

In the Spotlight: RSNA 2011

ALSO INSIDE:

Analyzing Outcomes, Adding Elastography
Could Improve US Breast Screening

Strengths, Weaknesses of Radiology
Education Vary Across the Globe

Embracing Change, Staying United, are
Key to Thriving in Healthcare Reform Era

Move to Digital Spurs New ABR Exam
Security Campaign

RSNA has developed this editorial fellowship program as a benefit for trainees interested in scholarly publication and the editorial processes at medical journal offices.

Learn about manuscript preparation, peer review, manuscript editing, journal production, printing, and electronic publishing by working with the...

Editor of **Radiology**
Boston, Massachusetts,
for 2 days

Editor of **RadioGraphics**
Burlington, Vermont,
for 1 day

RSNA Publications Department
Oak Brook, Illinois,
for 1 day

The fellow will also assist the editors and attend editorial meetings during the **RSNA annual meeting**.

Award

One fellow will be selected each year and will be awarded a stipend of \$3,000 to cover travel, lodging, and expenses.

Eligibility

Candidate must:

- ✓ Be an RSNA member
- ✓ Be from North America
- ✓ Still be in training (resident, fellow)
- ✓ Have a record of publications in scientific and/or educational peer-reviewed journals

Applications

Send a request by email to editfellowships@rsna.org

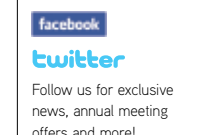
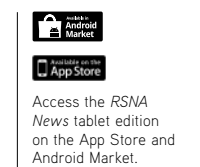
Deadline for applications is April 1, 2012.

Applications should include:

- A curriculum vitae, with work in peer-reviewed scientific or educational journals highlighted
- A personal statement that clearly describes your objectives in radiology journalism
- Three letters of reference from:
 1. The department chair that must indicate that the chair is willing to let the resident or fellow be away from the department if he or she is selected
 2. The program director
 3. A faculty member

The Fellowship Experience

Trainee editorial fellows prepare evaluations and follow-up reports on their experiences during and as a result of the fellowship.



For more than 20 years, *RSNA News* has provided high-quality, timely coverage of radiology research and education and critical issues facing the specialty, along with comprehensive information about RSNA programs, products and other member benefits.

UP FRONT

- 1 First Impression
- 4 My Turn

FEATURES

- 7 Strengths, Weaknesses of Radiology Education Vary Across the Globe
- 9 In the Spotlight: RSNA 2011
- 11 Embracing Change, Staying United, are Key to Thriving in Healthcare Reform Era
- 13 Move to Digital Spurs New ABR Exam Security Campaign

RADIOLOGY'S FUTURE

- 5 Analyzing Outcomes, Adding Elastography Could Improve US Breast Screening
- 15 R&E Foundation Donors

NEWS YOU CAN USE

- 17 Journal Highlights
- 18 Radiology in Public Focus
- 19 Education and Funding Opportunities
- 21 Annual Meeting Watch
- 22 For Your Benefit
- 23 Residents & Fellows Corner
- 24 *RSNA.org*

EDITOR

David M. Hovsepian, M.D.

R&E FOUNDATION CONTRIBUTING EDITOR

C. Leon Partain, M.D., Ph.D.

EXECUTIVE EDITORS

Lynn Tefft Hoff

Marijo Millette

MANAGING EDITOR

Beth Burmahl

EDITORIAL ADVISORS

Mark G. Watson

Executive Director

Roberta E. Arnold, M.A., M.H.P.E.

*Assistant Executive Director
Publications and Communications*

EDITORIAL BOARD

David M. Hovsepian, M.D.

Chair

Colin P. Derdeyn, M.D.

Kavita Garg, M.D.

Bruce G. Haffty, M.D.

Nazia Jafri, M.D.

Bonnie N. Joe, M.D., Ph.D.

Edward Y. Lee, M.D., M.P.H.

Kerry M. Link, M.D.

Barry A. Siegel, M.D.

Gary J. Whitman, M.D.

William T. Thorwarth Jr., M.D.

Board Liaison

GRAPHIC DESIGNERS

Adam Indyk

Ken Ejka

CONTRIBUTING WRITERS

Felicia Dechter

Paul LaTour

Evonne Acevedo Johnson

2012 RSNA BOARD OF DIRECTORS

N. Reed Dunnick, M.D.

Chair

Ronald L. Arenson, M.D.

*Liaison for Annual Meeting
and Technology*

Richard L. Baron, M.D.

Liaison for Education

William T. Thorwarth Jr., M.D.

*Liaison for Publications and
Communications*

Richard L. Ehman, M.D.

Liaison for Science

Vijay M. Rao, M.D.

*Liaison-designate for Annual
Meeting and Technology*

George S. Bisset III, M.D.

President

Sarah S. Donaldson, M.D.

*President-elect and
Secretary-Treasurer*

RAO JOINS RSNA BOARD OF DIRECTORS



Front row, from left: Ronald L. Arenson, M.D., *Liaison for Annual Meeting and Technology*; **Sarah S. Donaldson, M.D.,** *President-elect and Secretary-Treasurer*; and **Vijay M. Rao, M.D.,** *Liaison-designate for Annual Meeting and Technology*.
Back row, from left: William T. Thorwarth Jr., M.D., *Liaison for Publications and Communications*; **Richard L. Baron, M.D.,** *Liaison for Education*; **George S. Bisset III, M.D.,** *President*; **Richard L. Ehman, M.D.,** *Liaison for Science*; and **N. Reed Dunnick, M.D.,** *Chairman*.

2012 RSNA OFFICERS

George S. Bisset III, M.D.
President, Houston

Sarah S. Donaldson, M.D.
*President-elect /Secretary-Treasurer,
 Stanford, Calif.*

Donald P. Frush, M.D.
First Vice-President, Durham, N.C.

Mahadevappa Mahesh, M.D., Ph.D.
Second Vice-President, Baltimore

Luis Felipe Alva Lopez, M.D.
Third Vice-President, Mexico City

N. Reed Dunnick, M.D.
Chairman, Ann Arbor, Mich.

Bisset is RSNA President

GEORGE S. BISSET III, M.D., a revered educator, radiologist and leader, is RSNA president for 2012.

Dr. Bisset is chief of pediatric radiology at Texas Children's Hospital and a professor of radiology and Edward B. Singleton Chair of Pediatric Radiology at Baylor College of Medicine in Houston.

"In my role as president, I have several pressing goals for the coming year," Dr. Bisset said. "We will carefully focus on our newly redesigned strategic plan and, in a continuing quest to enhance member benefits, we will seek to provide more opportunities for interactive and point-of-service education."

Previous to his positions in Houston, Dr. Bisset was a professor of radiology and pediatrics, as well as a staff radiologist, at Duke University Medical Center in Durham, N.C., where he served as vice-chair of the Department of Radiology from 1995 to 2008. He was interim chair of the Department of Radiology at Duke from November 2008 to March 2010. Dr. Bisset also has served in academic positions in radiology and pediatrics at Tulane University School of Medicine in New Orleans and the University of Cincinnati College of Medicine.

Dr. Bisset has authored or coauthored more than 20 book chapters and nearly 200 scientific papers and abstracts and is currently a reviewer for *Radiology*, *American Journal of Roentgenology*, *Pediatric Radiology* and *Journal of Pediatric Gastroenterology*.

Dr. Bisset has been invited to lecture at nearly 100 medical schools and meetings throughout North America, Asia, Europe and South America. He has also been a visiting professor at numerous universities and medical schools in North America and Japan.

During his career, Dr. Bisset has been an active member of various medical organizations and societies. He is currently a member of the American College of Radiology (ACR) and the Society for Pediatric Radiology, among others. He received the ACR's Distinguished Committee Service Award in 2002.

Dr. Bisset served on the pediatric subcommittee of the RSNA Scientific Program Committee from 1990 to 1998 and chaired the Scientific Program Committee from 2000 to 2004. He was elected to the RSNA Board of Directors in 2004 and has been the Board education liaison since 2005. In 2010, Dr. Bisset served as Board chairman.



Dunnick Becomes Board Chairman

N. REED DUNNICK, M.D., the Fred Jenner Hodges Professor and chair of the Department of Radiology at the University of Michigan Health System in Ann Arbor, Mich., is chairman of the RSNA Board of Directors for 2012.

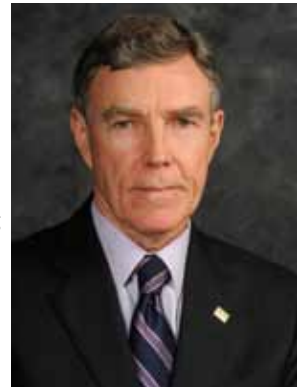
As chairman, Dr. Dunnick will help to implement several important RSNA goals for 2012, including the development of programs and tools to translate research discoveries into clinical practice and enable focused learning and rapid information retrieval.

"As the pace of change in the healthcare environment quickens, the challenges to maintaining our intellectual leadership in medical imaging increase," he said. "Radiologists must take leadership roles in helping to improve the efficiency of healthcare, while enhancing the quality of the care we deliver."

Dr. Dunnick earned his medical degree in 1969 from Cornell University Medical College in New York City and began his academic appointments as an assistant radiology professor at Stanford University School of Medicine in California in 1976. At Duke University Medical Center in Durham, N.C., Dr. Dunnick held many posts from 1980 to 1992, including professor of radiology, chief of uro-radiology and director of the Division of Diagnostic Imaging.

Dr. Dunnick's expertise in publications includes service on the editorial boards of 14 journals, including *Radiology*, *American Journal of Roentgenology*, *Academic Radiology* and *Journal of the American College of Radiology*.

An RSNA member since 1978, Dr. Dunnick has served on numerous committees, such as the Scientific Program Committee, Research Development Committee, Research & Education Foundation Board of Trustees, Education Council and the Grants Program Committee. In 2006, he was elected to the RSNA Board of Directors and served as the liaison for publications and communications from 2006 to 2007. In 2007, he became the liaison for science.



Rao Named to RSNA Board

VIJAY M. RAO, M.D., a global authority on head and neck imaging also recognized for her health services research in radiology, is the newest member of the RSNA Board of Directors.

Dr. Rao will serve as the liaison-designate for annual meeting and technology under Ronald L. Arenson, M.D., until Dr. Arenson becomes RSNA Board Chairman in 2013.

"The RSNA meeting provides an exciting glimpse into what is new on the horizon in all aspects of radiology—new innovations and new technology, be it CT or PET scanners or new ways to gather and distribute images using the cloud," Dr. Rao said.

