Welcome to RSNA 2013

Dear Colleagues,

The RSNA 99th Scientific Assembly and Annual Meeting will be an event of a lifetime, and I am so proud to share it with you.

This year, we celebrate “The Power of Partnership.” Our specialty recognizes the importance of collaboration—across professions and around the world.

The power of our partnerships is the greatest strength of the radiologic community. Your presence at this global forum demonstrates that you are committed to forging and maintaining critical professional relationships, gaining expertise, and keeping your skills sharp in order to provide the very best care to your patients.

Take time to witness the fruits of our partnerships, including the BOOST sessions, focused on oncologic imaging and image-guided therapy, and “France Presents,” part of a continuing series that highlights the contributions of one of our strongest international contributors.

With your mobile device, you can have an even richer meeting experience—from enhanced education exhibits to Cases of the Day to the popular RSNA Diagnosis Live™ sessions. Stop by the Mobile Connect booth in RSNA Services for hands-on help with getting started.

Be sure to take advantage of countless opportunities to network with your colleagues, to enhance your education, to optimize your clinical skills, and to incorporate the cutting edge of research into your practice. Lend your voice to cooperative discussions that can change the world of healthcare for the better.

RSNA 2013 is the culmination of partnership at its best. Make the most of it.

On behalf of the RSNA Board of Directors, I wish you a wonderful week.

Sarah S. Donaldson, MD

2013 RSNA President
Saturday, November 30, 2013

12:00–2:00  AAPM/RSNA Physics Tutorial for Residents (SPPH01) Room E351
1:00–5:00  Radiologia de la Infeccion e Inflamacion: Session del Colegio Interamericano de Radiologia (CIR)/Imaging of Infection and Inflammation: Session of the Interamerican College of Radiology (CIR) in Spanish (SPSP01) Room E451A
     NIH Grantsmanship Workshop (SPGW01) Room E253AB
     RSNA/ARR Study Section Reviewers Workshop (SPRW01) Room E253CD
2:15–4:15  AAPM/RSNA Tutorial on Equipment Selection (SPPH02) Room E351

Sunday, December 1, 2013

8:30–10:15  Opening Session (PS10) Arie Crown
     Outstanding Educator Award and Outstanding Researcher Award Presentations
     President’s Address
     Annual Oration in Diagnostic Imaging
10:15–10:35  Business Session Arie Crown
10:30–11:30  Radiologist Assistants Symposium (MSRA11) Room S402AB
10:30–12:00  Pediatric Radiology Series (VSPD11) Room S100AB
10:45–12:15  Oncodiagnosis Panel (SPOI11) Room E353C
     Scientific Paper Sessions (SSA)
11:00–12:30  Informatics Courses (IC)
11:45–12:45  Radiologist Assistants Symposium (MSRA12) Room S402AB
12:15–2:00  Lunch—Scientific Informal (Posters) and Education Exhibits (CME: 12:30–1:30)
1:30–6:00  Interventional Oncology Series (VSI011) Room S405AB
2:00–3:00  Radiologist Assistants Symposium (MSRA13) Room S402AB
2:00–3:30  Refresher Courses and Workshops (RC100s)
     Pediatric Radiology Series (VSPD12) Room S102AB
3:15–4:15  Radiologist Assistants Symposium (MSRA14) Room S402AB
4:00–4:10  Report of the RSNA Research & Education Foundation Arie Crown
4:00–5:30  Informatics Courses (IC)
4:00–5:45  Image Interpretation Session (PS12) Arie Crown
4:30–5:30  Radiologist Assistants Symposium (MSRA15) Room S402AB
Monday, December 2, 2013

7:15–8:15  Hot Topics/Controversy Sessions (SPSC-SPSH)
Room S105AB

8:30–10:00  Associated Sciences Refresher Course (MSAS21)
Room S100AB
Case-based Review of Magnetic Resonance (MSCM21)
Room S100AB
Cardiac CT Mentored Case Review (MSMC21)
Room S406A
BOOST: Head and Neck—Anatomy and Contouring (An Interactive Session) (MSRO21)
Room S103AB
BOOST: Gynecology—Anatomy and Contouring (An Interactive Session) (MSRO24)
Room S103CD
Molecular Imaging Symposium (MSMI21)
Room S406B

8:30–12:00  Breast Series (VSB21)
Arie Crown
Emergency Radiology Series (VSR21)
Room E350
Gastrointestinal Series (VSGI21)
Room E251
Interventional Radiology Series (VSI21)
Room E352
Musculoskeletal Radiology Series (VSMK21)
Room E451B
Neuroradiology Series (VSNR21)
Room N230
Nuclear Medicine Series (VSNM21)
Room S505AB
Pediatric Radiology Series (VSIP21)
Room S102AB
Radiology Informatics Series (VSIN21)
Room S404CD

10:30–12:00  Informatics Courses (IC)
Associated Sciences Refresher Course (MSAS22)
Room S105AB
Case-based Review of Magnetic Resonance (MSCM22)
Room S100AB
BOOST: Head and Neck—Integrated Science and Practice (ISP) Session (MSRO22)
Room S103AB
BOOST: Gynecology—Integrated Science and Practice (ISP) Session (MSRO25)
Room S103CD
Molecular Imaging Symposium (MSMI22)
Room S406B
Scientific Paper Sessions (SSC)
France Presents Room E353C

10:30–12:15  Cardiac CT Mentored Case Review (MSMC22)
Room S406A

12:00–1:30  Lunch—Scientific Informal (Posters) and Education Exhibits (CME: 12:15–1:15)

12:30–2:00  Informatics Courses (IC)

1:30–2:45  Plenary Session: Eugene P. Pendergrass New Horizons Lecture (PS20)
Arie Crown
Alexander R. Margulis Award for Scientific Excellence Presentation
Honorary Membership Presentations
AAPM/RSNA Basic Physics Lecture for the Radiologic Technologist (SPPH21)
Room S102D
Associated Sciences Refresher Course (MSAS23)
Room S105AB
Case-based Review of Magnetic Resonance (MSCM23)
Room S100AB
Molecular Imaging Symposium (MSMI23)
Room S406B
Cardiac CT Mentored Case Review (MSMC23)
Room S406A
Program to Enhance Relational and Communication Skills for Radiologists (PERCS:Radiology) (SPRP21)
Room E271A
Interventional Oncology Series (VSI021)
Room S405AB
Informatics Courses (IC)
Scientific Paper Sessions (SSE)
BOOST: Head and Neck—Case-based Review (An Interactive Session) (MSRO23)
Room S103AB
BOOST: Gynecology—Case-based Review (An Interactive Session) (MSRO26)
Room S103CD
Estate Planning in Our New Tax Environment (SPEP21)
Room E253AB
Associated Sciences Refresher Course (MSAS24)
Room S105AB
Molecular Imaging Symposium (MSMI24)
Room S406B
Case-based Review of Magnetic Resonance (MSCM24)
Room S100AB
Cardiac CT Mentored Case Review (MSMC24)
Room S406A
RSNA Diagnosis Live™: Chest and Abdomen (SPDL21)
Room E450A
Special Interest Sessions (SIPS)
Informatics Courses (IC)
BOOST: Head and Neck Hands-On Contouring (MSRO29)
Room S104B
2013 RSNA AT A GLANCE

Tuesday, December 3, 2013

7:15–8:15 Hot Topics/Controversy Sessions (SPSC-SPSH)
   Room S105AB

8:30–10:00 Associated Sciences Refresher Course (MSAS31)
   Room S105AB

Case-based Review of Nuclear Medicine (MSCC31)
   Room S406A

Essentials of Radiology Course (MSES31) Room S100AB

Quality Improvement Symposium (MSQI31) Room S406B

BOOST: Gastrointestinal—Anatomy and Contouring (An Interactive Session) (MSRO31) Room S103AB

BOOST: Breast—Anatomy and Contouring (An Interactive Session) (MSRO34) Room S103CD

Refresher Courses and Workshops (RC300s)

8:30–12:00 Breast Series (VSBR31) Arie Crown

Emergency Radiology Series (VSER31) Room E352

Gastrointestinal Series (VSGI31) Room N230

Genitourinary Series (VSGU31) Room N228

Interventional Radiology Series (VSIR31) Room S405AB

Musculoskeletal Radiology Series (VSMK31) Room E451B

Neuroradiology Series (VSNR31) Room N227

Nuclear Medicine Series (VSNM31) Room S105AB

Pediatric Radiology Series (VSPD31) Room S102AB

Radiology Informatics Series (VSIN31) Room E502AB

10:00–10:20 Business Session Room S403B

10:30–12:00 Informatics Courses (IC)

Associated Sciences Refresher Course (MSAS32)
   Room S105AB

Case-based Review of Nuclear Medicine (MSCC32)
   Room S406A

Essentials of Radiology Course (MSES32) Room S100AB

Quality Improvement Symposium (MSQI32) Room S406B

BOOST: Gastrointestinal—Integrated Science and Practice (ISP) Session (MSRO32) Room S103AB

BOOST: Breast—Integrated Science and Practice (ISP) Session (MSRO35) Room S103CD

Scientific Paper Sessions (SSG)

