning while people get used to a new process,” said Dr. Hirschorn, who presented his findings at the Society of Imaging Informatics in Medicine conference in May. “It is definitely one of the biggest hurdles to the success of this technology.”

Training is critical and deploying a speech recognition program should be planned carefully in order to fully benefit from the software, Dr. Hirschorn said. Identifying a physician champion to motivate the department and reinforce the benefits of the technology also increases the odds of acceptance within the department.

“When radiologists learn how to use the system well, they can achieve greater results in the long run,” he said.

Financial Incentives Pay Off

Taking another approach, researchers at Brigham and Women’s Hospital in Boston found that combining technology with financial incentives measurably and sustainably improved radiologists’ report-signing behavior.

“Although previous studies have documented reductions in turnaround time for radiology reports after implementing voice recognition software (shown above), researchers at the University of North Carolina, Chapel Hill, found that improvements in report turnaround time correlate with work habits rather than workflow, suggesting that human behavior may play a role in determining the outcome of adopting the productivity-enhancing technology,” researchers at Brigham and Women’s Hospital in Boston noted in a recent study. “Combining technology with financial incentives measurably and sustainably improved radiologists’ report-signing behavior.”

Echoing the findings of the UNC researchers, Dr. Hirschorn, who presented his findings at the Society of Imaging Informatics in Medicine conference in May, said financial incentives further improved radiologists’ report-signing behavior—a substantial component of total radiologists’ report turnaround time and resulted in better overall performance than through technology alone.

In the 52-month prospective study published in the March 2010 edition of the Journal of the American College of Radiology, lead author Katherine P. Andriole, Ph.D., of the radiology department at Brigham and Women’s Hospital and Harvard Medical School in Boston, and colleagues measured radiologist signature times at a 751-bed, urban tertiary-care teaching hospital. Imaging volume over the study period was steady, averaging 48,000 imaging exams per month.

Along with implementing a PACS-integrated speech recognition reporting system and pagers to alert radiologists when reports were ready for signing, researchers offered a financial incentive to reward radiologists for signature time performance. A $4,000 bonus was added semianually to the regular paychecks of attending radiologists who met the departmental goal of a median signing time of eight hours or 80 percent of reports signed within 16 hours during the six-month period preceding the award date.

While results showed that just adopting the transcription and notification technology alone reduced the median signature time from five to one hour and 80th percentile signature time from greater than 24 hours to between 15 and 18 hours, adding the financial incentive further improved 80th percentile signature times to between 6 and 8 hours, researchers found.

“...the addition of financial incentive results in further significant improvements in signature time, which were sustained even after the financial incentive was discontinued,” the authors wrote. This suggests a time-limited incentive program after the new technology is implemented can result in long-term behavioral changes.

“What our research taught us is not to underestimate the human role. Everybody uses technology, but we’re still humans.”

Joseph K.T. Lee, M.D.
Contrast Debate Promises Stimulating RSNA 2010 Session

Although a mainstay in diagnostic imaging, gadolinium-based contrast agents (GBCAs) for MR imaging continue to stir controversy for their association with serious adverse reactions including nephrogenic systemic fibrosis (NSF) in patients with renal insufficiency.

Because contrast is used in approximately half of all MR imaging procedures and gadolinium-free agents for MR exams aren’t poised to enter the market anytime soon, the debate over the use of GBCAs continues to gain momentum, according to presenters of the RSNA 2010 Special Interest/Controversies/Hot Topics session, “MR Contrast Agents: What is Their Value?”

“Overall, contrast agents have a very good standing for efficacy and safety, especially in body imaging and neuroradiology,” said session moderator Elmar Merkle, M.D., of the Department of Radiology at Duke University Medical Center in Durham, N.C. “In our academic setting, approximately 70 percent to 75 percent of MR studies are performed with contrast agents. The main risk is in terms of NSF — this is not to say that patients are worried about it.”

In 2010, the U.S. Food and Drug Administration (FDA) issued a public health advisory discouraging the routine use of GBCAs in patients with moderate to severe impairment in kidney function. In September 2010, the agency began requiring safety-related label changes for all GBCAs to warn of NSF, a rare and potentially fatal syndrome that involves fibrosis and skin damage in kidney and internal organs. One of those GBCAs — gadofosveset — is among the contrast agents to be debated at the RSNA 2010 session (see sidebar).