Dr. Rao is The David C. Levin Professor and Chair of Radiology at Jefferson Medical College of Thomas Jefferson University. She was appointed associate chair for education in 1989 and vice-chair for education in 2000 and in 2002 became the first woman chair of a clinical department in Jefferson's history.

Dr. Rao has published more than 180 papers and 200 abstracts in the medical literature and co-edited *MRI and CT Atlas of Correlative Imaging in Otolaryngology*. An RSNA member since 1981, Dr. Rao has led numerous courses and sessions at RSNA annual meetings and served on the Health Services Policy & Research subcommittee of the RSNA Scientific Program Committee. She has served as a member of the RSNA Research & Education (R&E) Foundation Board of Trustees since 2008.

Dr. Rao served as president of the American Society of Head and Neck Radiology, the American Association for Women Radiologists and the Association of Program Directors in Radiology, which bestowed upon her its Distinguished Achievement Award in 2006.



Donaldson is President-Elect

RADIATION ONCOLOGIST Sarah S. Donaldson, M.D., is the 2012 RSNA president-elect.

Dr. Donaldson is the Catharine and Howard Avery Professor of Radiation Oncology at Stanford University School of Medicine in Stanford, California. She serves as associate residency program director of radiation oncology at Stanford Hospital and Clinics and is chief of radiation oncology service at Lucile Salter Packard Children's Hospital at Stanford.

As president-elect, Dr. Donaldson will help to shape and implement RSNA's vision and strategic goals to advance the radiologic sciences and embrace the model of patient-centered care.

"As a global leader in radiology, RSNA must continually evolve with the changing medical landscape," she said. "As we embark upon a new era in healthcare, it is imperative that RSNA foster the development of new technologies, diversify and expand educational opportunities, and facilitate informatics strategies to improve the efficiency and effectiveness of the care we deliver."

Dr. Donaldson earned her medical degree in 1968 from Harvard Medical School in Boston and began her academic appointments at Stanford as an assistant professor of radiation therapy in 1973. From 2001 to 2009, Dr. Donaldson served as the residency program director of radiation oncology at Stanford.

A popular visiting professor at many universities and medical schools across North America, Dr. Donaldson presented the Annual Oration in Radiation Oncology at the 1995 RSNA annual meeting.





Ball Sacharias Hricak Gebski

RANZCR Bestows Honors

The Royal Australian New Zealand College of Radiologists (RANZCR) announced several awards at its recent annual meeting.

The gold medal was awarded to **David Ball, M.B.B.S.**, deputy director of radiation oncology at the Peter MacCallum Cancer Centre and a radiation oncologist at Royal Melbourne Hospital, both in Melbourne, Australia.

The Roentgen Medal was awarded to **Nina Sacharias, M.B.B.S.**, former director and visiting radiologist of the Alfred Hospital Radiology Department and an adjunct clinical professor at Monash University, both in Melbourne, Australia.

Honorary Fellowship was awarded to 2010 RSNA President **Hedvig Hricak, M.D., Ph.D., Dr (hc)** and **Val Gebski, M.Stat.** Dr. Hricak is chair of the Department of Radiology at Memorial Sloan-Kettering Cancer Center in New York, a professor of radiology at Cornell University Medical College and an attending radiologist at Memorial Hospital in New York. The statistical examiner for RANZCR, Dr. Gebski is a professor of biostatistics and research methodology and medicine, Sydney Medical School and the National Health and Medical Research Council Clinical Trials Centre in Australia.

Texas Children's Hospital Establishes Singleton Pediatric Chair

In recognition of his 60-plus year legacy and devotion to pediatric radiology, The Texas Children's Hospital Board of Trustees has established the **Edward B. Singleton, M.D.**, Chair in Pediatric Radiology at the Houston-based hospital. 2012 RSNA President **George S. Bisset III, M.D.**, the current chief of pediatric radiology at Texas Children's, is the inaugural recipient of the endowed chair. Dr. Singleton, 91, is currently chief emeritus of radiology at Baylor College of Medicine and Texas Children's. In October 2011, Dr. Singleton was awarded the Baylor College of Medicine Excellence in Teaching Award for the 2010-2011 academic year.



Singleton

Numbers in the News

13

Direct cost in billions of dollars to U.S. teaching hospitals, related to training some 110,000 residents across medicine each year. The cost of education was among the topics addressed at the International Radiology Trends meeting at RSNA 2011. [Read more on Page 7.](#)

27.4

Percentage cut in the reimbursement physicians receive from Medicare, scheduled to go into effect on January 1 barring any intervention by Congress. [Read how several experts foresee healthcare reform continuing to impact radiology on Page 11.](#)

2,662

Number of participants from the ACRIN 6666 protocol database studied by a group of researchers seeking to determine the prevalence and malignancy rate of BI-RADS-3 lesions. Results showed that nearly 20 percent of participants had BI-RADS-3 lesions, but less than 1 percent were malignant. [Read more on Page 5.](#)

12,334

Number of abstracts submitted for consideration for presentation at RSNA 2011. Abstracts for RSNA 2012 can be submitted starting this month; turn to [Page 21 to learn how.](#)

CORRECTION

A chart in the December issue of *RSNA News* incorrectly listed the top physician compensation for diagnostic radiologists (non-interventional). The correct figures are: 2011, \$461,250; 2010, \$454,205; (1.55 percentage change); 2009, \$438,115; 2008, \$420,858 (5.28 percentage change); 2008-2011 (9.60 percentage change). A corrected version of the chart appears at [rsnanews.RSNA.org.](#)

My Turn

Presidential Perspective

Having been fortunate enough to realize my dream of joining the Board of Directors and one day (eight years later) becoming the President of the RSNA, I would like to briefly share with you my insider's view of the strengths of the RSNA. In a word—"Wow!" I don't think I fully understood the depth and breadth of this organization as a member.

This coming year will continue to bring more new offerings that enhance the benefits of membership. For instance, this year at our annual meeting, we will again highlight one of our many international relationships and dedicate our "Country Presents" session to Brazil. I am certain that we will all gain from the skills and knowledge that will be shared.

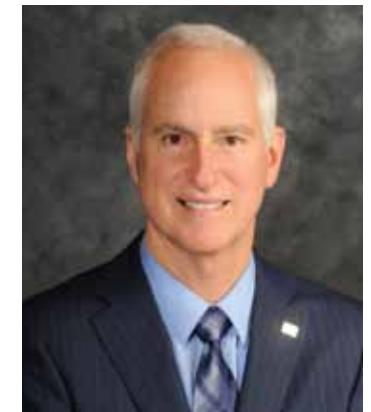
We are also expanding the successful Virtual Meeting that started in 2011. Technology continues to broaden our educational horizons with new

mobile delivery sites, searchable online resources, a redesign of *RSNA.org*, and new media for *Radiology*, *RadioGraphics*, and *RSNA News*. Our IT group continues to amaze me with their ingenuity and skill.

On another IT theme, the RSNA/NIBIB "Image Share" project is making great progress and we are confident that the days of transporting images on CDs are numbered.

The RSNA road map emphasizes our role with patients and I plan to work with the Patient-Centered Radiology initiative, which is a passion of mine, as it develops into a mature campaign.

In summary, we have an ambitious agenda for the coming year. Our newly revised strategic plan provides a sound footing for the RSNA to deliver even greater member benefits, offering the most "bang for your membership buck."



2012 RSNA President George S. Bisset III, M.D., is the chief of pediatric radiology at Texas Children's Hospital and a professor of radiology and Edward B. Singleton Chair of Pediatric Radiology at Baylor College of Medicine in Houston.

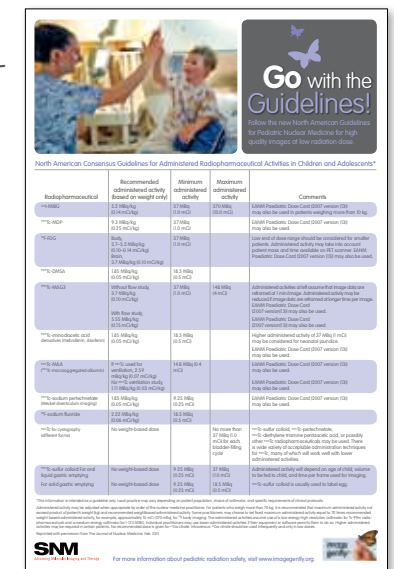
"Go With the Guidelines" Poster Offers Pediatric Nuclear Medicine Reminders

Posters enumerating the 11 guidelines in the new "Go with the Guidelines" pediatric nuclear medicine campaign are available from the Image Gently website at www.imagegently.org.

The campaign, sponsored by Image Gently and SNM, aims to standardize pediatric nuclear medicine procedures in order to get quality images with the smallest amount of radiation needed. "Since the adoption of these new guidelines, children's and academic hospitals have reported high-quality imaging with low patient dose," said S. Ted Treves, M.D., strategy leader of the cam-

paign and chief of nuclear medicine and molecular imaging at Children's Hospital Boston.

A companion publication for parents, "What You Should Know about Pediatric Nuclear Medicine and Radiation Safety," is also available at www.imagegently.org.



RSNA News

January 2012 • Volume 22, Number 1
Published monthly by the Radiological Society of North America, Inc.
820 Jorie Blvd., Oak Brook, IL 60523-2251. Printed in the USA.

POSTMASTER: Send address correction "changes" to: *RSNA News*, 820 Jorie Blvd., Oak Brook, IL 60523-2251

Non-member subscription rate is \$20 per year; \$10 of active members' dues is allocated to a subscription of *RSNA News*.

Contents of *RSNA News* copyrighted ©2012, RSNA. RSNA is a registered trademark of the Radiological Society of North America, Inc.

LETTERS TO THE EDITOR
rsnanews@rsna.org
1-630-571-7837 FAX
SUBSCRIPTIONS
subscribe@rsna.org
1-888-600-0064
1-630-590-7770

REPRINTS AND PERMISSIONS
permissions@rsna.org
1-630-571-7829
1-630-590-7724 FAX

ADVERTISING
advertise@rsna.org
Jim Drew, Director
1-630-571-7819
RSNA MEMBERSHIP
1-877-RSNA-MEM



Analyzing Outcomes, Adding Elastography Could Improve US Breast Screening

More biopsies and follow-up will result from ultrasound breast screening, but through analyzing outcomes and adding elastography, these rates can be reduced to acceptable levels, according to research presented at RSNA 2011.

A PRIME STEP in the process is better categorization of the ultrasound lesions, said Jennifer Harvey, M.D., a professor of radiology and director of breast imaging at the University of Virginia in Charlottesville.

"For mammography, we have defined criteria for putting lesions into BI-RADS-3 (Breast Imaging-Reporting and Data System 3), but ultrasound is still evolving," Dr. Harvey said. "Our goal for probably benign lesions is to have a risk of breast cancer of less than 2 percent."