12:00–1:00 Lunch—Scientific Informal (Posters) and Education Exhibits (CME: 12:15–1:15)

12:30–2:00 Informatics Courses (IC)

1:30–2:45 Plenary Session: Special Lecture by Condoleezza Rice, PhD (PS30) Arie Crown

Gold Medal Presentations

1:30–3:00 Associated Sciences Refresher Course (MSAS33)
   Room S105AB

Case-based Review of Nuclear Medicine (MSCC33)
   Room S406A

Essentials of Radiology Course (MSES33) Room S100AB

Quality Improvement Symposium (MSQI33) Room S406B

Interventional Oncology Series (VSIO31) Room S405AB

Informatics Courses (IC)

Scientific Paper Sessions (SSJ)

3:00–6:00 Interventional Oncology Series (VSIO32) Room S405AB

3:00–4:00 Refresher Courses and Workshops (RC400s)

3:00–5:00 Pediatric Radiology Series (VSPD32) Room S102AB

3:30–5:00 Associated Sciences Refresher Course (MSAS34)
   Room S105AB

Case-based Review of Nuclear Medicine (MSCC34)
   Room S105AB

Essentials of Radiology Course (MSES34) Room S100AB

3:00–6:00 Refresher Courses and Workshops (RC400s)

3:00–4:15 BOOST: Gastrointestinal—Case-based Review (An Interactive Session) (MSRO33) Room S103AB

BOOST: Breast—Case-based Review (An Interactive Session) (MSRO36) Room S103CD

Pediatric Radiology Series (VSPD32) Room S102AB

Associated Sciences Refresher Course (MSAS34)
   Room S105AB

Case-based Review of Nuclear Medicine (MSCC34)
   Room S406A

Essentials of Radiology Course (MSES34) Room S100AB

3:00–4:15 BOOST: Gastrointestinal—Integrated Science and Practice (ISP) Session (MSRO32) Room S103AB

BOOST: Breast—Integrated Science and Practice (ISP) Session (MSRO35) Room S103CD

Scientific Paper Sessions (SSG)
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<th>Event</th>
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<td>7:15–8:15</td>
<td>Hot Topics/Controversy Sessions (SPSC-SPSH)</td>
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<td>8:30–10:00</td>
<td>Associated Sciences Refresher Course (MSAS41) Room S105AB</td>
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<td><strong>BOOST: Genitourinary—Anatomy and Contouring (An Interactive Session)</strong> (MSRO41) Room S103CD</td>
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<td><strong>Case-based Review of Musculoskeletal Radiology (MSCS41) Room S406A</strong></td>
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<td><strong>Essentials of Radiology Course (MSES41) Room S100AB</strong></td>
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<td><strong>RSNA/ESR Emergency Symposium (MSSR41) Room S402AB</strong></td>
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<td><strong>Refresher Courses and Workshops (RC500s)</strong></td>
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<td>8:30–12:00</td>
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<td><strong>Neuroradiology Series (VSNR41) Room E451B</strong></td>
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<td><strong>Essentials of Radiology Course (MSES42) Room S100AB</strong></td>
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<td>Plenary Session: Annual Oration in Radiation Oncology (PS40) Arie Crown</td>
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<td><strong>Hospital Administrators Symposium (SPHA41) Room S103AB</strong></td>
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<td>RSNA Diagnosis Live™: Neuroradiology and Musculoskeletal Radiology (SPDL41) Room E451A</td>
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<td><strong>Controversy Sessions (SPSC)</strong></td>
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<td><strong>BOOST: Genitourinary Hands-on Contouring (MSRO49) Room S104B</strong></td>
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### Thursday, December 5, 2013

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<td>Hot Topic/Controversy Sessions (SPSC-SPSH)</td>
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<td>ASRT@RSNA 2013 (MSRT51) Room N230</td>
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<td>Refresher Courses and Workshops (RC600s)</td>
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<td>Vascular Imaging Series (VSVA51) Room S502AB</td>
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<td>Interventional Oncology Series (VSI051) Room S405AB</td>
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<td>3:00–4:00</td>
<td>RSNA Diagnosis Live™: Radiology Potpourri (SPDL51) Room E450A</td>
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### Friday, December 6, 2013

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<td>12:30–3:00</td>
<td>Friday Imaging Symposium (SPMK61) Room E350</td>
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2013 MEETING PROGRAM DEDICATIONS

In light of the 2013 annual meeting theme, “The Power of Partnership,” it is only fitting that RSNA dedicates its Meeting Program to the memory of two physicians who devoted much of their careers to forging relationships to further patient care.

David H. Hussey, MD

David H. Hussey, MD, 2005 RSNA president, used his position as an internationally respected radiation oncologist to effectively advocate for closer collaboration between diagnostic radiology and radiation oncology. Dr Hussey died April 17, 2013, at the age of 75.

“David Hussey was one of the most broad-based, and solid, clinical investigators in our field,” said 2013 RSNA President Sarah S. Donaldson, MD. “David created a culture of camaraderie throughout his professional career. Everyone who knew David loved him; everywhere he went, he had friends. He served as a role model to many of us, leading by example, and teaching the importance of integrating diagnostic imaging with oncology to further advance precision radiology.”

Dr Hussey was born in Savanna, Illinois. His father was the town family doctor. Dr Hussey earned his bachelor’s degree from Beloit College in Wisconsin and his medical doctor degree from Washington University School of Medicine in Saint Louis. He continued his medical training with an internship and a radiology residency at the University of Iowa and a radiation therapy fellowship at the University of Texas M. D. Anderson Hospital and Tumor Institute.

Between 1969 and 1983, Dr Hussey served on the faculty at the M. D. Anderson Hospital in Houston, where he directed the Fast Neutron Therapy program. He then spent a year in private practice before moving to the University of Iowa in Iowa City, where he directed the Division of Radiation Oncology for 15 years. He returned to Texas in 2001, joining the faculty of the University of Texas Health Science Center in San Antonio. He remained there until his retirement in 2006.

(continued on page 16)

Philip E. S. Palmer, MD

Philip E. S. Palmer, MD, spent much of his 70-year career collaborating with international colleagues to promote the use of radiology and radiation therapy around the world. Dr Palmer died January 3, 2013, at the age of 91.

Dr Palmer was an emeritus professor of radiology at the School of Medicine at the University of California (UC) Davis in Sacramento. He joined the staff in 1970 as the first radiology department chair and spent the next 20 years of his career there, also serving as director of diagnostic radiology at the UC Davis Medical Center.

“Dr Palmer was decades ahead of his time with his international collaborations and involvement with physicians, particularly radiologists worldwide,” said 2013 RSNA President Sarah S. Donaldson, MD. “He was truly a pioneer in his efforts to advance the best of radiology, particularly to underserved areas. The RSNA international efforts today are, in large part, patterned after the service and practice of Dr Palmer more than half a century ago.”

Dr Palmer was born in London, England. His father and grandfather were physicians. In 1939, as World War II loomed in Europe, he entered medical school at the University of London and served as an ambulance driver during the Blitz. After graduation, Dr Palmer became a surgeon at Westminster Hospital and was then sent to Portsmouth in June 1944 to serve as an anesthetist in a surgical unit that treated casualties from the landings at Normandy. This experience would lead to his first published article, a coauthored piece detailing the treatment of battlefield injuries. Dr Palmer went on to become Westminster’s senior medical officer, registrar, and the first surgical assistant in the radiotherapy
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<td>Accreditation</td>
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New Online Evaluation and Claim Center
RSNA 2013 attendees need not look for attendance “chits” in their registration materials. Attendees will now document their attendance by evaluating RSNA 2013 courses and sessions and claiming their credits online—via their own laptop and mobile devices or at any of the Internet Kiosks within McCormick Place. The new Online Evaluation and Claim Center allows attendees to begin their evaluations as early as 10 minutes after a course begins, claim their credits onsite, and walk away with printed certificates in hand. Attendees will also receive links via e-mail that allow printing of certificates at home, and for RSNA members, credits are automatically added to the RSNA CME Repository. After the meeting, attendees will still be able to evaluate courses and claim credit for 1 week.

Meeting App
Download the RSNA 2013 app for iPhone, iPad and Android smartphones and get Meeting Program access even when you’re offline. The app also offers maps for navigating McCormick Place, online help during the annual meeting, a QR code scanner for interactive exhibits and drawings, an agenda planner and exhibitor list access, and a notification center with important meeting alerts. Available via the App Store and Google Play, the RSNA 2013 app is sponsored by Siemens.

Virtual Meeting
With the vast offerings RSNA 2013 provides, it’s impossible to see it all at McCormick Place. Add the Virtual Meeting to your registration and tune in to a full slate of live and on-demand sessions during RSNA 2013 and on-demand sessions through December 13. The opportunity to earn CME credits is available for live activities. Go to RSNA.org/Virtual.

Self-assessment Modules (SAMs)
The American Board of Radiology (ABR) granted approval to the RSNA for SAM Deemed Status. This allows RSNA to develop and implement, without prior ABR review, enduring SAMs and in-person (“live”) SAMs that satisfy ABR Part II MOC requirements. Select RSNA refresher courses have been approved for SAMs. Each RSNA in-person SAM is available for 1.50 SAM credits and 1.50 AMA PRA Category 1 Credits™. Courses offered as SAMs are indicated in the Meeting Program with an icon.

