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“I liked the interaction with the experts and the flexibility of the different workstations. I felt like I had my home unit there!”
—Charles Ariz, M.D., Bellingham, Wash.

“I’m new to CT colonography. ... I liked the instant feedback ... and how the experts walk around the room and help you along.”
—Pauline Germaine, D.O., Cherry Hill, N.J.
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Praising a Gentler Radiology

One of the greatest responsibilities that we have as radiologists is protecting our patients, especially younger patients, from unnecessary ionizing radiation. This issue of the ACR Bulletin highlights the “Image Gently” campaign initiated by The Society for Pediatric Radiology (SPR) to protect pediatric patients.

The Image Gently program was established by the SPR in close collaboration and support from the ACR. It is a unique and heretofore unprecedented undertaking that seeks to engage everyone involved in the imaging of pediatric patients in rightsizing, or as the Image Gently program says, “kid sizing” the radiation doses used for imaging pediatric patients.

We all need to get behind the campaign to protect our patients but also to demonstrate to the public and to legislators, regulators, and others that we are acting responsibly on behalf of the public’s interests.

The campaign started with a focus on computed tomography (CT), which now accounts for a very substantial fraction of the total ionizing radiation associated with medical imaging. The campaign’s initial success has resulted in a broadening of its mission to encompass other methods associated with ionizing radiation.

A notable initiative undertaken in conjunction with the Image Gently campaign has been the convening of the commercial companies that build and sell CT scanners. The specific issue of interest is to work with these industrial partners to harmonize the way that estimated doses are made between different brands and to make sure that estimation methods include appropriate modifications so that they are accurate for pediatric patients as well as adults. Currently, it is impossible to really compare dose estimates between vendors, and until that is possible, we will not have a true ability to benchmark between institutions and to establish best practices.

As ACR members, we should be enormously proud of the College’s role in helping to launch and support the Image Gently campaign. It has been a true partnership, and there are now many more organizations that have endorsed the campaign’s principles, as well as more than 1,500 individual radiologists who have pledged to “Image Gently.” We all need to get behind the campaign to protect our patients but also to demonstrate to the public and to legislators, regulators, and others that we are acting responsibly on behalf of the public’s interests.

If your plans this fall include a trip to Chicago for RSNA 2008, visit the ACR Exhibit (booth #6403A), where you’ll have the opportunity to take the online pledge to image gently.
Elsewhere in this issue, we learn about the intriguing opportunities of lung imaging with hyperpolarized gases. As we monitor the development of this evolving technology, we must also embrace our responsibility in the prevention and early detection of lung diseases. An important component of this process is the maintenance of, and perhaps the introduction to, the skills employed in the imaging surveillance of workers at risk for the development of occupational lung disease. In April 2009, the ACR Committee on Pneumoconioses, in collaboration with the National Institute of Occupational Safety and Health (NIOSH), will sponsor a symposium designed for radiologists and other physicians familiar with the interpretation of chest radiographs and the International Labor Organization (ILO) Classification of Radiographs of Pneumoconioses.

The symposium will be held over a weekend, April 24-26, with the afternoon of April 26 and all day Monday, April 27, devoted to the B Reader exams administered by NIOSH. An attractive venue in the Washington, D.C. area, the Westfields Marriott offers many amenities, including an affiliation with a nearby Fred Couples Signature Golf Course, and is a short distance from Dulles International Airport, convenient for those traveling by air.

The course begins Friday afternoon with a session sponsored by NIOSH that explores clinical issues related to occupational lung disease and the transition from film-based to digital-imaging technologies. The film-reading sessions start at 6 p.m. Friday. Following a primer on how to recognize and acquire good-quality images, the ILO Film Classification Guidelines will be reviewed. A film-reading session will close the evening program.

Saturday morning will be devoted to the classification of images of coal and silica exposures, and the afternoon focuses on asbestos. The morning features two film-reading sessions, followed by dedicated reviews of the pathology and chest CT findings of coal and silica. The afternoon includes two film-reading sessions on asbestos and correlated chest CT of asbestos. The afternoon session will close with an overview of the B Reader exams by a NIOSH spokesperson. On Sunday morning, the asbestos segment of the symposium will continue with a review of correlated pathology and a final film-reading session.