In one prospective, three-year, 21-site study, "Reasons for Failed Cancer Detection in the ACRIN 6666 Screening Protocol: Mammography, US and MRI," researchers reviewing 130 malignancies on different modalities discovered that ultrasound had a rate of missed detection similar to those of mammography and MR imaging.

"Anywhere between 15 to 20 percent of cancers missed on any of the modalities—mammography, ultrasound or MR imaging—were actually documented and visible, just not recognized as suspicious," said the study's lead author, Wendie Berg, M.D., Ph.D., a visiting professor at the University of Pittsburgh School of Medicine.

"Automated screening ultrasound won't solve the problem because these are errors of interpretation, not detection," Dr. Berg added. "Computer-assisted detection and diagnosis should help with ultrasound as it does with mammography and MR imaging."

BI-RADS-3 Lesions Rarely Malignant

Dr. Berg also participated in a related study, "Probably Benign Lesions on Screening Breast Sonography: Prevalence and Risk of Malignancy in the ACRIN 6666 Trial," led by presenter Richard Barr, M.D., Ph.D., president and head of breast imaging and ultrasound at Radiology Consultants in Youngstown, Ohio.

To determine the prevalence and malignancy rate of BI-RADS-3 lesions, Dr. Barr and colleagues studied 2,662 participants from the ACRIN 6666 protocol database for lesions in this category, which make up 25.5 percent of all ultrasound lesions. After three rounds of screening, results showed that nearly 20 percent of participants had BI-RADS-3 lesions, but less than 1 percent of those lesions were malignant.



(clockwise) Wendie Berg, M.D., Ph.D.; Jennifer Harvey, M.D.; Richard Barr, M.D., Ph.D.



“Computer-assisted detection and diagnosis should help with ultrasound as it does with mammography and MR imaging.”

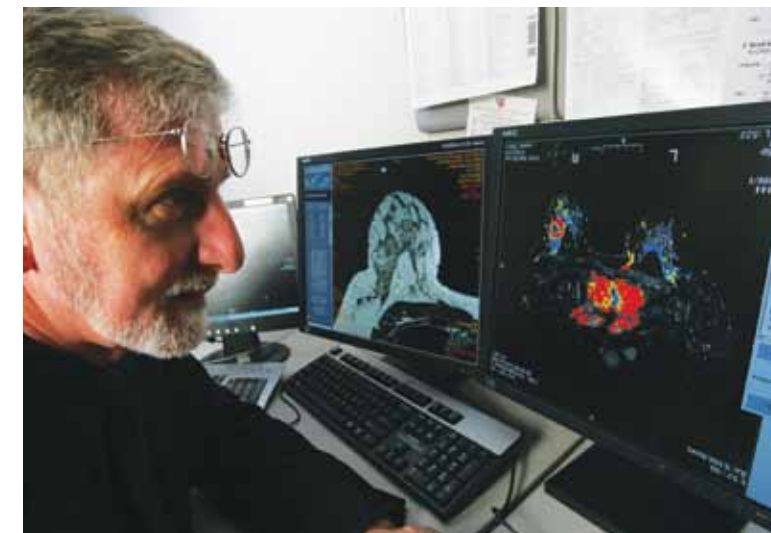
Wendie Berg, M.D., Ph.D.

"Along with the additional testing or biopsy associated with BI-RADS 3, patients experience anxiety because they are told they have a lesion even though we actually need to wait and watch," Dr. Barr said.

Methods to identify the few malignancies among BI-RADS-3 lesions and avoid short-term follow-up of benign BI-RADS-3 lesions would greatly reduce costs of screening ultrasound, Dr. Barr added. Elastography could play a significant role by allowing a radiologist to upgrade or downgrade BI-RADS-3 lesions, reducing anxiety, additional work-ups and unnecessary biopsies.

"We're hoping elastography will offer significant improvements in those areas and help us either upgrade or downgrade the lesions," Dr. Barr said. □

Daily Bulletin coverage of RSNA 2011 is available at RSNA.org/bulletin.



Better categorization of ultrasound lesions is the goal of researchers who presented findings at RSNA 2011.

New Study Supports Mammography Screening at 40

Women in their 40s with no family history of breast cancer are just as likely to develop invasive breast cancer as are women with a family history of the disease—indicating that women in this age group would benefit from annual screening mammography, according to research presented at RSNA 2011.

The breast cancer screening guidelines issued by the U.S. Preventive Services Task Force in November 2009 sparked a controversy among physicians, patient advocacy groups and the media. Much of the debate centered on the recommendation against routine annual mammography screening for women in their 40s.

"We believe this study demonstrates the importance of mammography screening for women in this age group, which is in opposition to the recommendations issued by the task force," said Stamatia V. Destounis, M.D., radiologist and managing partner of Elizabeth Wende Breast Care, LLC, in Rochester, N.Y.

Dr. Destounis and colleagues performed a retrospective review to identify the number and type of cancers diagnosed among women between the ages of 40 and 49—with and without a family history of breast cancer—who underwent screening mammography at Elizabeth Wende Breast Care from 2000 to 2010. Researchers then compared the number of cancers, incidence of invasive disease and lymph node metastases between the two groups.

Of the 1,071 patients in the 40–49 age group with breast cancer, 373 were diagnosed as a result of screening. Of that 373, 39 percent had a family history of breast cancer, and 61 percent had no family history of breast cancer. In the family history group, 63.2 percent of the patients had invasive disease, and 36.8 percent had noninvasive disease. In the no family history group, 64 percent of the patients had invasive disease, and 36 percent had noninvasive disease. The respec-



Stamatia V. Destounis, M.D., presented results of a study supporting mammography screenings at age 40 at RSNA 2011.

tive lymph node metastatic rates were 31 percent and 29 percent.

"In the 40-49 age group, we found a significant rate of breast cancer and similar rates of invasive disease in women with and without family history," Dr. Destounis said. "Additionally, we found the lymph node metastatic rate was similar."

According to Dr. Destounis, these results underscore the importance of early detection and annual screening mammography for women between the ages of 40 and 49 whether or not they have a family history of breast cancer. □

Strengths, Weaknesses of Radiology Education Vary Across the Globe

The current state of radiology education throughout the world—negatives and positives—and hopes for the future were discussed by a leading group of radiologists at RSNA 2011.

PANELISTS FROM Germany, India, Korea, Hungary, Venezuela and the U.S. made presentations at the International Trends meeting which addressed educating radiology residents, the possibility of creating an international approach to structuring radiology residencies and nuclear medicine imaging education.

Beginning the session, Vijay Rao, M.D., chair of the Department of Radiology at the Jefferson Medical College at Thomas Jefferson University Hospital in Philadelphia, described the diagnostic radiology residency training process in North America including curriculum, assessment of residents, faculty, accreditation, American Board of Radiology (ABR) certification and fellowship after residency.

“Becoming a diagnostic radiologist in North America is a lengthy process,” said Dr. Rao, RSNA Board liaison-designate for Annual Meeting and Technology. “It’s very competitive to get into a radiology residency. It’s very desirable.”

It’s also a fairly costly process.

Dr. Rao said the cost to teaching hospitals for training one resident is \$100,000 or more a year and that Medicare’s share of that cost is usually approximately \$40,000. Given that there are about 110,000 residents in training each year, the direct cost to teaching hospitals is approximately \$13 billion a year. Medicare supports about \$3 billion of that total, Dr. Rao said.

Countries Report Disparities in Education

In India, there is a “significant disparity” in the quality of education, said Mukund Joshi, M.D., chief of the Ultrasound Division of Radiology at Jaslok Hospital and Research Center in Mumbai.

Deficiencies include lack of adequate teachers and research facilities during training, Dr. Joshi said. Nevertheless, “there are expert, well-trained radiologists available at most institutions,” he said.

“The worst scenario is that students mainly learn to pass examinations but very few truly learn the subject of radiology and handling real-life clinical scenarios,” Dr. Joshi said.

In South America, imaging equipment is becoming increasingly available throughout the country, said Oswaldo Ramos, M.D., Ph.D., president of the Inter-American College of Radiology and a professor at the University of Los Andes, in Venezuela. Traditionally, residents have had a limited role, but today, they’re performing everything from scanning to interpreting exams, Dr. Ramos said.



A group of leading radiologists from around the world discussed the strengths and weaknesses of educational systems in their respective countries during the RSNA 2011 International Trends meeting.

“I want to see residents doing the job and not just watching,” he said. “The teacher is the guide.”

Michael Forsting, M.D., professor and chair of radiology at the University of Essen, described “a total separation between radiologists and nuclear medicine” in Germany.

“That makes it difficult to train people,” Dr. Forsting said. “We have to think about developing a new organization to train radiologists and nuclear medicine physicians.”

Europe Explores Creating a Common Residency Standard

Europe continues efforts to harmonize the training of radiology residents, said Andras Palko, M.D., president of the European Society of Radiology (ESR) and chairman of the Department of Radiology of the University of Szeged, Hungary, who presented, “Should There be an International Approach to Structuring Radiology Residency?”

“The worst scenario is that students mainly learn to pass examinations but very few truly learn the subject of radiology and handling real-life clinical scenarios.”

Mukund Joshi, M.D.



Panelists from Germany, India, Korea, Hungary, Venezuela and the U.S. addressed education issues including creating an international approach to structuring radiology residencies and nuclear medicine imaging education.



Dr. Palko discussed European efforts to standardize radiology training through the continent’s 42 countries that each conduct independent national training systems. ESR conducts this harmonizing exercise through endeavors including preparing and maintaining the European Training Charter, running a European School of Radiology and, most recently, creating a European Diploma in Radiology exam, he said.

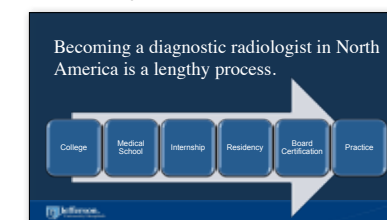
Daily Bulletin coverage of RSNA 2011 is available at RSNA.org/bulletin.

“These efforts—although none of them compulsory or legally binding to any of the national institutions or the individuals—may establish the groundwork for the appreciation of a common standard which then may be introduced as a common goal in training,” Dr. Palko said. “Of course, cooperation with other international/regional/global players, like RSNA for example, is a must, and ESR must make many efforts to create this inter-continental perspective. Cooperation on the daily

level in the form of mutual acceptance of diplomas and licenses is very difficult, but we cannot give up keeping this goal on our horizon.”