Mobile Connect
Get the most out of your personal digital devices, including the on-the-go flexibility offered by RSNA’s mobile apps. Tech experts will be on hand in this casual, open environment in RSNA Services to help attendees get familiar with their mobile devices’ functions and introduce them to the apps RSNA offers for RSNA 2013, Radiology, RadiologyInfo™, RSNA News, and RadiologyInfo™. Stop by anytime during RSNA Services hours for personalized, hands-on help from an RSNA expert. Presentations from annual meeting presenters and technical exhibitors will also occur during the week.

RSNA Diagnosis Live™
These exciting moderated sessions feature a series of interactive case studies to challenge radiologists’ diagnostic skills utilizing RSNA Diagnosis Live™, the latest in presentation technology, developed by RSNA. Submit and discuss your responses with your colleagues in a fast-paced game format. Monday’s session (SPDL21) from 4:30 PM to 6:00 PM will feature chest and abdomen cases in Room E450A; Wednesday’s session (SPDL41) from 4:30 PM to 6:00 PM will feature neuroradiology and musculoskeletal cases in Room E451A; and Thursday’s session (SPDL51) from 3:00 PM to 4:00 PM will be a radiology potpourri in Room E450A.

Resident and Fellow Symposium
This program is tailored specifically for radiology trainees. To be held Wednesday from 1:30 PM to 5:45 PM in Room E451B, the program (MSRP41 and MSRP42) will address the radiology job market, the process of looking for a job, legal aspects of radiology, and dictation of radiology reports.

Pediatric and Nuclear Medicine/Molecular Imaging Campuses
Separate Pediatric and Nuclear Medicine/Molecular Imaging campuses feature many components—including refresher and series courses, scientific presentations, and education exhibits—of these subspecialties, to facilitate focused study during the week. The Pediatric Campus is located in Rooms S101AB and S102AB of McCormick Place. The Nuclear Medicine/Molecular Imaging Campus is located in Rooms S503AB, S504CD, and S505AB. Lunch-hour presentations of scientific posters and education exhibits in the Pediatric and Nuclear Medicine/Molecular Imaging subspecialties will take place in the campuses.

France Presents
This Celebration of International Partnership includes a scientific session on Monday from 10:30 AM to 12:00 PM in Room E353C, featuring the latest science from France and highlighting new oncologic imaging findings and techniques. Also at RSNA 2013, visit the French Society of Radiology in booth 1122, South Building, Hall A, to learn more about the radiology community in France and the contributions from French radiology to the RSNA annual meeting. A “Navigating the RSNA Meeting” session will be offered in French on Sunday at 10:00 AM at the Global Connection booth in RSNA Services.

CIR Spanish Program (with English Translation)
Radiología de la Infección e Inflamación: Sesión del Colegio Interamericano de Radiología (CIR) en Español/Imaging of Infection and Inflammation: Session of the Interamerican College of Radiology (CIR) offers a series of presentations for the Spanish-speaking radiological professional, with available simultaneous English translation. The session (SPSP01) is Saturday from 1:00 PM to 5:00 PM in Room E451A.

Hospital Administrators Symposium
The Hospital Administrators Symposium (SPHA41) on Wednesday in Room S103AB from 1:30 PM to 5:30 PM addresses radiology utilization management, mergers and acquisitions, issues and perspectives on teleradiology, new roles of radiologists, and the payer perspective.

Special Interest, Controversies and Hot Topics
These sessions, offered throughout the week, address important radiology-related topics that are late-breaking or particularly controversial, or require in-depth analysis. These 1–1½ hour sessions are approved for AMA PRA Category 1 Credits™. No tickets are required.

Quality Essentials Certificate (QEC) Sessions
Designed to recognize those who demonstrate a threshold level of knowledge in various quality improvement domains, QECs will be awarded to participants of the following sessions who earn 80% or higher on the related SAM test (Getting Radiologist Peer Review Right, SPSI22; Safety at Work, MSQI31; Keeping Our Customers Satisfied, MSQI32).

Radiology Cares: The Art of Patient-centered Practice
Stop by the Radiology Cares booth in RSNA Services to take the pledge and get a lapel pin and suitable-for-framing certificate acknowledging that patients are the focus of your radiology practice. Visitors can also learn more about the initiative, view patient-centered practice resources and share patient-centric ideas.
Academy of Radiology Leadership and Management
More than three dozen courses at RSNA 2013 count toward the Certificate of Achievement offered by the Academy of Radiology Leadership and Management (ARLM). Go to www.radleaders.org to learn how to obtain the Certificate of Achievement and see a list of qualifying courses offered at RSNA 2013. ARLM-eligible courses are designated with the ARLM icon in the Meeting Program.

Estate Planning Program
Estate Planning in Our New Tax Environment (SPEP21) will focus on the fundamentals of conventional estate planning for any financial situation, including planning strategies for retirement needs, Roth conversions, and charitable gifts. The program is on Monday, 3:00–5:30 PM, in Room E253AB. CME is not offered for this course.

QR Codes
Look for the QR codes listed in this program. Use your smartphone to scan the code and automatically download abstract information for the session or course. Information can also be downloaded using the codes on signs outside meeting rooms at McCormick Place.

“Patients First” 5k Fun Run
Enjoy a 5k event with your colleagues along Chicago’s beautiful Lake Michigan shore, and help fuel critical research to enable the best care for our patients. Check-in and warm-up start at 6:00 AM and the race officially begins at 6:30 AM on Tuesday at Arvey Field in South Grant Park, Chicago. Onsite at McCormick Place, sign up as a runner or walker for the “Patients First” 5k Fun Run. The sign-up donation of $40 will benefit the RSNA R&E Foundation and is fully tax deductible. Participants receive a commemorative T-shirt.

RSNA Services
Stop by RSNA Services, Level 3 of the Lakeside Center, to ask questions, get answers, and see demonstrations of RSNA’s exceptional services and new initiatives: Career Connect; RSNA Store; Membership; Journals, News & RadiologyInfo.org; Mobile Connect; myRSNA®; Radiology Cares, and the Research & Education Foundation. New this year in RSNA Services is an enhanced Global Connection area, including “Navigating the RSNA Meeting” sessions in a number of languages.

Integrating the Healthcare Enterprise (IHE®)
Visit the Integrating the Healthcare Enterprise (IHE®) exhibit in Booth 8140 in North Building, Hall B, for demonstrations by care sites and commercial vendors of IHE® methods for sharing image-enabled electronic health records and radiation dose information. Demonstrations take place regularly during exhibit hours.

Opening Session
Sunday, 8:30 AM, Arie Crown Theater (PS10)

Presentation of Outstanding Educator and Outstanding Researcher Awards
Bruce G. Haffty, MD, Outstanding Educator
Norbert J. Pelc, ScD, Outstanding Researcher

Dedication of the RSNA 2013 Meeting Program to the Memory of David H. Hussey, MD, and Philip E. S. Palmer, MD

President’s Address
The Power of Partnership
Sarah S. Donaldson, MD

In the current healthcare environment, radiologists must reexamine their traditional expectations, attitudes, and behaviors so as to embrace a requisite change in culture that builds partnerships throughout radiology, the general medical community, and the larger community of patients and families. This address illustrates the perils of technology that have unintentionally fragmented radiology and radiologists; yet in this current era of precision imaging and therapy, we find natural partnerships throughout the radiologic community. Within the general medical community, multidisciplinary team medicine mandates visibility of the radiologist, who must accept responsibility for patient care beyond rapid communication of imaging results. Team-based practice promotes collaborative clinical and research programs, augments one’s expertise, and builds careers. Professional interdependence promotes innovation and adds value to our collective endeavors. However, our most important partners are the patients we serve. When we commit ourselves to focusing on their care and becoming their partners, they will come to understand our contribution to diagnosis and treatment and will become our advocates. The physician-patient bond that is well-developed in oncology serves as a model for all of radiology and confirms the gratifications that come from being a patient-oriented radiologist.

Annual Oration in Diagnostic Radiology
We Must Stand on the Shoulders of Giants
Damian E. Dupuy, MD

Radiology and interventional oncology share a strong focus on cancer detection and staging, locoregional therapy, and follow-up. Despite their mutual goals and complementary skill sets, many radiology and radiation oncology departments struggle to be autonomous and at times compete for hospital resources and patients. In the new health care paradigm of evidence-based medicine, a cohesive team approach to cancer care makes the most economic sense. According to a 2008 American College of Radiology survey of U.S. radiology and radiation oncology practices, both prefer a large multispecialty group practice. It behooves these departments to reach a stronger collaboration, given the shared interests and synergy between their treatments. The time has come for a reunification of spirit as well as intellect—our patients will benefit. As Isaac Newton said, “If I have seen further than others, it is by standing upon the shoulders of giants.”
**Oncodiagnosis Panel**  
*Pediatric Sarcoma*  
**Sunday, 10:45 AM–12:15 PM, Room E353C (SPOI11)**  
In this session, attendees will learn about the principles of musculoskeletal imaging as it relates to soft tissue tumors arising in the extremity and trunk, as well as the basic physics principles and value of the imaging and therapeutic modalities involved in diagnosis, staging, and management of soft tissue sarcomas in children. Also to be covered are the cultural and economic differences that may influence practices of care for radiologic imaging in children with soft tissue sarcomas today and in the future, as well as the relative value of image-guided techniques in management of pediatric soft tissue sarcomas.