The Case for Gadofosveset

As the first blood-pool agent approved for use in contrast-enhanced MR angiography (MRA), gadofosveset offers a unique set of clinical and practical benefits that potentially outweigh associated risks, according to Winfried Willinek, M.D., an associate professor of radiology at the University of Bonn in Germany, and a presenter at the RSNA 2010 session.

“In my opinion, the emphasis on NSF has promoted other modalities such as contrast-enhanced CT, sometimes with an even higher risk-benefit balance,” he said.

“Non-contrast MRA seems to be promising,” Dr. Leiner said. “Although there is no non-gadolinium contrast agent on the market that can be used for the same set of clinical indications as GBCAs, this might change and we will have to carefully assess these agents if and when they become widely available.”

In terms of adverse reactions, Drs. Leiner and Willinek agree the risk of NSF remains a critical consideration, but that the radiologic community has been successful in identifying patients at high risk for NSF, effectively preventing new cases. Nevertheless, the emphasis on NSF has created a separate set of risks for some patients. “In my opinion, the emphasis on NSF has promoted other modalities such as contrast-enhanced CT, sometimes with an even higher risk-benefit balance,” Dr. Willinek said.

While conceding that the FDA must err on the side of caution, both physicians agree that there is little evidence linking GBCAs — including gadofosveset — to NSF and that a blanket label warning for all subtypes of GBCAs may not be the best way to ensure patients receive the most beneficial treatment at the lowest risk. “I recommend that radiologists and clinicians dealing with this matter carefully consider what study is in their patient’s best interest,” said Dr. Leiner, who co-authored, “NSF Prevention in Clinical Practice: Summary of Recommendations and Guidelines in the United States, Canada, and Europe,” for the October 2009 issue of the Journal of Magnetic Resonance Imaging. “Very often, this is still contrast-enhanced MR imaging or MRA.”

The case for and against gadofosveset will be presented at an RSNA 2010 Special Interest/Controversies/Hot Topics session. Published in the November 2008 issue of Radiology, a study conducted at the University of Bonn in Germany, by RSNA 2010 presenter Winfried Willinek, M.D., and colleagues, illustrated MR angiographic and digital subtraction angiography (DSA) images of high-grade stenosis of common right femoral artery (arrow) in a 72-year-old man with severe aortic insufficiency. In (a), a focused maximum intensity projections of moving-table-subtracted contrast-enhanced TI-weighted gradient-echo images. (c) Cross-sectional multiphase reformation of contrast-enhanced TI-weighted gradient-echo images (2.70/8.91) during the arterial first pass. (f) Cross-sectional multiphase reformation of high-spatial-resolution contrast-enhanced TI-weighted gradient-echo images (4/8.7/42) during the steady state. (c) Anterior view of DSA of right pelvic arteries. Stenosis grading of right common femoral artery was judged as less than 50% on first-pass MR angiogram, but 50 percent or higher on steady state MR angiogram and DSA image. Note the vast underestimation of stenosis grade on a and b. (Reprinted from Radiology 2008;249;2:701-711) ©RSNA, 2010. All rights reserved. Inset A: Courtesy of Dr. Willinek.
R&E Launches Planned Giving Web Page

The charitable gift annuity is among the giving options featured on the R&E Foundation, Radiologists now have the opportunity to give back to their specialty while reaping financial benefits and security for themselves and their loved ones.

For more information, visit RSNA Research & Education Foundation Director Karena Galvin at 1-630-399-7742 or kgalvin@rsna.org.

Annual Donors

Donors who give $1,500 or more per year for the RSNA President’s Circle. Their names are shown in bold face.

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<th>Name of Donor</th>
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<td>Dr. James A. and Joan P. McGee</td>
<td>Million Dollar Member</td>
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<td>Bennett G. Gray IV, M.D.</td>
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<td>J. Karen Clark, M.D.</td>
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Your Donations in Action

With an RSNA R&E Foundation grant, Dr. Steve Fung, M.D., is working to develop a new class of enzyme-activatable MR nanoprobe contrast agents for early detection of micrometastasis within the lymph nodes.

Vanguard Program

Companies supporting endowed endowments and term funding for named grants

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<td>Mitsubishi, A Division of Devon Medical Product, Inc.</td>
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Exhibitors Circle Program

Companies who give annual unrestricted gifts of $5,000 to $9,999

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<td>Ghislaine &amp; Albert Zilkha, M.D.</td>
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<td>Susan &amp; Stephen M. Smith, M.D.</td>
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Visionaries in Practice

A giving program for private practices and academic departments

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RSNA Research & Education Foundation Donors

The RSNA Research & Education Foundation thanks the following donors for gifts made August 14 – September 17, 2010.