Dong Kim, Ph.D., president of Korean Society of Radiology and a professor of radiology at Severance Hospital, Yonsei University College of Medicine, in Seoul, said that since 1984, Korea has seen a steady increase in the number of board-certified radiologists and that radiology is now the most popular medical discipline. □

WEB EXTRAS



PowerPoint presentations by panelists at the International Trends meeting—including the one at left presented by Vijay M. Rao, M.D., (pictured, bottom right)—are available at rsnanews.RSNA.org.

In the Spotlight: RSNA 2011

Along with the usual spectrum of cutting-edge research and technical exhibits, new technological advancements kept RSNA 2011 attendees—including those accessing RSNA's new Virtual Meeting—connected to every facet of the meeting. Digital Navigators helped attendees find their destinations while smartphone users browsed the mobile versions of the RSNA 2011 website and the *Daily Bulletin* and downloaded session abstracts. New offerings including the Global Connection and Pediatric Campus helped attendees of RSNA's 97th annual meeting truly "Celebrate the Image."



- 1 The RSNA 2011 Technical Exhibition featured nearly 700 exhibitors.
- 2 Along with the latest educational offerings, the popular RSNA Store featured RSNA-branded apparel and merchandise.
- 3 2011 RSNA President Burton P. Drayer, opened RSNA 2011 with his address, "Celebrate the Image: How We Changed the Face of Health Care."
- 4 *RadioGraphics* Editor William W. Olmsted, M.D., (left) who retired at the end of 2011 after serving at the helm of the RSNA education journal since 1990, was honored by many colleagues including RSNA Board Liaison for Publications and Communications William T. Thorwarth Jr., M.D., (right) at an RSNA 2011 reception held in Dr. Olmsted's honor.
- 5 RSNA's media wall featured daily meeting information and spotlighted RSNA staff members discussing Society features.
- 6 Digital Navigators guided attendees to technical exhibits, education sessions, facility services and more.
- 7 Attendees flocked to Diagnosis LIVE!, the audience participation game where they tested their knowledge on interactive case studies and submitted diagnoses via their personal digital devices.
- 8 Doctors took a break from the hustle and bustle of the meeting in the Residents Lounge, a place to relax, network and enjoy complimentary refreshments.

Daily Bulletin coverage of RSNA 2011 is available at RSNA.org/bulletin.

Embracing Change, Staying United, are Key to Thriving in Healthcare Reform Era

While the future of the specialty itself remains bright, the forecast for the individuals practicing within it is far less certain. Nevertheless, physicians facing the financial cuts fueled by healthcare reform need to stand together to make sure their voices are heard.

THAT WAS the message conveyed by experts at RSNA 2011 who discussed the current state of healthcare and trends that will impact radiology in coming years.

"Together we have quite a voice, and today, more than ever, we must use that voice," said American Medical Association (AMA) President Peter W. Carmel, M.D., who presented "Year Two of Health System Reform: Where are We Now?"

"We must stand up, we must speak out and we must fight for the changes that physicians and patients need," Dr. Carmel said.

Adapting to change is critical to surviving—and thriving—in such challenging times, said Bruce J. Hillman, M.D., a professor of radiology at the University of Virginia in Charlottesville, who presented "Saving Our Profession: How Radiologists Can Thrive in the Era of Health Care Reform."

As technology continues to evolve and the financial ground beneath the specialty shifts, radiologists must learn to respond to those changes or face an uncertain future, Dr. Hillman said.

"Fundamental to the intellectual and financial success of radiology has been this amazing succession of new technology and expansion and networking of technologies that have made radiology so important in modern medicine," Dr. Hillman said. "Inevitably, if we are not successful innovators and we don't continue to adopt innovations, the 40-year reign of success for radiology is likely to go into decline."

Dr. Hillman discussed two specific examples of "disruptive technologies" for their potential to alter the industry. First are molecular technologies that target specific diseases and work with specific therapies for diagnosis. Second are information technologies—such as networking, communication and social media—that will facilitate physician-to-physician and physician-to-patient consultations.

"We need to change from what is working for us now—or at least some part of what is working for us—and invest in future disruptive technologies or radiologists could be disenfranchised," Dr. Hillman said. "We have to embrace these new technologies.

Declining Reimbursement is Among Financial Concerns

Financial compensation is also a growing concern for the specialty that has been targeted for payment cuts in successive federal bills that are bringing



Carmel



Hillman



Goldsmith



Muroff

radiologists face-to-face with economic issues they haven't faced before, said presenter Lawrence Muroff, M.D., CEO and president of Imaging Consultants, Inc., in Tampa, Fla.

Dr. Muroff said five trends could alter what radiologists earn: declining reimbursement; Washington's love affair with family practice versus radiologists' image, or lack thereof, within the general public; more demands on hospital administrators for better medical imaging coverage; non-traditional competition for what used to be exclusive contracting with radiologists; and alternative payment systems including bundled payments and accountable

“Together we have quite a voice, and today, more than ever, we must use that voice.”

Peter W. Carmel, M.D.



Adapting to change is critical to thriving in such challenging economic times, according to experts (from left) Bruce Hillman, M.D., Jeff Goldsmith, Ph.D., and Lawrence Muroff, M.D., who presented, "Saving our Profession: How Radiologists Can Thrive in the Era of Health Care Reform," at RSNA 2011.

care organizations.

"Things are going to be far more difficult for radiologists than they had been for the last 10 years," Dr. Muroff said. "What we have now is not guaranteed. Some will thrive in the future, while many will be caught unprepared." Bundled payments are coming faster than many radiologists are expecting, he said, and radiologists should be prepared for them to be in place by 2015.

Nevertheless, Jeff Goldsmith, Ph.D., an independent healthcare consultant for Health Futures, Inc., in Charlottesville, Va., said he believes bundled payments are further off than Dr. Muroff estimates. Dr. Goldsmith said despite its problems, the fee-for-service payment structure will continue as the dominant payment system for quite a while, even as the federal government experiments with alternative systems.

"I believe, and this is a contrarian view, that the fee-for-service medicine is going to be with us for a while," Dr. Goldsmith said. "The simple reason is we simply do not have consensus for what would replace it."

AMA Reports Success Stories

Despite considerable challenges, Dr. Carmel discussed several instances where the AMA successfully fought for physicians, including radiologists.

The AMA joined with the American College of Radiology (ACR) to block \$400 million in planned Medicare cuts to imaging services and worked with other groups to oppose the Medicare Payment Advisory Commission's recommendation to extend multiple procedure payment reduction (MPPR) to the professional component of imaging services. The MPPR proposed 50 percent cut was reduced to 25 percent, Dr. Carmel said.

"This shows that when physicians stand together,

we can have a profound impact," said Dr. Carmel, a professor and chair of neurosurgery at the New Jersey Medical School, University of Medicine & Dentistry of New Jersey and co-director of the Neurological Institute of New Jersey.

As year two of the Affordable Care Act (ACA) unfolds, Dr. Carmel highlighted several of its positive results including the elimination of insurance coverage abuses, granting those individuals under the age of 26 coverage on their parents' healthcare policies, eliminating copayments for most preventive services, and the requirement that health insurance companies spend at least 80 percent of their premium dollars on healthcare or pay the difference to patients.

"This list indicates just how beneficial the Affordable Care Act is for millions of American patients," Dr. Carmel said. "The Affordable Care Act is an historic victory, but like so many victories, it is imperfect."

He pointed to the failure to repeal the Sustainable Growth Rate formula (SGR) as the foremost challenge.

Barring an act of Congress in December, a 27.4 percent Medicare pay cut was scheduled to take effect January 1. In Illinois, for example, that equates to a loss of almost \$1 billion for the care of elderly and disabled patients. That's an average of \$31,000 for every physician in the state.

Dr. Carmel saved his harshest comments for the 12-member Congressional "supercommittee" charged with making federal deficit reductions. Although the AMA lobbied aggressively to repeal SGR, the supercommittee failed to reach an agreement.

"They had a golden opportunity to protect Medicare for future generations of seniors and they blew that chance," he said. □

WEB EXTRAS

To view a video of Lawrence Muroff, M.D., discussing the impact of healthcare reform on radiology, go to rsnanews.RSNA.org.

Daily Bulletin coverage of RSNA 2011 is available at RSNA.org/bulletin.

Move to Digital Spurs New ABR Exam Security Campaign

The Internet may be, as Bill Gates once described it, “the town square for the global village of tomorrow.” But where the health of that village is concerned, the American Board of Radiology (ABR) is defending against the risks that come with the reach.

AS IT PREPARES to launch its new Core Examination in Diagnostic Radiology and Diagnostic Radiology Certifying Examination, ABR is intensifying its communications about exam security, involving not only the examinees but also the team that teaches them. “A combination of factors led to this emphasis, including the large effort by hundreds of volunteers and staff required to prepare these exams,” said Gary J. Becker, M.D., ABR executive director and 2009 RSNA President.

“Then there’s the high availability of electronic communications to those who might want to share questions, and evidence of question-sharing behavior obtained through Web surveillance,” Dr. Becker said. In addition, he said, the ABR acknowledges the momentousness of its decision to abandon the oral certifying examination that for nearly 78 years has been the final assessment of clinical reasoning and diagnostic skill for those completing training. The ABR is now replacing that assessment—completed by 10 oral examiners in 25-minute sessions each—with a computer-based examination.

While traditional multiple choice question examinations test mostly knowledge and comprehension, the new Core and Certifying Examinations (see sidebar) will assess higher levels of clinical reasoning, analysis, judgment, and management—but only if the questions presented are novel and not recalled by candidates who have shared

them inappropriately and reduced them to a memorization exercise, Dr. Becker said. “Given these factors, the ABR saw the need to be crystal clear about its exam security policy,” he said.

That policy strives to ensure that ABR exam results reflect examinees’ knowledge and skills, rather than unauthorized access to information sources—study materials in any medium during the exam, confidential exam information before, during or after—that may lead examinees to answer questions differently than they would have on their own.

That second information source category—“confidential exam infor-



Becker

“Society grants the medical profession the privilege to self-regulate, and in return the profession owes to society a certification process that has integrity.”

Gary J. Becker, M.D.

Diagnostic Radiology Certifying Examination

The Certifying Exam, to debut in fall 2015, will be taken 15 months after completion of diagnostic radiology residency. It will “emphasize synthesis of information, differential diagnosis, and patient management,” according to ABR, with all aspects of physics and basic sciences that are important in imaging to be included. “Noninterpretive Skills” and “Essentials of Diagnostic Radiology” will be required in addition to three modules in clinical practice areas—general radiology, breast, cardiac, gastrointes-

tinal, musculoskeletal, neuroradiology, nuclear, pediatric, thoracic, ultrasound, genitourinary, and vascular and interventional radiology—selected by the individual, based on training, experience, and practice emphasis.