**Report of the RSNA Research & Education Foundation**  
**Sunday, 4:00–4:10 PM, Arie Crown Theater**  
**James P. Borgstede, MD**  
2013 was an incredibly successful year for the RSNA Research & Education (R&E) Foundation. This year, the Foundation was able to fund 83 grants totaling more than $3 million—the highest amount awarded in the Foundation’s history.  
This success is due in large part to the support of our many loyal partners. From our individual, private practice and corporate donors, to the investigators who apply for funding and the department chairs, advisors, and mentors who support them—the Foundation could not continue to flourish without our amazing supporting partners.  
The mission of the R&E Foundation is to advance radiologic research, education, and practice, and the bedrock of radiologic research is the R&E Foundation. Since its inception, the Foundation has awarded more than $40 million to nearly 1,000 educators and investigators. An R&E grant is a pathway to greater funding from sources such as the National Institutes of Health, and in the R&E Foundation’s brief history, the Foundation has enabled more than $1 billion in radiological research.  
A partnership with the R&E Foundation means that critical funding is being directed to young and seasoned investigators during all stages of their careers, thus ensuring that our specialty stays at the forefront by investing in the researchers and scholars who are driving the advances in radiological sciences. The recipients in the R&E class of 2013 are performing research in a number of different subspecialty areas using many modalities and techniques. Their promising projects have clinical and translational implications that will most certainly move our specialty forward.  
Visit the R&E Foundation Booth in the Lakeside Center Ballroom, Level 3, to learn more about the 2013 grant recipients and opportunities to support the future of our profession.

**Image Interpretation Session**  
**Sunday, 4:10–5:45 PM, Arie Crown Theater (PS12)**  
**Moderator: Gerald D. Dodd III, MD**  
This popular session leads attendees through identifying abnormal imaging findings, constructing differential diagnoses based on those findings, and making recommendations for further procedures or treatment.

**Monday Plenary Session**  
**Monday, 1:30–2:45 PM, Arie Crown Theater (PS20)**  
**Presentation of the Alexander R. Margulis Award for Scientific Excellence**  
This annual award for the best original scientific article published in *Radiology* is named for Alexander R. Margulis, MD, a distinguished investigator and inspiring visionary in the science of radiology.  
**Presentation of Honorary Memberships**  
Gabriel P. Krestin, MD, PhD, Rotterdam, Netherlands  
Anne W. M. Lee, MD, Shenzhen, China  
Małgorzata Szczerbo-Trojanowska, MD, Lublin, Poland  
**Eugene P. Pendergrass New Horizons Lecture**  
**Normal and Neoplastic Stem Cells: Implications for the Radiological Sciences**  
**Irving L. Weissman, MD**  
Research that bears on the earliest stages of cancer development as well as the sequelae of cancer treatment is of import not only to radiation oncologists but to diagnostic radiologists as well. An investigation led by Dr Weissman into blood-forming stem cells and their non-self-renewing progeny found that they hold promise for (1) regenerating the hematopoietic system after chemotherapy and radiation for cancer, (2) replacing genetically defective or otherwise damaged blood-forming systems, (3) understanding the stages of hematopoiesis that harbor the earliest stages of preleukemia, and (4) providing the first constant target found on all cancers.

**Tuesday Plenary Session**  
**Tuesday, 1:30–2:45 PM, Arie Crown Theater (PS30)**  
**Presentation of Gold Medals**  
Theresa C. McLoud, MD, Boston, MA  
Harvey L. Neiman, MD, Reston, VA  
J. Frank Wilson, MD, Milwaukee, WI  
**Special Lecture**  
**Mobilizing Human Potential**  
**Condoleezza Rice, PhD**  
Continuing to address the healthcare challenges of the 21st century means answering some critical questions: How do we educate the students of tomorrow? How do we foster leadership among present and future practitioners? Former U.S. Secretary of State Condoleezza Rice, PhD, will offer her experiences in how resources can be identified, attracted, and mobilized to solve problems and forge new paths for the benefit of people worldwide.
Wednesday Plenary Session
Wednesday, 1:30–2:45 PM, Arie Crown Theater (PS40)

Annual Oration in Radiation Oncology
Beneficial Liaisons: Imaging and Therapy
Paul M. Harari, MD

See the tumor, treat the tumor. How complicated can this be? Not long ago, external anatomy and plain X-rays served as the primary guide for radiation therapy. Broad field design was the prevailing paradigm, with the knowledge that the tumor surely resided within. Collateral normal tissue damage was a necessary accompaniment of treatment, and tumor dose was largely limited by normal organ tolerance. Today we deliver ablative radiation doses to complex three-dimensional tumor shapes virtually anywhere in the body. We create sharp dose gradients between tumor and critical normal tissues and seek high precision for daily treatment across thousands of patients.

We are poised to move well beyond “see the tumor, treat the tumor.” We are on the threshold of unparalleled visualization within tumors, tracking individual tumor cells, developing diapeutic agents to simultaneously image and treat, and harnessing early response profiles to shape more personalized and effective future therapies. Strengthening the bond of interaction between diagnostic and therapeutic practitioners in oncology has never been more vital and gratifying.

Thursday Plenary Session
Thursday, 1:30–2:45 PM, Arie Crown Theater (PS50)

RSNA/AAPM Symposium
Imaging in Partnership: With Radiation Therapy
David A. Jaffray, PhD

Imaging in Partnership: With Physics and Quantitative Medicine
James A. Deye, PhD

In this symposium presented in conjunction with the American Association of Physicists in Medicine, learn how multimodality imaging methods are being used in combination with high-precision radiation therapy delivery techniques to understand fundamental mechanisms of cancer pathogenesis, progression, and treatment response. Also to be addressed are the challenges and advances associated with quantitative imaging, and how more accurate and quantitative imaging is central to advancing the understanding of major questions in 21st century medicine. Learn how imaging, in partnership with medical physics and other technical and clinical disciplines, provides a vital tool and multidisciplinary expertise for such advances.

Friday Imaging Symposium
Friday Imaging Symposium
MR Imaging of Common Musculoskeletal Injuries
Friday, 12:30–3:00 PM, Room E350 (SPMK61)
Moderator: Mark D. Murphy, MD

Learn how to recognize the common patterns of meniscal injuries on MR imaging and their clinical importance, including the MR appearance of hip labral tears and patterns of femoroacetabular impingement syndrome (FAI). Also to be discussed are common MR patterns and locations of rotator cuff tears and the importance of associated tendon retraction and muscle atrophy and the patterns of injury and MR appearance associated with cruciate and collateral ligament injuries of the knee.
THE R&E FOUNDATION—A POWERFUL PARTNER

Since 1984, R&E grants have given nearly 1,000 of the brightest minds in radiology the funding and protected time needed to discover new methods to diagnose and fight disease, devise sophisticated technologies and cultivate the workforce of the future.

Look for the icon throughout the program book to see many of these bright minds sharing their research, knowledge and experience by teaching refresher courses, lecturing in plenary and scientific sessions, and sharing their ideas on posters. The work they are doing now will impact patient care and clinical practice.

The R&E Foundation would not be able to fund bright minds or bright ideas without the support of thousands of individuals, private practices, and corporations that share in its mission. Continued support is needed to make funding available for new research and education projects that will impact your profession. Join your colleagues today, and do your part to invest in the research that you will be looking for at future RSNA meetings.

Visit the R&E Foundation in RSNA Services to see the current projects being funded, learn about grant opportunities, and make a donation (Lakeside Center Ballroom, Level 3).
The RSNA® Scientific Assembly and Annual Meeting is the official meeting of the Radiological Society of North America. RSNA is a registered trademark of the Radiological Society of North America.

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Accreditation and Designation Statements

The Radiological Society of North America (RSNA) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The RSNA designates this live activity for a maximum of 93.75 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The Commission on Accreditation of Medical Physics Education Programs (CAMPEP) has approved the direct transfer of AMA PRA Category 1 Credit™ to Medical Physics Continuing Education Credit (MPCEC) on a credit-for-credit basis for medical physicists.

RSNA is an ARRT®-approved Recognized Continuing Education Evaluation Mechanism Plus (RCEEM+) and will provide Category A/A+ continuing education credits for radiologic technologists and radiologist assistants.