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<td>Andrew Yang, M.D.</td>
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<td>Albert G. Grabb, M.D.</td>
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<td>Charmaine Chiu, M.D.</td>
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<td>Jennifer Chiu, M.D.</td>
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R&E Launches Planned Giving Web Page

The charitable gift annuity is among the giving options featured on the newly launched R&E Foundation Web page designed to help potential donors understand their opportunities for supporting the R&E Foundation during or after a donor’s lifetime.

Opportunities are explained in plain language and the site features an “Explore Your Options” page that lets users compare gifts, quizzes themselves on planned giving and instantly calculate their benefit payments. The user-friendly site features easy-to-find information and tools like clearly visible buttons for adjusting text size to the user’s preference.

For more information, visit RSNA.org/PlannedGiving or contact RSNA Research & Education (R&E) Foundation Director Karena Galvin at 1-630-399-7742 or kgalvin@rsna.org.
AHF Research and Education (R&E) Foundation funding. The grants are part of the Clinical and Health Outcomes Initiative in Comparative Effectiveness (CHOICE) program, part of AHRQs million awarded by AHF through a program of patient-centered outcomes research programs. More information is available at http://www.ahf.org.

Jennifer & Joe E. Parkey, M.D.
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Hiroshi Nobusawa, M.D., Ph.D.
Charlene & Randy L. Niblett, M.D.
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CT Findings in Diseases Associated with Pulmonary Hypertension: A Current Review

RadioGraphics

In an article in the November-December issue of RadioGraphics, Claudia Grosse, M.D., and Alexandra Grose, M.D., of the Department of Radiology at the Medical University of Vienna in Austria, review CT features and histologic findings of diseases associated with pulmonary hypertension with reference to their underlying pathophysiologic mechanisms and histologic hallmarks. “High-resolution CT and CT angiography play a crucial role in the diagnostic work-up of pulmonary hypertension and are important for identifying patients with chronic or recurrent pulmonary thromboembolism and for assessing the feasibility of pulmonary thromboendarterectomy,” the authors conclude.

Chronic thromboembolic pulmonary hypertension in a 59-year-old man with a yestical pulmonary artery pressure of 100 mm Hg. Coronal reformatted image from contrast-enhanced CT more clearly depicts collateral vessels (arrow).

This article meets the criteria for 1.0 Category 1 Credit™. This article is available in print only.

For Your Benefit

Podcasts Broaden Discussion of Radiology Research

In the continuing effort to expand the online experience for journal readers, Radiology began offering podcasts in January 2009 to promote a broader discussion of manuscripts of particular interest.

Rather than mere capsule summaries of the articles, the monthly podcasts—digital audio files in an mp3 format—provide in-depth discussion among study authors, editor and deputy editors on the context and implications of the selected research.

The Value of Membership

We tend to choose articles that we believe have the potential for broad reader interest. Podcasts have featured discussions among authors of two or three unrelated articles and, increasingly, among several authors of related manuscripts.

For example, Radiology’s November podcast features a panel discussion moderated by Alex Bankier, M.D., the journal’s deputy editor for thoracic imaging, along with three authors of studies in that issue that describe CT data sets in assessing risks for other diseases unrelated to the original study indications. Howard P. Freeman, M.D., M.B.A., the author of a provocative November editorial, “What We Can and Cannot See Coming,” on the practice implications raised by these studies, also participates in the podcast. (See Radiology in Public Focus, Page 16)

We invite readers to experience the “How We Think” podcast in this—and every month’s issue—and explore the online podcast archive at RSNA.org/Radiology. Podcasts are also available as free downloads on iTunes.

For more information, check out the RSNA podcast hub at RSNA.org/radiology.

MOC News

Healthcare Reform Underscores Importance of MOC Program

As regulators, payers, providers and quality groups develop quality programs and metrics as a result of healthcare reform, the American Board of Radiology (ABR) has joined the other member boards of the American Board of Medical Specialties (ABMS) to set meaningful standards and to position participation in maintenance of certification as a credible marker of quality healthcare. ABMS and ABR want to help physicians serve their patients while allowing them to be rewarded under the new healthcare system.