The exam will be scored as pass or fail, and feedback will be provided to examinees. The two required modules must each be passed individually, and the elective modules must be passed as a group. If any of these three decisions is “fail,” the entire exam must be retaken.

Beginning with the residency class starting radiology training on July 1, 2010, candidates will have six years after they complete residency training to pass the Certifying Examination. An additional year of training is required if the candidate does not pass the Certifying Exam during the six-year time frame.

See www.theabr.org for more information on both exams.



mation”—was of particular concern as ABR prepared to launch new computer-based tests to replace the current written and oral versions (see sidebar), Dr. Becker said. “When the ABR decided to change its diagnostic radiology exams to computer formats that are case-based and image-rich, and measure complex abilities related to judgment and clinical reasoning, we became increasingly concerned about the deleterious effects of question sharing,” he said. “A memorized question measures ability at a different level than a novel question.”

Directors, Coordinators and Chairs Vow to Protect Exams

ABR knew it should ratchet up communication even with a limited release of the new Core Exam to a sample of board certification candidates this year, Dr. Becker said, and received a “warm reception” when it enlisted the help of the Association of University Radiologists, Association of Program Directors in Radiology, Association of Program Coordinators in Radiology, Society of Chairs in Academic Radiology Departments and American Alliance of Academic Chief Residents in Radiology. A result of those talks is a new requirement that candidates and their program directors, program coordinators and program chairs sign attestations that they understand

and promise to abide by the security policy, which they read about and see explained in a video. The attestations become part of the attestors’ files within the ABR database.

Such security measures safeguard a critical, but by no means singular, step in a sophisticated process designed to ensure that board-certified radiologists are qualified to do the job, Dr. Becker said. “Achieving board certification means clearing a lot of hurdles before the boards—undergraduate degree, medical school, medical licensure, internship, residency training and the attestation of their residency program director of readiness for examination,” he said.

Qualifying exams, Dr. Becker said, are part of a much larger picture—one the public wants to see in totality.

“The public trust and its relationship to the exam security policy are best understood in terms of the profession’s ‘contract’ with society,” Dr. Becker said. “Society grants the medical profession the privilege to self-regulate, and in return the profession owes to society a certification process that has integrity. This is the way to ensure that those who pass the test demonstrate that they have met the requisite standards for safe and competent practice.”

NEW IMAGE-RICH, COMPUTER-BASED EXAMS REPLACE WRITTEN AND ORAL VERSIONS

Core Examination in Diagnostic Radiology (Qualifying Exam)

The Core Exam debuts in October 2013. Trainees will take the exam 36 months after the beginning of radiology residency training. The Core Exam will test knowledge and comprehension of anatomy, pathophysiology, all aspects of diagnostic radiology, and physics concepts important for diagnostic radiology. Trainees will take 18 categories included on the examination:

- Breast
- Cardiac
- Gastrointestinal
- Interventional
- Musculoskeletal
- Neuroradiology
- Nuclear
- Pediatric
- Reproductive/endocrinology
- Thoracic
- Urinary
- Vascular
- CT
- MR
- Radiography/fluoroscopy
- Ultrasound
- Physics
- Safety

The Core Exam also includes the Radiolotope Safety Exam (RISE), one of the requirements for Authorized User Eligibility Status. No separate physics examination will be administered; however, physics questions integrated into each category will be separately scored and must be passed. The exam will be offered twice yearly.

WEB EXTRAS

To see a video of ABR Executive Director Gary J. Becker, M.D., discussing the new Core Examination in Diagnostic Radiology and the “major culture change” taking place in ABR examinations, go to rsnanews.RSNA.org.

RESEARCH & EDUCATION FOUNDATION DONORS

The R&E Foundation thanks the following donors for gifts made September 16 – October 13, 2011.



Exhibitors Circle Program

Companies who give annual unrestricted gifts at four levels from \$1,500 to \$10,000

BRONZE CIRCLE (\$1,500)



RamSoft, Inc.

Visionaries in Practice Program

A giving program for private practices and academic departments

BRONZE LEVEL (\$10,000)



Asheville Radiology Associates
Asheville, N.C.



Southeast Radiology, Ltd.
Upland, Pa.

VIP LEVEL (\$5,000)



Consulting Radiologists Ltd.
Minneapolis, Min.

The RSNA R&E Foundation provides the research and development that keeps radiology in the forefront of medicine. Support your future—donate today at RSNA.org/donate.

Visionary Donor Program

Individuals recognized for cumulative lifetime donations

GOLD VISIONARY (\$15,000)

Linda M. Gruener, D.O.

SILVER VISIONARY (\$10,000)

Satyavathi Anne, M.D. & M. R. Anne

BRONZE VISIONARY (\$5,000)

Edward A. Gize, M.D.

Anne & Ernest M. Scalzetti, M.D.

Individual Donors

Donors who give \$1,500 or more per year qualify for the RSNA Presidents Circle. Their names are shown in bold face.

\$2,500 – \$4,999

Rosalind B. Dietrich, M.D. & William G. Bradley Jr., M.D., Ph.D.
Edward A. Gize, M.D.
Bonnie Barnett & Robert L. Kagan, M.D.

\$1,500 – \$2,499

Satyavathi Anne, M.D. & M. R. Anne
Helen Moon & Kyongtae T. Bae, M.D., Ph.D.
Laurita & Gary T. Barnes, Ph.D.
Catherine Brant
In memory of Earl E. Brant, M.D.
Constance Whitehead & M. Paul Capp, M.D.
Maria Vittoria Chiechi, M.D.
In memory of Michele Antonio Chiechi, M.D.
William A. Fajman, M.D.
Linda M. Gruener, D.O.
Barbara & Thomas S. Harle, M.D.
In memory of Richard E. Buenger, M.D.
In memory of Frank L. Hussey Jr., M.D.
In memory of Theodore A. Tristan, M.D.
Huong (Carisa) Le-Petross, M.D.
Anne G. Osborn, M.D. & Ronald Poelman
Bernard A. Sakowicz, M.D.
In memory of George S. Naifeh Jr., M.D.
Margaret & Glenn A. Tuckman, M.D.

\$1,000

Christine E. & John O. Olsen, M.D.

\$500 – \$999

Nam S. & Chung T. Chung, M.D.
Tim H. Emory, M.D.
Fang-Yun Gan, M.D. & Mark Gesell

\$250 – \$499

Lauren S. Levy, M.D. & Ronald Aboody, M.D.
Hoda & Adel N. Abu-Saif, M.B.Ch.B.

Rajendra Achaibar, M.D.
Denise R. Aberle, M.D. & John S. Adams
Rebecca & Jose F. Alvarez, M.D.
Olivier Ami, M.D., Ph.D.
Howard J. Ansel, M.D.
Saba & Muhammed S. Anwer, M.D.
Siobhan Byrne & Greg D. Avey, M.D.
Zubin N. Balsara, M.D.
Eamonn C. Bannan, M.D.
Celine C. Bard, M.D.
Robert P. Beecham, M.D.
Marla & David H. Berns, M.D.
Gordon H. Beute, M.D.
Urmila & Ramesh C. Bhatt, M.D.
Kerry & Dennis J. Bielke, M.D.
Armando L. Bonnet, M.D.
Sherwin M. Borsuk, M.D.
William D. Boswell Jr., M.D.
Peter Bove, M.D.
Inge Box, M.D. & Peuter Bruno
Dorthe S. Brandt, M.D.
David K. Brewer, M.D.
Lamont D. Brown, M.D.
Sara R. & Stephen D. Brown, M.D.
David S. Buck, M.D.
Pattie & E. Brian Butler, M.D.
Urbanita G. & Winston Casis, M.D.
Eric H. Chen, M.D.
Christopher L. Chong, M.D.
Layne R. Clemenz, M.D.
Linda Parlin, M.D. & Frederick S. Cohn, M.D.
Elizabeth R. & Brian D. Coley, M.D.
Ellen & Christopher A. Coury, M.D.
Marlene V. Craigie, M.B.B.S.
Charles A. Crouch, M.D.

Shi Ran Lu & Jinguo Cui, M.D.
David P. Dalzell, M.D.
Barbara J. & Robert B. Davis, M.D.
Deborah L. Day, M.D.
Francisco De La Cruz, M.D.
Carole J. Dennie, M.D.
John P. DeRosa, M.D.
Frank G. Diettinger, M.D.
Linda L. Donegan, M.D.
Sonya L. & Heratch O. Doumanian, M.D.
Debbie & Richard Duszak Jr., M.D.
Paul E. Dybbro, M.D.
Melissa & Andrew W. Dyer, M.D.
Robert Einhorn, M.D.
John A. Eklund, M.D.
W. Scott Enochs, M.D., Ph.D.
Genevieve & Leandro A. Espinosa, M.D.
Janet & Steven Falcone, M.D.
Joaquim M. Farinhas, M.D.
Dan Fertel, M.D.
James P. Finch, D.O.
Anne L. & Scott D. Flamm, M.D.
Judy L. & Marc C. Flemming, M.D.
Leanne L. Seeger, M.D. & Rudi Foorman
Klaus J. Frank, M.D.
Jill H. Kingsly, M.D. & Robert A. Friedman, M.D.
Ulrike M. Hamper, M.D., M.B.A. & John J. Frost, M.D., Ph.D.
Paul J. Fry, M.D.
Linda Parlin, M.D. & Aaron Y. Fu, M.B.B.S.
Colleen & Thomas J. Gallagher Jr., D.O.
Ayca Gazelle, M.D. & G. Scott Gazelle, M.D., M.P.H., Ph.D.
J. Raymond Geis, M.D.
Erica T. Ghosh, M.D. & Ashoke Ghosh

Paul E. Gibson, M.B.B.S.
Hugo Gielkens, M.D., Ph.D.
Karen L. Giles, M.D.
Eli Glatstein, M.D.
Richard S. Goldenson, M.D.
Warren D. Goldstein, M.D.
Kate & Shaun J. Gonda, M.D.
Michael F. Grantham, M.D.
Johanna & Josef Hallermeier, M.D.
William K. Haney, M.D.
Mary & Donald P. Harrington, M.D.
Nancy K. & Lawrence P. Harter, M.D.
Jenna M. & Josh Hill, M.D.
Gerard J. Hogan, M.D.
Miriam Honnicke, M.D.
Michele & Reed M. Horwitz, M.D.
Patricia A. Hudgins, M.D.
Mary & Peter R. Hulick, M.D., M.S.
In memory of Peter V. Hulick, M.D.
Niamh & Gerard Hurley, M.D.
Willy Hwang, M.D.
Neville Irani, M.D.
Ryuta Itoh, M.D., Ph.D.
Anthony J. Jennings, M.D.
Deborah Levine, M.D. & Alex Jesurum, Ph.D.
Thomas R. Jones, M.D.
Austin D. Jou, M.D.
Cathy Velenchik & Christopher R. Joy, M.D.
Anthony W. Kam, M.D., Ph.D.
Evan M. Kaminer, M.D.
Shotaro Kanao, M.D.
Elizabeth & Jeffrey P. Kanne, M.D.
Jane S. & Barry H. Kart, M.D.
Junko Kato, M.D. & Katsuhiko Kato, M.D.