Content Codes

To help participants better organize their CME records, two-letter content codes have been indicated throughout the program. The key to the codes follows:

- **BR**: Breast (Imaging and Interventional)
- **CA**: Cardiac Radiology
- **CH**: Chest Radiology
- **CT**: Computed Tomography
- **DM**: Digital Mammography
- **ED**: Education
- **ER**: Emergency Radiology
- **GI**: Gastrointestinal Radiology
- **GN**: General
- **GU**: Genitourinary Radiology
- **HN**: Head and Neck
- **HP**: Health Policy
- **IN**: Informatics
- **IR**: Interventional
- **LM**: Leadership & Management
- **MT**: Molecular Imaging
- **MK**: Musculoskeletal Radiology
- **MR**: Magnetic Resonance Imaging
- **NM**: Nuclear Medicine
- **NR**: Neuroradiology
- **OB**: Obstetric/Gynecologic Radiology
- **OM**: Oncologic Imaging
- **OT**: Other
- **PD**: Pediatric Radiology
- **PH**: Physics and Basic Science
- **PR**: Professionalism
- **QA**: Quality Assurance/Quality Improvement
- **RO**: Radiation Oncology
- **RS**: Research and Statistical Methods
- **US**: Ultrasound
- **VA**: Vascular

Learning Objectives

At the conclusion of this live activity, participants will be able to:

1. Access the results of new research, and assess their potential applications to clinical practice.
2. Improve basic knowledge and skills relevant to clinical practice.
3. Practice new techniques.
4. Assess the potential of technological innovations and advances to enhance clinical practice and problem solving.
5. Apply principles of critical thinking to ideas from experts and peers in the radiologic sciences.

Continuing Education

CE Credit

In order to record and obtain Category A/A+ continuing education (CE) credits, all ARRT registered technologists and radiologist assistants must follow ARRT guidelines. Failure to do so will result in no credits being awarded.

- Attendance will be verified with a check-in and checkout process for all courses and events; therefore, all registrants looking to obtain Category A/A+ credit must be present for the duration of the course or event.
- ARRT Attendance Documentation Cards will be available at the door for all courses and events that are approved for Category A/A+ credit.
- Attendee must obtain an ARRT Attendance Documentation Card at the beginning of the session, complete the card, and return it to the room attendant at the end of the session.
- Additionally, attendees must evaluate the session using RSNA’s Online Evaluation and Claim Center, document your attendance by using the RSNA’s Online Evaluation and Claim Center (OECC).
- An attendee arriving late or departing early will not obtain credit.
- Any attendee who forgoes submitting the ARRT Attendance Documentation Card at the close of the session will not obtain credit.

CME Credit

**Scientific Formal (Paper) and Plenary Sessions, Refresher Courses, Multisession Courses, Series Courses, and Informatics Courses**

All sessions/courses have been approved for AMA PRA Category 1 Credit™. To register attendance, claim credit, and evaluate the sessions, visit the RSNA’s Online Evaluation and Claim Center (OECC).

**Education Exhibits, Scientific Informal (Poster) Presentations, and Quality Storyboards**

AMA PRA Category 1 Credit™ is available for scientific informal (poster) presentations, quality storyboards, and selected education exhibits on Sunday, 12:30–1:30 PM, and Monday–Thursday, 12:15–1:15 PM. At the conclusion of discussions during the lunch period with the presenters of education exhibits, scientific informal (poster) presentations, and quality storyboards in the Lakeside Learning Center, document your attendance by using the RSNA’s Online Evaluation and Claim Center (OECC).

Education exhibits at RSNA 2013 will include the popular Cases of the Day feature. Each day, from Sunday through Thursday, a new case in each of 15 categories will be posted. Attendees will be able to submit a diagnosis for each case on the computer presentation system, at nearby Internet Zone computers, or via any Web browser. For each correct diagnosis submitted online, participants will earn .50 AMA PRA Category 1 Credit™.
References to Abstracts in the Online 2013 RSNA Meeting Program

To cite an abstract from the 2013 online meeting program, go to RSNA2013.RSNA.org to access the complete online program. Search for and access the text of the specific abstract you wish to cite, and then click on the box labeled “Cite this Abstract” at top left to access the specific abstract citation information for that particular online abstract.

The general format for citing an online RSNA 2013 abstract is as follows:


To obtain permission to reprint abstracts from the RSNA Meeting Program, go to www.rsna.org/publications/rsnarights. For additional information, contact permissions@RSNA.org, or send a fax to 1-630-590-7724. Direct inquiries by mail to Permissions, RSNA, 820 Jorie Blvd, Oak Brook, IL 60523. Requests should include the title, first author, year of meeting presentation, and intended use of the material.

RSNA 2013 Virtual Meeting

The meeting is not only at McCormick Place. The RSNA 2013 Virtual Meeting allows users to experience the world’s premier medical imaging event from anywhere in the world via the Internet with a Mac or PC. Participants can access live streaming courses and digital presentations. Many offerings are available for CME credit during the live sessions, and content will be available “on demand” through Friday (December 13). Visit RSNA2013.RSNA.org to register.

Subspecialty Content

Customizing your RSNA 2013 itinerary is easy through the enhanced sorting capability of the online RSNA Meeting Program. Go to RSNA2013.RSNA.org and click on Meeting Program to search for scientific presentations and other events by radiologic subspecialty. Choose a subspecialty of interest to you, view all of the meeting content in that subspecialty, and download and print it to facilitate your daily meeting plan. Printed brochures will also be available onsite at the convention center.

CME Disclosure

The ACCME requires that RSNA, as an accredited provider of continuing medical education, obtain signed disclosure statements from annual meeting faculty, including committee members, program planners, presenters, and authors. The intent of this policy is not to prevent an individual with a financial relationship from participating; however, in accordance with ACCME standards, RSNA has developed policies and procedures to manage identified conflicts of interest.

The ACCME further requires that RSNA provide disclosure information to all attendees prior to the educational activity. Individuals who have or have had an affiliation or financial relationship with any commercial interest (within the previous 12 months or at the time the research was conducted) are noted with a star (★) after their names in the program book. Financial disclosure statements for these individuals are reported after each individual’s name in the disclosure index at the back of the program book (p 453). All other individuals have indicated they have nothing to disclose.

This icon indicates discussion of uses not approved by the FDA. RSNA recognizes that at educational meetings, faculty may discuss the application of some devices, materials, or pharmaceuticals that are not FDA approved. In keeping with the highest standards of professional integrity and ethics, RSNA requires that faculty fully disclose to their audiences that there will be discussion of the unlabeled use of a commercial product, device, or pharmaceutical that has not been approved for such purpose by the FDA.

Authors of scientific abstracts at RSNA 2013 have guaranteed that human research was conducted following institutional review board (IRB) approval, under a waiver from the IRB, or in accordance with the World Medical Association Declaration of Helsinki, and that animal research was conducted following approval by the institutional animal care and use committee or in accordance with the National Institutes of Health Public Health Service Policy on Humane Care and Use of Laboratory Animals.

QR Codes

Look for the QR codes accompanying plenary and scientific sessions and special, multisession, series, and refresher courses listed in this program. Use your smartphone to scan the code and automatically download abstract information for the session or course. Information can also be downloaded by using the codes on signs outside meeting rooms at the McCormick Place Convention Center.
in the subspecialties of radiology, and has made significant contributions to the field of radiation oncology and his commitment to creating partnerships within the subspecialties of radiology, and was responsible for attracting many of the radiation oncology leaders of today into the field.

In his RSNA 2005 president’s address, Dr Hussey urged closer collaboration between diagnostic radiology and radiation oncology, as well as among specialties in general, saying, “As a radiation oncologist who was trained first as a radiologist, I understand the role that each specialty plays individually, as well as the strength of the specialties when they work together.”

Upon receiving the RSNA Gold Medal at RSNA 2010, Dr Hussey recalled that RSNA was the first scientific meeting he attended as a physician. As such, it “made a significant impact on me in some of the most formative years of my career,” he said. “I was in a general radiology residency at the time. I went on to sub-specialize in radiation oncology. Imaging has always been very important for radiation therapy, but it’s been even more important in recent years.”

In addition to his service to RSNA, Dr Hussey provided leadership in all the major radiation oncology national organizations, including serving as president of the American Radium Society and the American Society for Therapeutic Radiology and Oncology (ASTRO, now the American Society for Radiation Oncology). Dr Hussey led efforts to develop a radiation oncology maintenance of certification program within ASTRO. As a trustee of the American Board of Radiology, Dr Hussey contributed significantly to the recertification examination in radiation oncology, as well as the effort to computerize the oral and written examinations. He also developed a tutorial for those writing items for the radiation oncology written examination.

Dr Hussey was honored with distinguished alumni awards from the M. D. Anderson Cancer Center and the Washington University Medical School and fellowships in the American College of Radiology and ASTRO. He is an honorary member of the European Congress of Radiology. He published more than 180 scientific articles and 38 book chapters and delivered numerous invited lectures throughout the United States and abroad.

In recognition of his significant accomplishments and contributions to the field of radiation oncology and his commitment to creating partnerships within the subspecialties of radiology, RSNA is honored to dedicate the 2013 RSNA Meeting Program to the memory of David H. Hussey, MD.

Dr Palmer’s emigration to Southern Rhodesia (now Zimbabwe) with his family in 1954 marked the beginning of some of his greatest contributions to radiology. He developed X-ray imaging services in rural areas and introduced advanced techniques in Bulawayo, the country’s second largest city. While chairman of radiology at the University of Cape Town, Dr Palmer revised postgraduate training, renovated the radiology departments of the university’s major hospitals, and became an internationally recognized invited speaker.

In 1968, Dr Palmer brought his expertise to North America, joining the radiology faculty of the University of Pennsylvania School of Medicine. Two years later, he was invited to become the first professor of diagnostic radiology at UC Davis, remaining there until his retirement in 1990.