The MOC Program of the ABMS has been developing for more than a decade. ABR participates not only because its board is accountable to the public, but also because participation in MOC is imperative for professionals who enjoy a position of privilege within society—the public wants and deserves to know that physicians have remained current and that they practice according to contemporary standards and guidelines. The requirements of the ABR MOC Program result from very thoughtful deliberations, consideration of practice diversity and national healthcare priorities, review of published evidence, dialogue with specialty societies and compliance with ABMS guidelines.

While details must be fleshed out by individual member boards, including ABR, a proposed amendment to new reform set aside for participating in quality reporting and incentive payment adjustment inserts the words “or through a Maintenance of Certification program operated by a specialty body of the American Board of Medical Specialties that meets the criteria for such a registry.” The ABR thanks all MOC participants for their support of a program that is already having a durable impact on the quality and safety of radiology practice.

Member Question of the Month

E-mail us your answer at tellus@rsna.org. Responses featured in an upcoming issue of RSNA News will receive a small gift featuring the new RSNA logo.

September 2010

Media Coverage of RSNA

In September 2010, media outlets carried 850 RSNA-related news stories. These stories reached an estimated 456 million people.

September print coverage included The New York Times, Chicago Tribune, Orlando Sentinel, Straits Times, Edmonton Sun, Toronto Sun, News and Observer (Raleigh-Durham, N.C.), Daily Herald (Chicago), Cincinnati Enquirer, Charleston Gazette, Lexington Herald-Leader, San Bernadino Sun, Courier-Tribune, R&D Magazine, Diagnostic Imaging and Bioscience Technology. Online coverage included KTVG-TV (Seattle), WCAI-TV (Philadelphia), WMAQ-TV (Chicago), WPXI-TV (New York), KSAT-TV (San Antonio), WSB-TV (Atlanta), WDSU-TV (New Orleans), KSB-TV (Kansas City, Mo.), KGB-TV (Portland, Ore.), KSL-TV (Salt Lake City) and WDR-AM (New York).


November Public Information Activities

Focus on Lung Cancer

In recognition of National Lung Cancer Awareness Month in November, RSNA distributed public service announcements (PSAs) focusing on:

• Symptoms of lung cancer
• Risk factors
• Possible treatment options

In addition to the PSAs, RSNA also distributed the “ls-2nd Checkup” audio program to radio stations. The radio segments focus on lung cancer awareness and potential screening methods.

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RSNA News

Easy Navigation Key to Revamped QIBA Page

Along with an inviting new look, visitors to the Quantitative Imaging Biomarkers Alliance (QIBA) Web page will find an easy-to-navigate format highlighting QIBA’s expanding library of cutting-edge content. Easy-access boxes link to information on QIBA’s process, keys to identifying biomarker opportunities and much more.

To use QIBA’s new look, log onto RSNA.org, go to “Science” on the top navigation bar, and click Quantitative Imaging from the drop-down tab. Highlights include:

QIBA Wiki: Along with QIBA’s mission statement, this page offers a collection of QIBA materials, committees, activities and documents.

Media: Offers links to the QIBA Quarterly newsletter and QIBA in the Literature, providing links to research citing QIBA and its members.

In the Spotlight: Links to additional imaging biomarker and quantitative imaging activities supported by RSNA.

COMING IN DECEMBER

As the war in Afghanistan toils on, medical personnel—including radiologists—continue to do their part aiding American soldiers on the front lines. Next month, RSNA News will report the 2009 wartime experiences of two radiologists assigned by the U.S. Navy to a battlefield hospital in Kandahar Airfield, where they treated more than 2,000 soldiers in a M.A.S.H.-like setting—often in the line of incoming fire.

Johns Hopkins Site Devoted to CT

CT is the sole focus of www.ctisis.com, the non-profit website created and maintained by Elliot K. Fishman, M.D., of the Advanced Medical Imaging Laboratory, which is part of the Department of Radiology at the Johns Hopkins Medical Institutions in Baltimore. Along with CME courses, lectures and exhibits, the site offers scanner protocols, learning modules and a host of other features including hot topics in CT, real-time videos and teaching files. Dr. Fishman was the 2009 RSNA Outstanding Educator and is a member of the RSNA-ACR Public Information Website Committee that over-sees www.RadiologyInfo.org.