Lori & Shannon L. Kauffman, M.D.
Maria & Dennis Kay, M.D.
Todd W. Kennell, M.D.
Karolyn R. Kerr, M.D.
Sobia & Abdul-Majid Khan, M.D.
Hirohiko Kimura, M.D., Ph.D.
Marge & Thomas B. Kinney, M.D.
Jan M. & Donald R. Kirks, M.D.
Kari A. Kluessendorf, M.D.
Mark S. Kristy, M.D.
Elizabeth L. Kulwicz, M.D.
Sharon Shapiro, M.D. & Andrew J. Kurman, M.D.
Kristen A. Lachance, M.D.
Kent T. Lancaster, M.D.
Heleen Brody-Lang & Jeffrey N. Lang, M.D.
Hillary & Charles Lawrence, M.D.
Shlomo Leibowich, M.D.
Paul M. Leiman, M.D.
In memory of Jay Leiman
Darlene & Keith D. Lemay, M.D.
Sebastian Leschka, M.D.
Michael Licata, M.D.
Yuen Chi Liu, M.D.
Robert B. Lufkin, M.D.
James E. Machin, M.D.
Joan M. Mack, M.D.
Nathan A. Maertz, M.D.
Mary Ann & Ferdinand L. Manlio, D.O.
Mylon W. Marshall, M.D.
Jean & John J. Meehan, D.O.
Alec J. Megibow, M.D., M.P.H.
John R. Mernagh, M.D.
Sharon & Robert M. Miller, M.D.
Deborah & Donald G. Mitchell, M.D.
Lee M. Mitsumori, M.D., M.S.
Sagar A. Naik, M.D.
Dean A. Nakamoto, M.D.
Todd A. Nichols, M.D.
Harvey L. Nisenbaum, M.D.
Barbara A. Nitsch, M.D.
Richard G. Num, M.D.
Iclal Ocak, M.D.

Yumiko O. Tanaka, M.D. & Mitsunobu Oishi
Satomi & Hiroaki Onaya, M.D.
Marc G. Ossip, M.D.
Virginia S. Owen, M.D.
Anokh Pahwa, M.D.
Amy A. Davidson & Nimish H. Patel, M.D.
Rhonda K. McDowell, M.D. & Robert W. Patton Jr., M.D., J.D.
Tatjana Pavlovic, M.D. & Zivojin Pavlovic, M.D.
Irene Pérez Franco, M.D.
Kristen A. Lachance, M.D.
Rita J. Pink, M.D.
Stephen F. Probst, M.D.
Christine & Robert M. Quencer, M.D.
Michael F. Quinn, M.D.
Bolar R. Rao, M.D.
Christine Caldwell & Michael L. Richardson, M.D.
Catherine & Robert J. Rienzo, M.D.
Russell L. Roberts Jr., M.D.
William F. Rosner, M.D.
Trenton D. Roth, M.D.
Glenn S. Roush, M.D.
Muriel & Patrick Sabbah, Ph.D.
Nicole Lebon-Scagnelli & Thomas Scagnelli, M.D.
Anne & Ernest M. Scalzetti, M.D.
David P. Schale, M.D.
Anthony J. Scuderi, M.D.
Wales R. Shao, M.D.
Richard Shoefeld, M.D.
Dale G. Sickles, M.D. & Edward A. Sickles, M.D.
Douglas I. Silver, M.D.
William Silverstein, M.D.
Audrey & W. C. Sims, M.D.
Suzanne M. Slonim, M.D.
Becky & Gregory B. Smith, M.D.
Kirk C. So, M.D.
Jill Steinkeler, M.D. & Jared Silverstein, M.D.
Phyllis & Mark A. Stein, M.D.

Donna & Randall H. Stickney, M.D.
Nathan Stofberg, M.D.
David W. Stoller, M.D.
Alan H. Stolpen, M.D., Ph.D.
Daniel M. Stovell, M.D.
Kimberly A. Garver, M.D. & Peter J. Strouse, M.D.
Robert L. Stubbs, M.D.
Louis Sulman, M.B.B.Ch.
David I. Thickman, M.D.
James F. Tustin, M.D.
In memory of Thomas Barry Wilson, M.D.
Takashi Ushimi, M.D., Ph.D.
Diana T. Jucas, M.D. & Srinu Vasani

Jorge A. Vidal, M.D.
Sharon K. Wallace, M.D. & Douglas C. Wallace, M.D.
Carolyn L. Wang, M.D. & George Wang, M.D.
Anthony R. Whittemore, M.D.
JoAnn & Russell L. Wilson, M.D.
Caroline Reinhold, M.D. & Elric Winter, M.D.
Masashi Yamashiro, M.D.
Angela & Gerald E. York II, M.D.
Nina A. Mayr, M.D. & William T. Yuh, M.D., M.S.E.E.

YOUR DONATIONS IN ACTION



The Postmortem Imaging and Content Development Team at Massachusetts General Hospital includes (from left to right) Synho Do, Ph.D., Homer Pien, Ph.D., Mannudeep K. Kalra, M.D., Shima Aran, M.D., and Sarabjeet Singh, M.D.

With an RSNA R&E Foundation Grant, **Mannudeep K. Kalra, M.D.**, and his colleagues at Massachusetts General Hospital are developing a key image-based educational program for CT radiation dose management. Using human cadaver imaging and pathology data, this online program will help radiology personnel understand the effect of different scanning parameters and doses on lesions confirmed with pathology correlation.



RSNA 2011 attendees enjoyed the Research & Education (R&E) Foundation Donor Lounge. An annual meeting staple, the lounge offered computers, coat racks and comfortable furniture for relaxation and refreshments.

Journal Highlights

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

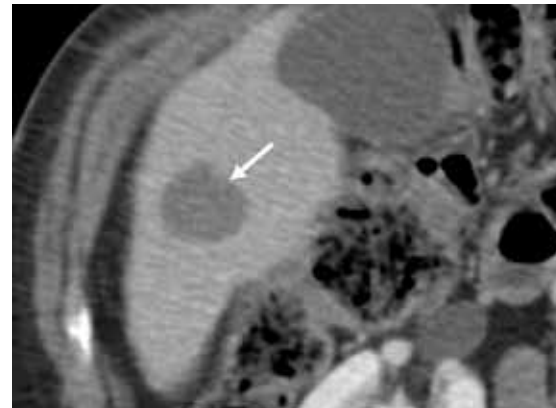
Local-regional Treatment of Hepatocellular Carcinoma

Local-regional treatments play a key role in the management of hepatocellular carcinoma (HCC), the sixth most common type of cancer and the third leading cause of cancer-related death.

In patients with early stage HCC, image-guided tumor ablation is recommended when surgical options are precluded and can replace resection in selected patients, while transcatheter arterial chemoembolization (TACE) is the current standard of care for patients with relatively preserved liver function, no cancer-related symptoms and no evidence of vascular invasion or extrahepatic spread (i.e., intermediate-stage HCC).

In a State-of-the-Art article in the January issue of *Radiology* (RSNA.org/Radiology), Riccardo Lencioni, M.D., and Laura Crocetti, M.D., Ph.D., of Pisa University Hospital, Italy, discuss treatment strategy according to tumor stage and outline the advantages and limitations of current local-regional treatments with respect to surgical and systemic approaches. They note that embolic microspheres, with the ability to release a drug in a controlled and sustained fashion, have been shown to substantially increase the safety and efficacy of TACE in comparison to conventional ethiodized oil-based regimens.

"A growing body of literature suggests that interventional treatments, including radioembolization, might be an effective treatment approach for selected categories of patients with advanced HCC," Drs. Lencioni and Crocetti write.



RF ablation of very-early-stage hepatocellular carcinoma in a 67-year-old man with hepatitis C-related liver cirrhosis. Portal venous phase CT images obtained one month after treatment show tumor has been replaced by nonenhancing ablation zone (arrow) that exceeds diameter of naive tumor. Findings are consistent with complete response.

(*Radiology* 2012;262:1:43-58) ©RSNA, 2012. All rights reserved. Printed with permission.

Radiology

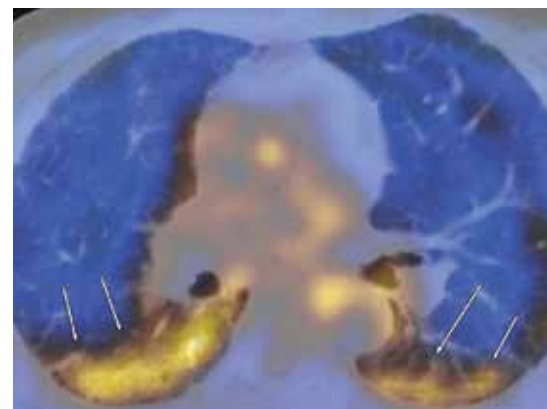
Thoracic Manifestations of Collagen Vascular Diseases

While collagen vascular diseases may affect various organs, these disorders may involve the lungs, pulmonary vessels, pericardium and pleura, producing a broad spectrum of thoracic imaging manifestations.

In an article in the January-February issue of *RadioGraphics* (RSNA.org/RadioGraphics), Julia Capobianco, M.D., of the Federal University of São Paulo, Brazil, and colleagues describe the thoracic imaging patterns most commonly seen in patients with collagen vascular diseases and discuss patterns of lung involvement and other thoracic findings frequently seen in specific collagen vascular diseases. The authors discuss:

- Nonspecific interstitial pneumonia
- Pulmonary arterial hypertension
- Rheumatoid arthritis
- Progressive systemic sclerosis
- Systemic lupus erythematosus
- Polymyositis and dermatomyositis
- Mixed connective tissue disease
- Sjögren syndrome
- Ankylosing spondylitis

RadioGraphics



A 64-year-old woman with PM and NSIP. PET/CT fused image demonstrates sites of 18F-FDG uptake (arrows) corresponding to the areas of ground-glass opacities on CT.

(*Radiographics* 2012;32:1;in press) ©RSNA, 2012. All rights reserved. Printed with permission.

This article meets the criteria for 1.0 AMA PRA Category 1 Credit™. CME is available in print and online.