Dr Palmer joined other global radiology pioneers at a meeting organized in 1975 by the Pan American Health Organization/Regional Office of the World Health Organization (WHO). The group devised a system to make high-quality X-ray imaging services available to underserved populations around the world. The system, originally called the WHO Basic Radiological System (BRS), now the WHIS-RAD, comprised a high-quality, dependable X-ray machine and training materials to help prepare competent operators in a short period of time.

For nearly the next 40 years, Dr Palmer assisted WHO and its regional offices. His last publication, “Diagnostic Imaging in the Community: A Manual for Clinics and Small Hospitals,” was completed only a year before his death. Dr Palmer was a member of the WHO Expert Panel on Radiation and visited numerous countries as a consultant to provide advice on radiological services. He was the coauthor and/or editor of WHO-published manuals on radiographic technique, radiographic interpretation, darkroom technique, ultrasound, and the organization of basic diagnostic imaging services. Dr Palmer also coauthored the two-volume textbook, The Imaging of Tropical Diseases.

Dr Palmer received the Roentgen Medal from the German Radiological Society in 1993. He received the first Béclère Medal, the highest award of the International Society of Radiology, and gave the first Béclère Lecture in 1996. Dr Palmer served as RSNA second vice-president in 1994 and received the RSNA Special Presidential Award in 2000.

For his commitment to partnerships with radiologists internationally, and for advancing radiology everywhere he traveled, RSNA is honored to dedicate the 2013 RSNA Meeting Program to the memory of Philip E. S. Palmer, MD.
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Past Presidents: The list of the Past Presidents of the RSNA is available online at:
Theresa C. McLeod, MD

A world-renowned thoracic radiologist, 2008 RSNA President Theresa C. McLeod, MD, is one of the foremost educators in her field, as well a passionate promoter of the globalization of radiology.

Throughout her career, Dr McLeod has earned a reputation as a “doctor’s doctor” often sought out to consult on the most difficult and challenging cases, as well as a greatly respected educational leader who has helped launch the successful careers of some of today’s foremost academic radiologists. Along the way, Dr McLeod has forged new territory for women, serving as the first woman in the history of radiology at the Massachusetts General Hospital (MGH) in Boston to hold the rank of professor at Harvard.

“Dr McLeod has been a major leader in radiologic education for decades. Her impact on radiology educational programs extends across North America and around the world,” said 2013 RSNA President Sarah S. Donaldson, MD. “In addition she has been a stellar role model to radiologists worldwide. I am personally indebted to Theresa for the many lessons I have learned from her.

I am thrilled to be able to present the RSNA Gold Medal to Theresa McLeod for her multiple contributions to our discipline.”

“I am deeply honored to receive the RSNA Gold Medal,” Dr McLeod said. “I would like to acknowledge the support and contributions so many individuals have made to the success of my career. Particular gratitude is due to my family, my academic mentors, and colleagues throughout the years, and to the members of the RSNA Board of Directors and the RSNA staff during my long association with such an outstanding organization.”

A Boston native, Dr McLeod earned her medical degree from the McGill University (Montreal, Quebec), where she also completed her residency in radiology. After a thoracic imaging fellowship at Yale University School of Medicine (New Haven, Conn), she quickly became an assistant professor of diagnostic radiology at Yale. In 1976, she returned to Boston and joined Harvard Medical School, where she has been professor of radiology since 1993. Dr McLeod served as chief of thoracic radiology from 1982 to 1996 and chief of thoracic and cardiac radiology from 1996 to 2001 and is currently vice-chair of education in the Department of Radiology at MGH. A consistent leader in departmental and institutional initiatives, Dr McLeod played a pivotal role in the MGH transition into the digital era of medical imaging.

One of the foremost educators in her field, Dr McLeod’s impact is felt in the daily practices of nearly anyone practicing thoracic radiology today. Her warmth and level of commitment to her role as an education leader have earned the unwavering respect and admiration of the residents she has mentored throughout her career.

Dr McLeod’s research in interstitial lung disease, CT of the thorax, lung cancer imaging, and occupational lung disease has taken her around the world, conducting postgraduate teaching and visiting lectures in Brazil, Argentina, Mexico, Chile, South Africa, Canada, Austria, and other countries. She is also an honorary member of the Chilean Society of Respiratory Diseases, Royal Australian College of Radiology, European Society of Radiology, and the Spanish, Argentinean, Italian, Mexican, Australia-New Zealand, and French societies of radiology.

That global perspective was central to Dr McLeod’s 2008 Presidential Address, “Trends in Radiology Training: North American and International Implications,” where she stressed that, “The globalization of healthcare science and practice, coupled with electronic distribution of images, now provides for distance learning around the globe.” Her attention to the needs of the international community in RSNA’s education, science, and research endeavors continues to affect the society’s global impact and its mission.

An RSNA member since 1979, Dr McLeod began her term on the RSNA Board of Directors in 2001, was board chair in 2006, and served as president in 2008. She has also worked on the Scientific Program Committee, serving as its chair from 1998 to 2000. Dr McLeod’s long list of awards includes gold medals from the American Roentgen Ray Society (ARRS) in 2003, the Society of Thoracic Radiology in 2010, and the International Cancer Imaging Society in 2012. In 2003, she received the Marie Curie Award, the highest honor bestowed by the American Association for Women Radiologists. She is past president of the Fleischner Society, the Society of Thoracic Radiology, and ARRS.

Dr McLeod has conducted more than 150 postgraduate courses and published more than 200 scientific papers, reviews, and book chapters. Now in its second edition, her 1998 text, Thoracic Radiology: The Requisites, remains a popular and comprehensive introductory work. Her extensive literary career includes serving as associate editor for Radiology and serving on the editorial boards for RadioGraphics and the Journal of Thoracic Imaging and on the international editorial boards of the Turkish Journal of Radiology and Revista Argentina de Radiologia, among others.

In recognition of her significant contributions to thoracic radiology and her pioneering role in leading the way for innovations in radiologic education throughout the world, RSNA is proud to award its Gold Medal to Theresa C. McLeod, MD.
Dr Neiman has served as chief executive officer (CEO) of the American College of Radiology (ACR) since 2003 and will retire in spring 2014.

“Harvey Neiman has had a tremendous impact on the entire field of American radiology which will resonate for many years to come,” said 2013 RSNA President Sarah S. Donaldson, MD. “He has influenced the practice of radiology at every level of the radiologic sciences and touched the lives of all of us. Visionary leadership and skills at consensus building are the hallmarks of his truly distinguished career.”

“I am truly honored to receive the RSNA Gold Medal,” Dr Neiman said. “RSNA is an organization that demonstrates expertise in all areas of radiology, and to be chosen to represent this is an honor I could only dream about.”

Dr Neiman was born in Detroit, Mich. He received his bachelor’s and medical degrees from Wayne State University in Detroit and completed his radiology residency and a fellowship in angiography at the University of Michigan in Ann Arbor. He is accomplished as an educator and administrator—he began his career in Washington, DC, as an instructor at the Armed Forces Institute of Pathology and chief of cardiovascular radiology at Walter Reed Army Medical Center. He spent the next 10 years as a professor at Northwestern University in Chicago, where he also served as director of angiography and sectional imaging. He also was director of angiography at Children’s Memorial Hospital in Chicago. Dr Neiman was a clinical professor of radiology at the University of Pittsburgh from 1985 to 2002 and a professor of radiology at Temple University in Philadelphia from 2000 to 2003; during that time, he also served as chair of the Department of Radiology at the Western Pennsylvania Hospital in Pittsburgh.

An RSNA member since 1977, Dr Neiman has served as a refresher course faculty member and plenary session moderator for numerous RSNA annual meetings.

Within the ACR, Dr Neiman has served on numerous committees and commissions, including those on education, ultrasound, and economics. Dr Neiman chaired the ACR commissions on ultrasound and economics and served as a member of the ACR Board of Chancellors from 1994 to 2002 and as chairman of the board from 2000 to 2002.

During his tenure as ACR CEO, Dr Neiman has helped establish the ACR Education Center, the Radiology Leadership Institute, the Harvey Neiman Health Policy Institute, and the American Institute for Radiologic Pathology. When asked his vision of the ACR, he reiterates that his goal is for ACR resources—in government relations, economics and health policy, education, clinical and economic research, and quality and safety—to be of maximum benefit to radiologists across the United States.

Dr Neiman has published more than 125 scientific papers and 26 book chapters and is the author of the book, *Angiography of Vascular Disease*. He has given nearly 300 invited lectures and scientific presentations. Among the many honors he has received are the Teacher of the Year award of the Radiology Residency Program at the Western Pennsylvania Hospital, the Distinguished Alumni Award from Wayne State University School of Medicine, and the Presidential Award of the American Institute of Ultrasound in Medicine. Dr Neiman was named an honorary member of the Society for Pediatric Radiology and received the ACR Gold Medal in May 2013.

In honor of a distinguished career that has touched so many inside and outside the community of radiology, RSNA is pleased to present Harvey L. Neiman, MD, with its Gold Medal.
J. Frank Wilson, MD

Renowned for his leadership and commitment to radiation oncology, J. Frank Wilson, MD, was an early advocate for breast conservation therapy and is internationally regarded as an authority on breast cancer. He has been consistently recognized as one of the top physicians in America.