More Than 50 Attend RSNA Biomarker Roundtable

 Held September 21-22 in Chicago, the Imaging Biomarkers Roundtable, moderated by RSNA Scientist-in-Residence Daniel Sullivan, M.D., Crigler, was attended by more than 50 representatives of pharmaceutical and device manufacturers, government organizations, academic institutions, professional societies and clinical research organizations. A number of participants were invited to share their interests and activities in quantitative imaging and imaging biomarkers, with the goal of discovering gaps and fostering communication and coordination among the groups. The second day featured focused breakout sessions on topics including regulatory approach to combined products and open image archives.
CONTINUED FROM PREVIOUS PAGE

including individual risk determination, texture analysis, growth rate and metabolic behavior—have now been integrated into an accepted management approach, according to the presenter of the RSNA 2010 Annual Oration in Diagnostic Radiology.

“While this evidence-based expert consensus strategy now provides a simple roadmap for the management of groups of individuals with similar morphologic and risk characteristics and defines a new standard of practice, it does not yet entertain the concept that the biological behavior of focal pulmonary lesions can differ from patient to patient,” said Dr. Christian J. Herold, M.D.

Moreover, relatively new findings such as non-small and part-solid lesions have not been investigated to the extent that would allow for undisputed research and evidence-based integration into a holistic management and treatment approach, Dr. Herold said.

“Undoubtedly, the next steps in refining these strategies should aim at a tailor-made management and treatment approach, Dr. Herold said.

Eugene P. Pendergrass

New Horizons Lecture

Strategies for the Earlier Detection of Cancer

• Monday, Nov. 29 • 1:30 p.m.

Too much research investment is placed on later stages of cancer, when the probability of survival is markedly reduced, said Sanjil S. Gambhir, M.D., Ph.D., presenter of the New Horizons Lecture at RSNA 2010 Radiology, said Dr. Gambhir, can fundamentally shift the equation towards earlier detection—the merger of in vivo diagnostics, such as blood tests for proteins, and in vivo molecular/anatomical imaging will enable a fundamental revolution.

“There is significant promise for profound change in how we practice medicine,” said Dr. Gambhir, who received the 2009 RSNA Outstanding Researcher Award. “Radiology can play a central role, helping evolve and shape this emerging vision for the benefit of cancer patients.”

Dr. Gambhir is the Virginia & D. K. Ludwig Professor of Radiology, Bioengineering and Materials Science at Stanford University. He is the head of nuclear medicine, director of the Molecular Imaging Program and a member of the Bio-X program at Stanford, and heads the Canary Center for Cancer Early Detection.

Dr. Gambhir and his team have developed methods for image gene expression in living subjects, including humans. These imaging strategies have been translated into clinical trials for cancer gene/cell therapies. Dr. Gambhir and his team have developed a new paradigm for understanding the biological events such as imaging protein-protein interactions.

Dr. Gambhir and his team have developed many of the original management algorithms for cancer patients—including cost-effectiveness models—which led to FDG-PET reimbursement by the Centers for Medicare and Medical Services. He also works with imaging vendors and hospital administration to design new medicine clinical facilities and has set up the FDA radiochemistry/cytotoxic facilities with good manufacturing practices.

President Clinton

Real Reform: Facing the Complexity of Health Care

• Monday, Nov. 29 • 1:30 p.m.

From his unique perspective as a practicing surgeon, writer, and lecturer, Atul Gawande, M.D., tackles the practice of medicine, the reform of healthcare and the human struggle to do better and improve performance. Dr. Gawande encourages incremental reforms that build on the strengths and limitations of the current system and speaks to how to improve care and lower costs.


A staff member of Brigham and Women’s Hospital (BWH) in Boston, the Dana Farber Cancer Institute and The New Yorker magazine, Dr. Gawande is an associate professor of surgery at Harvard Medical School, associate professor in the Department of Health Policy and Management at the Harvard School of Public Health, and research director for the BWH Center for Surgery and Public Health.

Dr. Gawande served as a senior health policy advisor in Bill Clinton’s presidential campaign and in the Clinton White House from 1992 to 1993. He is the director of the World Health Organization’s Global Challenge for Safer Surgical Care.

In 2006, Dr. Gawande received the MacArthur Award for ‘fresh and unique perspective, clarity and intuition’ in his written work and his ‘energetic and imaginative’ approach to finding practical ways to improve surgical practice. Dr. Gawande was named to the 2010 TIME 100 at number five in the thirteenth category.

Special Address

• Tuesday, Nov. 30 • 1:30 p.m.