Although chest radiography is most often used for screening and monitoring of thoracic alterations, high-resolution CT can provide additional information about lung involvement in collagen vascular diseases and may be especially helpful for differentiating specific disease patterns in the lung, the authors write.

"Knowledge about the spectrum of thoracic findings in collagen vascular diseases and about potential complications associated with treatment helps improve the detection and management of these disorders," they write.

Radiology in Public Focus

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

Spinal Subdural Hemorrhage in Abusive Head Trauma: A Retrospective Study

Children with abusive head trauma who underwent thoracolumbar spine imaging showed a high incidence of spinal canal subdural hemorrhage compared with those who suffered accidental trauma, according to new research.

In the retrospective study, Arabinda Kumar Choudhary, M.D., of Penn State University College of Medicine, Milton S. Hershey Medical Center, Pa., and colleagues compared imaging results of children ages 2 years old or younger treated for abusive head trauma with those of 70 similarly aged children treated for accidental trauma. Imaging results included CT and MR imaging of the brain, spine, chest, abdomen and pelvis.

Spinal canal subdural hemorrhage was evident in more than 60 percent of the children with abusive head trauma who underwent thoracolumbar imaging, while one of the 70 children in the accidental trauma group had spinal subdural hemorrhage. This finding may help distinguish between abusive and accidental injury and aid in understanding the mechanism of injury with further studies, according to the authors.

"Although usually clinically asymptomatic, subdural hemorrhages could lead to complications from spinal cord compression," the authors wrote. "As others have, we urge considering complete spine imaging for all children undergoing brain MR imaging for moderate or severe traumatic brain injury, both accidental and abusive."



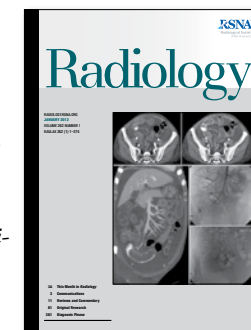
Images in a 7-month-old male patient. Sagittal reconstruction show hyperattenuating nodular thickening of the posterior dura.

(*Radiology* 2012;262:1:216-223) ©RSNA, 2012. All rights reserved. Printed with permission.

Media Coverage of RSNA

In October 2011, media outlets carried 388 RSNA-related news stories. These stories reached an estimated 224 million people.

October coverage included *The Indianapolis Star*, *San Diego Union-Tribune*, *Omaha World-Herald*, *Harvard Business Review*, Yahoo! News, Yahoo! Finance, *Reuters.com*, *New York Daily News* – Online, *Boston Globe* – Online, *Houston Chronicle* – Online, *San Francisco Chronicle* – Online, *Miami Herald* – Online, *HealthDay*, *Medicinenet.com* and *Auntminnie.com*.



January Public Information Activities Focused on Back Pain

In January, RSNA's "60-Second Checkup" radio program focused on minimally invasive procedures to treat back pain.

RSNA Wins Web, Marketing & Communication Gold Awards

The RSNA/American College of Radiology public information website *RadiologyInfo.org* recently received a gold award from the Web Health Awards, which recognize high-quality digital health resources for consumers and health professionals. Now in their 13th year, Web Health Awards are organized by the Health Information Resource Center (HIRC), a national clearinghouse for professionals who work in consumer health fields.



RSNA also received two MarCom Awards from the Association of Marketing & Communication Professionals. RSNA received gold awards in the Media Kit/Special Event category for the RSNA 2010 press kit and in the Television Placement category for a segment about a *Radiology* article showing that screening mammography reduces breast cancer mortality that appeared on "World News" with Diane Sawyer.

One of the largest competitions of its kind in the world, the MarCom Awards honor excellence and recognize the creativity, hard work and generosity of marketing and communication professionals.

Education and Funding Opportunities



RSNA Introduction to Research for International Young Academics

Deadline for nominations—April 15

The RSNA Committee on International Relations and Education (CIRE) seeks nominations for this program

that encourages young radiologists from countries outside North America to pursue careers in academic radiology by:

- Introducing residents and fellows to research early in their training
- Demonstrating the importance of research to the practice and future of radiology
- Sharing the excitement and satisfaction of research careers in radiology
- Introducing residents to successful radiology researchers, future colleagues and potential mentors

The program consists of a special four-day seminar held during the RSNA Scientific Assembly and Annual Meeting. CIRE recommends 15 international young academics for consideration by the RSNA Board of Directors each year. Complimentary registration, shared hotel accommodation for the duration of the program and a stipend to help defray travel expenses are awarded to successful candidates.

Eligible candidates are residents and fellows currently in radiology training programs or radiologists not more than two years out of training who are beginning or considering an academic career. Nominations must be made by the candidate's department chairperson or training director. Fluency in English is required.

Nomination forms are available at RSNA.org/IRIYA.

Woloschak is New Instructor for RSNA Advanced Course in Grant Writing

VETERAN NATIONAL Institutes of Health (NIH) grant writer Gayle E. Woloschak, Ph.D., is the new instructor for the RSNA Advanced Course in Grant Writing, designed to assist physicians prepare and submit quality grant applications to

NIH and other institutions. Dr. Woloschak is a professor of radiation oncology and radiology at Northwestern University's Feinberg School of Medicine in Chicago and has extensive experience writing NIH and other grants.

The course consists of four multi-day sessions spanning a 9-month period, held at RSNA Headquarters in Oak Brook, Ill. For more information, go to www.rsna.org/research/educational_courses.cfm



Woloschak

Medical Meetings

February-May 2012

FEBRUARY 4-9

International Society for Optics and Photonics (SPIE), Medical Imaging 2012, Town & Country Resort and Convention Center, San Diego
• www.spie.org

FEBRUARY 16-18

American Society of Spine Radiology (ASSR), Annual Symposium, Eden Roc Renaissance Hotel, Miami Beach, Fla.
• www.theassr.org

FEBRUARY 20-24

Healthcare Information and Management Systems Society (HIMSS), Annual Conference and Exhibition, Venetian-Palazzo Sands Expo Center, Las Vegas
• www.himssconference.org

MARCH 1-5

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

MARCH 11-14

Society of Thoracic Radiology (STR), Annual Meeting, Hyatt Regency Huntington Beach Resort & Spa, Huntington Beach, Calif.
• www.sgr.org

MARCH 19-22

Association of University Radiologists (AUR) 60th Annual Meeting, in joint sponsorship with RSNA, JW Marriott San Antonio Hill Country, San Antonio, Texas
• www.aur.org

APRIL 12-15

Japan Radiological Society (JRS), 71st Annual Meeting, Pacifico Yokohama, Japan
• www.congre.co.jp/en/index.html

MAY 10-12

European Society for Radiotherapy & Oncology (ESTRO), World Congress of Brachytherapy, Barcelona International Convention Center, Spain
• www.americanbrachytherapy.org

RSNA Education Products Now Available Online

RSNA thanks those who visited the RSNA Store at this year's annual meeting. Patronage and support of RSNA education products aid the RSNA Research & Education (R&E) Foundation's mission to fund research and education grants.

Those who didn't get a chance to visit the store can access all RSNA education products at RSNA.org/education. The CD collection series—a popular product for physicians looking to add to their libraries—is priced at a 25 percent savings and is available while supplies last.

Each collection contains a bundled set of refresher courses containing related educational content:

- **Emergency Collection:** A review of some of the most common—and confounding—traumatic conditions radiologists encounter, including abdominal and head and neck injuries and the injured child; includes three CDs offering 4.50 *AMA PRA Category 1 Credits*™.
- **Pulmonary Collection:** A comprehensive study of CT imaging of the lungs, from the features of chronic obstructive conditions to evaluation of the patient at risk of pulmonary embolism; includes three CDs offering 4.25 *AMA PRA Category 1 Credits*™.
- **Oncologic Imaging Collection:** A systematic review of radiation oncology for the diagnostic radiologist, from terminology to treatment to follow-up imaging; includes three CDs offering 4.00 *AMA PRA Category 1 Credits*™.
- **Renal Collection:** A look at renal imaging studies, from assessment of vasculature to the discovery of incidental masses; includes two CDs offering 2.25 *AMA PRA Category 1 Credits*™.

New this year, RSNA added a search feature to the online RSNA Education Resources catalogue, allowing customers to access content more quickly than ever before. Customers can now narrow their product search by content area, activity type, product code, keyword or author. This new, more robust search function also allows you to search the newest products available with the click of a button.

For more information or to purchase the CD collections, go to RSNA.org/education or call the Education Center at 1-800-272-2920.

Omary Awarded NCI Grant to Develop Nanoembolization for Liver Cancer

RSNA Research & Education (R&E) Foundation grant recipient Reed Omary, M.D., M.S., has been awarded nearly \$2.6 million over the next five years from the National Cancer Institute (NCI) for his grant, “Quantitative MRI-guided Nanoembolization for Liver Cancer.”

Dr. Omary, a professor and vice-chair for research in the Department of Radiology at Northwestern University in Evanston, Ill., will collaborate with co-principal investigator Andrew Larson, Ph.D., and a multidisciplinary team of Northwestern investiga-

tors to develop a new therapy for liver cancer using therapeutic nanoparticles.

Dr. Omary received an RSNA Research Resident Grant in 1993 and a Bracco Diagnostics/RSNA Research Scholar Grant in 1999.



Omary



Annual Meeting Watch

RSNA 2012 Online Abstract Submission Opens mid-January

The online system to submit abstracts for RSNA 2012 will be activated in mid-January. The submission deadline is 12 p.m. Central Time on March 31, 2012. Abstracts are required for scientific presentations, education exhibits, applied science and quality storyboards.

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

The easy-to-use online system helps the Scientific Program Committee and Education Exhibits Committee evaluate submissions more efficiently. For

more information about the abstract submission process, contact the RSNA Program Services Department at 1-877-776-2227 within the U.S. or 1-630-590-7774 outside the U.S.



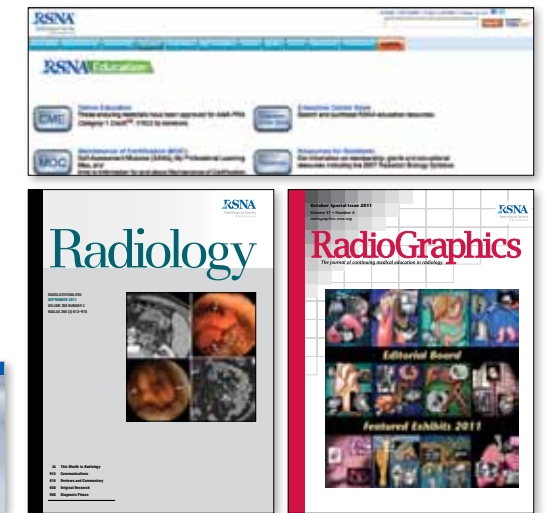
For Your Benefit

Renew Your RSNA Membership Now

RSNA membership includes many benefits, such as your subscription to *RSNA News* and:

- Subscription to *Radiology* and *RadioGraphics*
- Access to the myRSNA® personalized Web portal
- Free tools to help with continuing medical education
- Free advance registration to the RSNA annual meeting

Renew online at RSNA.org/renew or by mail with the invoice sent to you early in October. For more information, please contact membership@rsna.org or 1-877-RSNA-MEM (1-877-776-2636) or 1-630-571-7873 outside the U.S. and Canada.