Equally respected for his role as an educator, Dr Wilson has lent his considerable expertise to teaching his colleagues the most cutting-edge radiation therapy techniques—including brachytherapy—and mentoring countless radiation oncology students, residents, and junior faculty who rank among the specialty’s finest leaders today.

“I’ve personally known Dr Wilson since the earliest days of his residency and consider him one of the most effective leaders our field has known,” said 2013 RSNA President Sarah S. Donaldson, MD. “As a respected clinical investigator and leader in virtually all aspects of radiation oncology, he has helped move our discipline to its premier position today. Along with being one of the specialty’s longest serving department chairs, he is one of the most loyal, dedicated, and effective leaders in North American radiation oncology.”

“I attended my first RSNA meeting as a junior resident in the mid-1960s,” Dr Wilson said. “It was a very exciting and deeply impressive learning experience that highly influenced my ultimate career path. RSNA and its members have been central to my professional and personal life ever since. Accordingly, I am deeply respectful of the honor that I am to receive and very grateful to the community of colleagues in radiology with whom I have been associated for so many years.”

Born in Huntsville, Missouri, Dr Wilson earned his undergraduate and medical degrees from the University of Missouri before completing his residency in radiation oncology at Penrose Cancer Hospital (Colorado Springs, Colo). He served fellowships in the Radiation Branch of the National Institutes of Health and at Hospital Creteil, University of Paris. Dr Wilson joined the Medical College of Wisconsin (MCW) in 1974 as an assistant professor of radiology, rising to professor of radiation oncology in 1985 and department chair in 1986. He served as director of the MCW Cancer Center from 1994 to 2000. Today, Dr Wilson serves as chair and Bernard & Miriam Peck Family Professor of Radiation Oncology and director emeritus of the MCW Cancer Center.

In addition to quality of cancer care and breast cancer, Dr Wilson’s research interests have included developmental aspects of brachytherapy, a field in which he has coauthored several seminal textbooks. His expertise in brachytherapy began in the mid-1970s when he completed his fellowship in Paris and learned brachytherapy (then called curietherapy) from the French masters. Dr Wilson returned to the United States and educated American radiation oncologists on the burgeoning treatment, contributing greatly to the radiotherapy of women’s cancers.

A prolific author, Dr Wilson has published more than 200 papers and abstracts and 21 books or chapters and has presented lectures across the globe on the role of radiation therapy in the management of cancer. He served as chair and principal investigator of the National Cancer Institute–funded American College of Radiology (ACR) Quality Research in Radiation Oncology (QRRO) project dedicated to improving the quality of radiation oncology care by developing evidence-based performance measures and conducting nationwide surveys of radiation therapy practice.

Dr Wilson’s own literary career has been prodigious. He served as editor of the International Journal of Radiation Oncology • Biology • Physics (IJROBP) from 1988 to 1996. He served on the editorial board of the Journal of the American College of Radiology and holds current positions on the editorial boards of the Turkish Journal of Cancer, Oncology, Cancer Radiotherapy, and the Jordonian Medical Journal. Dr Wilson also serves as a reviewer for Radiation and IJROBP, among other journals.

An RSNA member since 1985, Dr Wilson delivered the Annual Oration in Radiation Oncology in 1998. He has held numerous positions within RSNA, serving as vice-president in 1999 and on the Committee on International Relations & Education from 1995 to 1998. He is a current member of the RSNA Public Information Advisors Network and the Centennial Planning Committee.

Dr Wilson served 6 years on the ACR Board of Chancellors and as ACR vice-president in 2004. He was named an ACR Fellow in 1988. He is past president of the American Society for Radiation Oncology (ASTRO) and of the American Radium Society.

Dr Wilson received gold medals from ASTRO in 2003 and from ACR and the Juan del Regato Foundation in 2006. In 2008, he received Froedtert Hospital’s highest honor, the Smallwood Award for Patient Care Excellence. In 2011, he received the Honorary Alumnus Award from the MCW/Marquette Medical Alumni Association and the Heritage and Hope Award from the Froedtert Hospital Foundation.

For his extensive contributions to radiation oncology advancement and his unwavering leadership and tireless dedication to breast cancer research and treatment, RSNA is proud to present J. Frank Wilson, MD, with its Gold Medal.
As 2012 president of the European Society of Radiology (ESR), Dr Krestin oversaw the launch of the first International Day of Radiology aimed at building greater awareness of the value that radiology contributes to patient care and healthcare overall. The success of the joint initiative of ESR, RSNA, and the American College of Radiology (ACR)—which grew from the first European Day of Radiology in 2011—demonstrates Dr Krestin’s commitment to keeping radiology in the spotlight across the globe.

“By forging an alliance across radiology worldwide, Dr Krestin supports the RSNA 2013 theme, ‘The Power of Partnership,’ and has cemented a strong partnership between ESR and RSNA,” said RSNA 2013 President Sarah S. Donaldson, MD. “Dr Krestin is a scholar of both the arts and sciences. While radiologists around the world learn from his scientific contributions, the walls of Dr Krestin’s home are covered with his collections of fine paintings. He is a true humanitarian with unparalleled devotion to the radiological sciences.”

“It is a great privilege to follow in the footsteps of the eminent international radiologists who have been bestowed with RSNA Honorary Membership, and I consider this honor a true recognition of the joint efforts of our societies to promote and strengthen all aspects of our profession,” Dr Krestin said.

Born in Romania, Dr Krestin immigrated to Germany at the age of 19. In 1981, he graduated from the faculty of medicine at the University of Cologne, Germany, where he completed his radiology residency and his doctoral thesis. In 1990, he was appointed staff radiologist and head of the MRI Centre at the Department of Radiology at Zurich University Hospital in Switzerland, where he became associate professor of radiology, head of the clinical radiology service, and acting chair of the Department of Diagnostic Radiology.

Dr Krestin, whose research interests primarily focus on imaging of abdominal organs and cardiovascular disease, molecular imaging, and population imaging, served as a permanent visiting professor at Stanford University Medical School from 1998 to 2009.

As ESR president, Dr Krestin worked to strengthen the society’s role and deepen its impact on the European political and scientific arena. His widespread involvement in radiologic associations includes serving as presidents of the European Society for Magnetic Resonance in Medicine and Biology (ESMRMB) and the Alliance of UK Healthcare Regulators on Europe (AURE), of which he is a founding member. Most recently, he served as the 2013 president of the International Society for Strategic Studies in Radiology.

Fervently committed to radiology research, Dr Krestin worked with ESR to establish the European Institute for Biomedical Imaging Research (EIBIR) in 2006 to foster and strengthen biomedical imaging research in Europe. EIBIR has successfully gathered powerful European biomedical imaging stakeholders to serve more than 280 research institutions. In 1999, Dr Krestin founded the ESR working group Management in Radiology (MIR) to develop ideas for greater involvement and the training of radiologists in the management of radiological departments. Dr Krestin is also a leading representative of the Alliance of MRI, which aims to safeguard the use of MR imaging in Europe.

An RSNA member since 1999, Dr Krestin has presented numerous RSNA refresher courses and served as a panelist for the RSNA 2010 International Trends program focusing on research challenges facing radiologists worldwide. He has served on the RSNA International Advisory Committee since 2010.

A frequent contributor to Radiology, Dr Krestin served as Radiology Associate Editor in 1999 and as a consultant to the editor in 2004. He has authored more than 350 original articles and 80 book chapters and has edited seven books, some of which have been translated into several languages. In 2010, he was appointed a member of the Distinguished Panel of Perspective Authors of Radiology.

Dr. Krestin’s numerous accolades include honorary membership in the Belgian, French, Hungarian, Italian, Spanish, and Swiss societies of radiology. ESMRMB bestowed on Dr Krestin honorary fellowship in 2011 and honorary membership in 2013. He was the Couch-Kerley Traveling Professor of the Royal College of Radiologists in the United Kingdom and received the Albers-Schönberg Medal of the German Society of Radiology.

In recognition of his formidable achievements as an internationally renowned leader, researcher, and activist, RSNA is proud to present Gabriel P. Krestin, MD, PhD, with honorary membership.
Anne W. M. Lee, MD

Decreasing mortality from nasopharyngeal cancer—a disease far more prevalent in Southeast Asia than in the Western world—can be attributed in large part to the efforts of Anne W. M. Lee, MD, and her dedicated teams of colleagues. In addition to spending much of her career researching nasopharyngeal cancer, Dr. Lee has established departments of radiation oncology in hospitals in Hong Kong and mainland China and facilitated robust clinical trials testing new therapies in head and neck cancer worldwide.

“She is best known for her investigations into the management and treatment of patients with nasopharynx cancer, by developing randomized clinical trials to validate treatment regimens and to test new therapies. Her extensive training and clinical experience started with mentorship from Professor John Ho, a pioneer in nasopharyngeal cancer, and have made her an international leader in our efforts to understand this complex malignancy. I’ve been learning from Anne continually over the 25 years I have known her.”