President Bill Clinton is a powerful voice for progress around the world. At RSNA 2010, President Clinton will address an international RSNA audience of radiology professionals and medical researchers who are engaged in shaping the practice of radiology around the globe.

*Tickets required to attend address in Arie Crown Theater. Attendees without tickets may view the lecture by simulcast in Room N228 or Room E23A. See RSNA10/RSS for more details.

Annual Oration in Radiation Oncology

Single Dose Radiotherapy (SDRT)—A Changing Paradigm Evolving from IMRT

• Wednesday, Dec. 1 • 1:30 p.m.

The effectiveness of single dose radiotherapy (SDRT) in locally curing tumors regardless of type has led to the hypothesis that SDRT may engage a different mechanism of tumor cure than classical fractionated radiotherapy, according to the presenter of the RSNA 2010 Annual Oration in Radiation Oncology.

“Genetic and pharmacologic studies in experimental tumor models support this notion, demonstrating a unique mechanism of action for SDRT in simultaneously activating two tumor tissue elements as primary targets, inducing potentially lethal lesions in parenchymal tumor stem cell clonogens (SCC) and triggering acid sphingomyelinase (KU70) mediated endothelial apoptosis and an associated dysfunction of the tumor microvascular network,” said Zw Fuls, M.D.

Dr. Fuls

Functional linkage of these two-target response mechanisms appears mandatory for tumor cure with SDRT, with the vascular component regulating SCC demise by attenuating DNA double strand breaks (DSBs) repair in the irradiated SCCs, according to Dr. Fuls.

“Understanding the complex interactions between the diverse endothelial and tumor SCC death mechanisms provides targets for optimizing SDRT as an emerging alternative modality to classical fractionated radiotherapy,” Dr. Fuls said.

World-renowned for his contributions to advancing the cure of cancer with radiation—many which remain standards for clinical practice—Dr. Fuls’ recent clinical efforts have focused on developing 3D conformal radiation therapy as a new modality in radiation oncology.

Dr. Fuls joined the Department of Radiation Oncology at New York’s Memorial Sloan-Kettering Cancer Center in 2004, serving as chair of the department and deputy physician-in-chief for planning for Memorial Hospital. Currently, Dr. Fuls is a member of the Department of Radiation Oncology and the Molecular Pharmacology and Chemistry Program at Sloan-Kettering Institute for Cancer Research and a member of the Institute of Medicine of the National Academy of Sciences.

The author of more than 400 journal articles and 100 book chapters, Dr. Fuls’ many accolades include the Alfred B. Sloan Chair, the Klaas’Burer Gold Medal Award and the gold medal of the American Society for Radiation Oncology.

Dr. Fuls
More About RSNA 2010

Take the Image Wisely™ Pledge
To be launched at RSNA 2010 is the Image Wisely™ campaign to increase understanding of adult radiation protection among radiologists, referring physicians, medical physicists and radiologic technologists. RSNA is among the campaign’s charter members, which also include the American College of Radiology (ACR), American Association of Physicists in Medicine (AAPM) and the American Society of Radiologic Technologists (ASRT).

Stop by one of these booths to learn more and pick up your “Pledged to Image Wisely” ribbon:
- ACR – #2189 (Hall A)
- ASRT – #605 (Hall D)
- AAPM – #400 (Hall D)
- Radiology.org (RSNA Services)

Learn about “Meaningful Use” Doctrine
Vendor and radiologists alike will benefit from the RSNA 2010 lineup of courses covering the impact of the new “meaningful use” doctrine—U.S. government criteria to determine whether healthcare providers are using IT tools effectively.

- Sunday, Nov. 28, 2:30 - 3:30 p.m.
- “Meaningful Use in Radiology: IT Vendors Will your Customers Will Demand,” Freehand Heading Will Be Provided
- “Pledging to Image Wisely,” Abstracts and learning objectives will not be available in the printed program but are instead available online only. Now this year, program updates will be available online only rather than in the Daily Bulletin.

Explore MOC
Stop by the American Board of Radiology kiosk in the Lakeside Learning Center at RSNA 2010 to learn more about the maintenance of certification (MOC) process and pick up an MOC lapel pin. See Page 18 for more information.

Tweet Your RSNA 2010 Experience
Access Twitter to follow live feeds about RSNA 2010 and contribute tweets of your own. RSNA staff members will be Tweeting live buzz and information about RSNA and want you to join in the discussion. Tweet about your experience and interact with others using the hashtag #RSNA10.