Important Dates for RSNA 2012

- May 9:** Member registration and housing open
- June 6:** Non-Member registration and housing open
- June 13:** Exhibitor housing and registration open
- July 11:** Course enrollment opens
- October 19:** International deadline to have full-conference badge mailed
- November 2:** Final housing and discounted registration deadline
- November 21:** Deadline to guarantee a seat for all ticketed courses
- Nov. 25 – Nov. 30:** RSNA 98th Scientific Assembly & Annual Meeting

RSNA® 2012

NOVEMBER 25-30 | McCORMICK PLACE, CHICAGO

RSNA Annual Meeting Lures German Radiologist For More Than a Decade

Despite the considerable distance and formidable language barrier, Christian Zumkley, M.D., has made the nine-and-a-half-hour flight to Chicago for the last 11 years—without hesitation—for one reason: the RSNA annual meeting.

Dr. Zumkley, of Rheine, Germany, attended his first annual meeting in 2000 at a colleague's suggestion and has been hooked ever since.

"The first year, I was so impressed by the size of the meeting and the number of courses and technical exhibits, I couldn't wait to go back," Dr. Zumkley said. "I've been back every year since then!"

While the English classes he began taking in 5th grade have aided his American travels, he still has problems understanding the complexities of some of the RSNA sessions. "Sometimes I need them translated, but the courses are so amazing, I really learn a lot at every annual meeting."

In 2011, Dr. Zumkley continued his usual routine, staying with family friends in the Lakeview neighborhood and using a prepaid cell phone to make calls dur-

ing his visit. He usually arrives early so he can take in Chicago's vast array of cultural attractions, restaurants and local color.

"I love seeing Chicago...the museums, the shops, the different neighborhoods," Dr. Zumkley said. "There is even a German neighborhood here."

A radiologist at Mathias-Spital, a small hospital in Rheine, Dr. Zumkley welcomes the exposure to the latest research and cutting-edge technology. He often investigates new equipment, watches demonstrations and reports findings back to his colleagues. "We often have problems getting patient data from other hospitals, but technology here at RSNA allows you to access that kind of data."

Dr. Zumkley considers the annual meeting one of the biggest advantages of membership—along with free access to



Zumkley

the peer-reviewed journals that never fail to pique his interest.

"I read a *RadioGraphics* study about researchers who put an Egyptian mummy through a CT scanner. With a mummy, you don't have to worry about radiation," he laughed.

Residents & Fellows Corner

New Resident & Fellow Committee Chair Shares Thoughts on RSNA-Resident Relationship

Q What are the most significant issues facing residents and fellows today?

A In these uncertain economic times, it seems even more ominous to enter the job market. We just launched the first ever Resident and Fellow Symposium at RSNA 2011 and it was a huge success! More than 600 residents and fellows attended our Career 101 workshop. We discussed different kinds of jobs such as academic or private practice and how to wade through contract negotiations. We also touched upon other issues such as how to balance career and home life. I am looking forward to reviewing the evaluations so we can improve next year's conference.

We have been busy developing a website called Fellowship Connect which is a database for all radiology fellowship programs in the U.S. This is a very useful tool for someone to research their area of interest, especially if they have to stay in a specific geographic location. It's also a perfect way for fellowship programs to showcase themselves online.

Q Conversely, what are most significant ways that residents and fellows can contribute to the mission of the RSNA?

A Stay involved! Attend the meeting (virtually or physically), read the newsletters and volunteer your time for committees. At every stage of your

career, you need to be informed about the changes that are taking place in health-care. Whether it's the new board system, the evolving job market or changes in reimbursement you need to know what's happening. If there are changes in government that will alter how you practice, you need to show your support or opposition. RSNA is a forum for discussion about these topics and a powerful voice to shape the practice of radiology.

Q What is your vision for the RFC and what it can accomplish?

A I think we can accomplish quite a bit. I hope to continue to develop the Resident and Fellow Symposium to include more topics concerning the transition from trainee to junior attending. Whether it's stress management, financial planning or medicolegal pitfalls, inevitably there is a steep learning curve.

I also have an interest in promoting resident education abroad, from studying in a technologically advanced country or somewhere underdeveloped. It would expose the residents to alternative methods of evaluating disease and a different healthcare system altogether.

More residents attended RSNA this year than ever before, and those numbers hopefully will continue to grow. Since this is a new committee, we are open to ideas and eventually would like to see resident and/or fellow input for as many RSNA committees as possible.

Q How has involvement with RSNA personally benefited you and your career?

A With the success of our first symposium, my eyes have been opened as to how much we can accomplish even at our level of training. I worked with an incredibly talented group of residents/fellows and learned about the inner mechanics of such a large organization from our RSNA staff, faculty advisors and Board liaison. This cannot be accomplished in a classroom setting. It's been an incredible experience and reinforces my commitment to staying involved with RSNA throughout my career.



Annam

EDITOR'S NOTE

Aparna Annam, D.O., is the new chair of RSNA's Resident and Fellow Committee. Dr. Annam is a board-certified pediatrician in her last year of diagnostic radiology residency at Baylor University in Houston.

Residents from Around the World Share Impressions of RSNA 2011

We asked doctors in RSNA Residents Lounge what is it like to be a resident at the 2011 RSNA annual meeting...

Eun Kyung Park, M.D., a third-year resident at the Korea University in Seoul, attending for the first time, commented: "It's a lot to learn. It is my first visit to Chicago and it's very exciting to be in the city and at McCormick Place."



Owen O'Connor, M.D., a fellow from the Boston-based Massachusetts General Hospital, here for the second time, said, "It's a privilege to be able to come to RSNA and present my own research and also learn from others' experiences."



"Overwhelming!" is how Benita Tamrazi, M.D., a senior resident at Strong Memorial Hospital in Rochester, New York, attending for the third time, described the meeting. "I think it makes you more hopeful. You see your own community and every year it gets bigger so you know we're moving forward."



RSNA.org

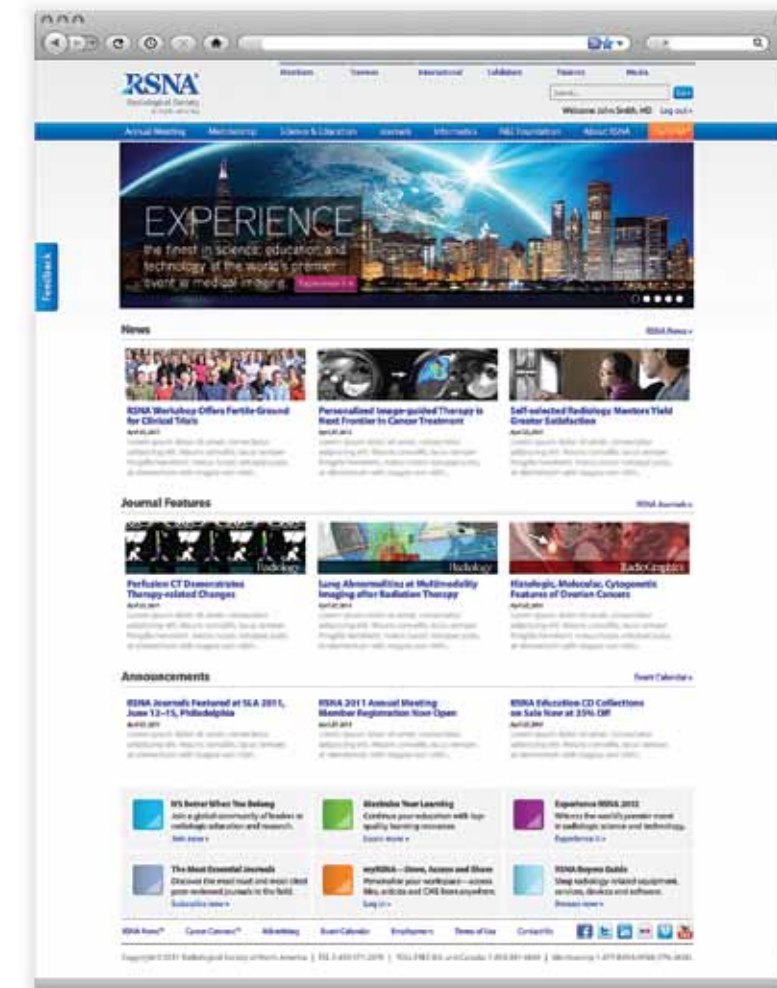
RSNA.org: The Revolution Starts Now

After gathering considerable input from users, RSNA is kicking off the New Year by unveiling its new, comprehensive website designed to communicate the Society's mission and serve the needs of its global audience.

Along with enhancements to the look and feel of *RSNA.org*, users will notice navigation and structural changes that make it easier than ever to access RSNA's vast array of dynamic content. Highlights include role-based pages designed to offer content relevant to RSNA members, patients, exhibitors and the media.

A full report on these and other enhancements to *RSNA.org* will appear in the February issue of *RSNA News*, while website features will be spotlighted on this page throughout the year.

Visit *RSNA.org* in early 2012 to experience the revolutionary changes under way.



Discover New Resources

Find additional articles, links and tools on the pages you're reading.

Explore Comprehensive Educational Content

Search smarter, based on your professional needs and areas of expertise.

See Late-breaking Medical Imaging News

See new stories and services as they happen.

COMING NEXT MONTH

Also next month, *RSNA News* will examine the business side of radiology and the importance of preparing trainees for the economic, financial and leadership challenges they will face after graduation. Experts will discuss strategies for learning and applying modern business and management concepts to daily medical practice.

CALL FOR ABSTRACTS

Do you want to present at RSNA 2012?

Submit abstracts for scientific presentations, applied science, education exhibits and quality storyboards.

DEADLINE
MARCH 31, 2012
12:00 NOON CHICAGO TIME

▼
SUBMIT
ONLINE AT
RSNA.ORG/ABSTRACTS

Questions? Call RSNA at: 1-877-776-2227 (*within U.S.*) or 1-630-590-7774 (*outside U.S.*)

Includes sessions in joint sponsorship with the American Association of Physicists in Medicine

RSNA® 2012

November 25–30 | McCormick Place, Chicago