Quynh-Thu Le, MD, chair of the Radiation Therapy Oncology Group’s Head and Neck Committee, describes Dr. Lee as “one of the thought leaders in the clinical management of nasopharyngeal carcinoma, instrumental in developing randomized clinical trials to validate treatment regimens and test novel treatment regimens.”

“RSNA honorary membership is truly an undreamt of honor for me,” Dr. Lee said. “No words can fully describe how overwhelmed I am with this most prestigious honor. To me, RSNA is always closest to our system because the Hong Kong College of Radiologists is composed of three faculties, radiologists, radiation oncologists, and nuclear physicians. We deeply treasure this very strong bond, and indeed I believe that our relationship will further grow as technology advances.

“This honor from North America, and particularly receiving it from President Donaldson, is especially meaningful for me because it was my training at Stanford University back in 1988 that stimulated my research on nasopharyngeal cancer,” Dr. Lee continued. “I have learned from her not only research methodology, but also the spirit of seeking the truth, seeking the lessons we learn from every single patient and putting them into actions for continual improvement. My little achievements today would not be possible if I did not have the great fortune of standing on the shoulders of giants, so this honor is a tribute to all my mentors and my parents.”

Dr. Lee is chief of service at the Center of Clinical Oncology, University of Hong Kong-Shenzhen Hospital (Shenzhen, China). She is an honorary consultant in the Department of Clinical Oncology at Pamela Youde Nethersole Eastern Hospital (Hong Kong), honorary consultant in healthcare management for the Hong Kong East Cluster, Hospital Authority, and honorary clinical professor at the University of Hong Kong Li Ka Shing Faculty of Medicine. Dr. Lee received her medical degree from the University of Hong Kong and began her study of oncology under Professor John Ho, a pioneer in nasopharyngeal cancer. Trained in radiation oncology and medical oncology, Dr. Lee is a fellow of the United Kingdom Royal College of Radiologists, Hong Kong College of Radiologists, and Hong Kong Academy of Medicine. She had further training at Royal Marsden Hospital (London, England), Stanford Medical Center (Stanford, Calif), and Princess Margaret Hospital (Toronto, Ontario).

In 2012, after more than 35 years of service to Hong Kong public hospitals, Dr. Lee took up the challenge of starting the Center of Clinical Oncology at the University of Hong Kong-Shenzhen Hospital, a project that attempted to introduce medical service reforms in mainland China. She also initiated the Hong Kong Nasopharyngeal Cancer Study Group to encourage multicenter collaboration in clinical trials and large-scale retrospective studies. She is the leader of clinical sciences in the Center of Nasopharyngeal Carcinoma Research, an area-of-excellence project awarded by the University Grant Committee of Hong Kong.

During the 30 years that Dr. Lee has helped in public education and research on nasopharyngeal cancer treatment, the age-standardized incidence rate of the disease in Hong Kong has decreased by over 50% and the mortality by over 60%. At the same time, the 5-year disease-specific survival rate has increased from 50% to over 80%.

Currently, Dr. Lee is the vice-president of the Hong Kong College of Radiologists and vice-chair of the Hong Kong Anti-Cancer Society. She has served as chair of the Hong Kong Nasopharyngeal Cancer Study Group and president of the Hong Kong Head and Neck Society. Her service to international organizations includes the Union for International Cancer Control, for which she helped to set up the national Cancer Staging Committee in China.

Dr. Lee serves journals worldwide, including the International Journal of Radiation Oncology Biology Physics, Radiotherapy and Oncology, and the American Journal of Clinical Oncology. She has received the Sir Patrick Manson Gold Medal of the University of Hong Kong and is an honorary member of the European Society of Therapeutic Radiology and Oncology.

For her significant contributions to increasing the understanding and optimal treatment of nasopharyngeal cancer—leading to improved survival—in Southeast Asia and throughout the world, RSNA is honored to present Anne W. M. Lee, MD, with honorary membership.
Dr. Szczerbo-Trojanowska is a professor of radiology, chair of the Department of Radiology, and head of the Department of Interventional Radiology and Neuroradiology at the Medical University of Lublin, Poland.

“No one has done more than Margaret to inspire female scientists in Poland since Marie Curie,” said 2013 RSNA President Sarah S. Donaldson, MD. “She has paved the way for women, interventionalists, and radiologists from Poland and other Eastern European countries with her unending contributions to the Polish Medical Society of Radiology, Polish Congress of Radiology, and the European Congress of Radiology. Her professional accomplishments include a series of ‘firsts,’ and above all, she is absolutely lovely, genuine, and a wonderful companion for an afternoon coffee or cup of tea.”

“RSNA meetings, which I have been attending regularly for many years, made a significant impact on my radiological career,” Dr. Szczerbo-Trojanowska said. “Now, being awarded RSNA honorary membership—and having my name placed among those whom I admire, learn from and respect—is a tremendous honor.”

Soon after receiving her medical degree from the Medical University of Lublin, Dr. Szczerbo-Trojanowska joined the newly established Department of Vascular and Interventional Radiology at the university. In 1995, she was appointed to her current position as head of the Department of Interventional Radiology and Neuroradiology. She has served as chair of the Department of Radiology since 1999. During her career, Dr. Szczerbo-Trojanowska has received additional training at Princess Margaret Hospital and the University of Southampton in the United Kingdom, Uppsala University and the Karolinska Institute in Sweden, and the Justus Liebig University Giessen in Germany.

Some of Dr. Szczerbo-Trojanowska’s greatest accomplishments include her work with societies to raise the profile of radiology in Poland and across Europe. She cofounded the interventional radiology section of the Polish Medical Society of Radiology and cofounded the Polish Society of Magnetic Resonance. In 2001, Dr. Szczerbo-Trojanowska was elected president of the Polish Medical Society of Radiology and in that same year presided over its congress—she was the first female to hold either of those positions. Dr. Szczerbo-Trojanowska also has served on various committees of the European Congress of Radiology (ECR), as the first ECR president from Eastern Europe and as a member of the executive council of the Cardiovascular and Interventional Radiological Society of Europe (CIRSE).

Since 2006, Dr. Szczerbo-Trojanowska has been a member of the steering committee of the European School of Radiology. She also helped establish the first European School of Interventional Radiology (ESIR) courses in eastern Europe. She has been a mentor to 26 radiologists who obtained their doctorates under her supervision.

With research interests in vascular interventions, including embolization, carotid stenting, aortic aneurysms, and stent-grafting, Dr. Szczerbo-Trojanowska has authored and coauthored 208 peer-reviewed publications and 10 book chapters. She has given more than 250 scientific presentations at numerous international scientific meetings, including more than 100 invited lectures.

Dr. Szczerbo-Trojanowska is a reviewer for and editorial board member of many radiological and medical journals, including *Cardiovascular and Interventional Radiology*, *Acta Angiologica*, and the *Polish Journal of Radiology*.

Dr. Szczerbo-Trojanowska has received many honors, including the gold medal of the European Society of Radiology, the Golden Cross of Merit from the president of Poland, the medal of the Polish Chamber of Physicians, and the president’s award of the American Association for Women Radiologists. She is a CIRSE Distinguished Fellow and has been awarded honorary membership in the radiological societies of Argentina, Germany, Hungary, and Poland, as well as honorary membership in the Seldinger Society of Interventional Radiology.

For her outstanding contributions to interventional radiology and radiological education, as well as her commitment to raising the profile of Polish radiology in Europe and throughout the world, RSNA is pleased to present Malgorzata Szczerbo-Trojanowska, MD, with honorary membership.
RSNA 2013 Plenary Sessions

Opening Session

Sunday, December 1 • 8:30 AM
Annual Oration in Diagnostic Radiology
We Must Stand on the Shoulders of Giants
Damian E. Dupuy, MD

Monday Plenary Session

December 2 • 1:30 PM
Eugene P. Pendergrass New Horizons Lecture
Normal and Neoplastic Stem Cells: Implications for the Radiological Sciences
Irving L. Weissman, MD

= The presenter is a past R&E Foundation grant recipient.
**Tuesday Plenary Session**

December 3 • 1:30 PM  
**Special Lecture**  
*Mobilizing Human Potential*  
Condoleezza Rice, PhD

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**Wednesday Plenary Session**

December 4 • 1:30 PM  
**Annual Oration in Radiation Oncology**  
*Beneficial Liaisons: Imaging and Therapy*  
Paul M. Harari, MD

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**Thursday Plenary Session**

December 5 • 1:30 PM  
**RSNA/AAPM Symposium**  
*Imaging in Partnership: With Radiation Therapy*  
David A. Jaffray, PhD  
*Imaging in Partnership: With Physics and Quantitative Medicine*  
James A. Deye, PhD
2013 Outstanding Researcher/Educator Awards

The RSNA Outstanding Researcher Award and Outstanding Educator Award annually recognize and honor one senior individual in each award category who has made significant contributions to the field of radiology or radiologic sciences throughout a career of research, or teaching and education.

The RSNA Board of Directors is proud to present the 2013 Outstanding Researcher Award to Norbert J. Pelc, ScD, and the 2013 Outstanding Educator Award to Bruce G. Haffty, MD.

The awards will be presented during the opening session of the RSNA Scientific Assembly and Annual Meeting on Sunday at 8:30 AM in the Arie Crown Theater, Lakeside Center, Level 2.

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