Discover myRSNA®
Demonstrations of myRSNA®, the personalized radiology workspace at myRSNA.org, will be offered at the newly redesigned RSNA Services kiosk during the annual meeting. In the hands-on workshops, RSNA staff will demonstrate how to create a customized home page, bookmark and share links, access files anywhere, and more.

Experience the Simplified Search of the RSNA Meeting Program Online
The RSNA Meeting Program online is enhanced for 2010 as the 1,200-page printed program has been replaced with a printed “Program in Brief” Abstracts and learning objectives will not be available in the printed program but are instead available online only. Now this year, program updates will be available online only rather than in the Daily Bulletin.

All special interest/controversies/hot topic sessions, multisession and refresher/informatics courses and vendor computer workshops are available in RSNA’s online meeting program. Along with searching for courses by title and name of presenter, users can search the online program by day, area and subspecialty, and sort findings from earliest to latest.

To view the online meeting program, go to RSNA2010.RSNA.org.

Meet the Editors
Stop by the Journals, News & Radiology.org area in the newly redesigned RSNA Services to meet the editors of RSNA’s peer-reviewed journals. Radiology Editor Herbert Y. Kressel, M.D., and Radiographics Editor William W. Olmsted, M.D., will be on hand to answer questions and discuss these prestigious medical journals with attendees.

Dr. Kressel
- Monday, Nov. 29
- 10:00 – 10:30 a.m.
- Tuesday, Nov. 30
- 10:30 – 11:00 a.m.

Dr. Olmsted
- Monday, Nov. 29
- 10:30 – 11:00 a.m.
- Tuesday, Nov. 30
- 10:30 – 11:00 a.m.
RSNA 2010 Technical Exhibition

Technical Exhibition Spans Three Halls

Technical exhibits at RSNA 2010 will feature more than 600 exhibits in three halls: Hall A in the South Building, Hall B in the North Building, and Hall D in the Lakeside Center. A balanced mix of companies will be located in each hall. Commercial vendors will conduct workshops in Hall D, Lakeside Center.

Detailed maps of the RSNA 2010 technical exhibit halls are available on the annual meeting website. Browse a comprehensive, up-to-the-minute list of the exhibitors and their products and services to map your visits to the exhibit floor. Search exhibitors by product category, keyword and more.

Dr. Lieberman

exhibit hall and You Are Here kiosks placed at the entrance to each Attendees can also find exhibitors via the RSNA.org/showcase, which will provide detailed floor plans of the exhibits areas, along with a directory of exhibiting companies and their contact information.

Register Onsite for Investment Seminars

RSNA will offer two investment seminars at McCormick Place during RSNA 2010.

RSNA will honor three individuals at RSNA 2010 for their contributions to research and education: Charles A. Mistretta, Ph.D., is Outstanding Researcher; Gillian Lieberman, M.B.B.Ch., and Kitt Shaffer, M.D., Ph.D., are Outstanding Educators.

RSNA.org/showcase

11:00 a.m. – 2:00 p.m.

Effective Real Estate Investment Strategies, presented by J. Michael Moody, M.B.A.

Monday, November 29

4:30 - 7:30 p.m.

Asset Protection and Retirement Planning in the New Era, presented by Barry Rubenstein, B.S., J.D., LL.M.

Register for these seminars onsite at McCormick Place Room E271A for Real Estate, E253AB for Asset Protection. You must be registered for the annual meeting in order to enroll in these seminars. These seminars do not qualify for AMA PRA Category 1 Credit™. For more information, contact the RSNA Education Center at 1-800-381-6660, x7772 or e-mail ed@rsna.org.

Public Information Activities Address the Media, Patients

Breast Cancer, Osteoarthritis, Sleep Apnea among RSNA 2010 Press Conference Topics

More than 170 members of the news media typically attend the annual meeting, generating thousands of stories appearing in print and electronic media in the U.S. and around the world. Among the press conferences to be presented in 2010 are:

• Light Exercise May Prevent Osteoarthritis
• Belly Fat Puts Women at Risk for Osteoporosis
• Women With Personal History of Breast Cancer Should Be Screened with MR Imaging
• Cancer Risk From Medical Radiation May Have Been Overestimated
• Walking Slows Progression of Alzheimer’s Disease
• People With Sleep Apnea at Higher Risk for Aggressive Heart Disease
• Annual Breast Cancer Screening Begins at Age 40 Reduces Mortality Risk
• Screening Tool May Better Identify Heart Disease in African Americans
• Diagnosis Uncertainty Increases Anxiety in Patients
• Virtual Biopsy May Allow Earlier Diagnosis of Brain Disorder in Athletes
• New Study Reports Effects of Endurance Running
• Acupuncture Changes Brain Perception and Processing of Pain
• Researchers Use Patient’s Own Blood to Treat Hair knob Injury
• CT Best at Uncovering Drug Mule Payload

New Products and Services Spotlighted in Daily Bulletin

Many exhibiting companies use the New Product & Services section of the RSNA Daily Bulletin to promote products and services released within the last 12 months. Published Sunday through Thursday, the Daily Bulletin is the official daily newspaper of the annual meeting and provides comprehensive coverage of meeting news. Each edition of the Daily Bulletin features a unique New Products & Services section. The Daily Bulletin is available at McCormick Place and also online at RSNA.org/bulletin.

Outstanding Researcher

Charles A. Mistretta, Ph.D., has transformed medical imaging and human health throughout his career with groundbreaking contributions at multiple times and in multiple subfields. The influence of Dr. Mistretta—director of the world-renowned International Center for Accelerated Medical Imaging at the University of Wisconsin—also extends to the dozens of exceptional researchers he has mentored.

Many people associate Dr. Mistretta with digital subtraction angiography (DSA), which he and his team began researching almost 40 years ago. The technique, distributed worldwide, is still the gold standard against which the image quality of new angiographic techniques is measured. Patent royalties from DSA presently rank second among all inventions in the history of the University of Wisconsin, where Dr. Mistretta currently serves as John R. Cameron Professor of Medical Physics and vice-chairman of the Department of Medical Physics.

Dr. Mistretta is also an innovator in MR angiography, leading his team to a number of breakthrough techniques for fast acquisition and unique processing of data, including Vardy undersampled k-space, P+Rejection imaging (VPRI), which permits data acquisition accelerations of one to two orders of magnitude relative to conventional Cartesian acquisition. Dr. Mistretta and his team are currently working on 4D DSA.

Outstanding Educators

Gillian Lieberman, M.B.B.Ch., has made her name synonymous with radiology education not only as a teacher but also as an innovator. For 30 years she has capitalized on new technology to expand both her content and her audience.

Dr. Lieberman is a director of Medical Student Radiological Education at Harvard Medical School, directs three Harvard clerkships at the Beth Israel Deaconess Medical Center (BIDMC) in Boston, and is co-director of radiologic education at BIDMC. She is a senior fellow of the Cannon Society at Harvard Medical School, a charter education scholar for the Carl J. Shapiro Institute for Education and Research, and a charter scholar of the Academy at Harvard Medical School.

She is perhaps best known for her web-based interactive teaching collections known as “Lieberman’s eRadiology.” The first offering is a set of 10 interactive web-based primary care radiology textbooks known as “Lieberman’s Primary Care Radiology.” Another of her innovations, her “Interactive Tutorials in Radiology,” have replaced the Lucy Square tapes for teaching radiology at Harvard and are used nationally and internationally.

Dr. Lieberman is also devoted to providing global free access to effective teaching materials to improve the quality of medical training, particularly in developing and underserved nations.

Kitt Shaffer, M.D., Ph.D., is known for her mastery of cutting-edge technology and evidence-based education innovations. She is vice-chair for education at Boston Medical Center and a professor of radiology at Boston University School of Medicine.

Previously, as the director of undergraduate medical education for the Cambridge Health Alliance in Cambridge, Mass., Dr. Shaffer developed the radiology portion of the Cambridge Integrated Clerkship, an innovative multidisciplinary retraining of the traditional third-year of medical school. She is also known for her work beyond the typical resume of a radiology educator—in particular, in 2004 she assumed the position of director of Harvard Medical School’s gross anatomy course.

A PACS authority, Dr. Shaffer helped develop the radiologic consultative service at Dana Farber Cancer Institute and international development of a PACS teaching file for use throughout Cambridge Health Alliance.

Dr. Shaffer is a founding member and past-president of the Alliance of Medical Student Educators in Radiology (AMSER) and helped develop national curricular guidelines for medical student education in radiology. She traveled to Shanghai, China, in 2008 as part of the RSNA International Visiting Professor program and leads a mentoring program for RSNA Research & Education Foundation applicants from the developing world.

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