Film-reading sessions are an essential component of the learning process. Every two registrants will be assigned a pair of view boxes and several groups of envelopes containing test cases for each film-reading session. Each test case will first be classified by the registrants and then reviewed from the podium. The review process is designed to be interactive, and registrants are encouraged to ask questions and participate in the review of the test cases with the lecturer. Other ACR pneumoconioses committee faculty will be circulating in the room to come to your reading station to answer questions.

The objective is to create a classroom-like atmosphere to promote a better understanding and application of the ILO system. The goal is to extend the film interpretive process to the classification process. The lecture hall will be ringed with additional test cases for registrants to view and will generally be open in the evening for those who wish to view additional material or study.

NIOSH will offer B Reader certification and recertification exams on-site after the meeting. It is no secret that the exams can be difficult, especially for those certifying for the first time. It is our hope that the material discussed during the symposium will improve the likelihood of a successful exam for the registrants. For more information on the B Reader program, visit www.cdc.gov/niosh/topics/chestradiography/breader-info.html.

The number of B Readers has declined recently, but the demand for services continues. Even though protective measures were employed some time ago, several large corporations and industry groups maintain surveillance programs, as does the federal government. Workers in energy-related industries, especially the booming coal industry, remain at risk, and individuals employed in other fields, such as highway construction and repair, are also at risk for potential exposure.

Save the date and don’t forget your ILO standard radiographs.
Member Featured on Local News

In January 2008, the *ACR Bulletin* featured a member profile of Margaret N. Oechsli, Ph.D. — lung cancer research coordinator at Louisville’s Jewish Hospital and “abstract” artist who merges science, medicine, nature, and art.

Barry Bernson and Candyce Clifft, hosts of “Bernson’s Corner” on “Fox in the Morning” (WDRB) in Louisville, Ky., featured Oechsli on their show Sept. 8. The show contrasted Oechsli’s “day job” as a scientist with her “night job” as an artist and included live interviews. The segment also featured many images of her art — molecules of chemicals that had been dried, colored, and photographed through a powerful microscope.

Bernson and Clifft reported that in October, Oechsli was to present an exhibition of her works in Vienna, Austria, focusing on the hidden world of cancer-fighting drugs. The event will benefit the international medical organization Medecins Sans Frontieres (Doctors Without Borders).

To view Oechsli’s photography, visit [www.knappgallery.com](http://www.knappgallery.com) or contact her directly at margaret.oechsli@jhhs.org.

Who Attended AMCLC 2008?

Each year, the ACR, as required by Resolution 28 passed by the ACR Council in 1998, publishes self-reported demographic information on the College’s leadership. The following table shows demographic information on the leadership attending this year’s Annual Meeting and Chapter Leadership Conference (AMCLC) held May 17-21 in Washington, D.C.

<table>
<thead>
<tr>
<th>Demographic Characteristic</th>
<th>Alternate Councilors</th>
<th>Councilors</th>
<th>Council Steering Committee</th>
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<tr>
<td>Average age, years</td>
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<tr>
<td>Average years in practice</td>
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<td>Female (%)</td>
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<td>Practice Type (%)</td>
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<tr>
<td>Practice Location (%)</td>
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<td>Small or Rural Area</td>
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<td>Practice Size (%)</td>
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</table>

Note: Percentages are rounded to the nearest whole number. Percentages may not sum to 100 percent because of rounding. n=524, based on non-duplicate total number of participant ID numbers.

JACR Celebrates Five Years

The *Journal of the American College of Radiology (JACR)* celebrates its fifth-year anniversary in December 2008. At the journal’s inception, the ACR wanted the profession’s only peer-reviewed journal to focus on issues relating to clinical practice, practice management, health services and policy, and education and training, and it accomplished that goal.
JACR addresses issues pertinent to current and future practices for radiologists, interventional radiologists, nuclear medicine physicians, radiation oncologists, medical physicists, and related business, administrative, and allied health care workers. It is recognized as one of the most prestigious radiology journals and became indexed in MEDLINE during its fourth year. The journal is a member benefit (also available to members-in-training) and is available both in print and online. To access the online version, visit www.acr.org and log in with your user name and password.

Branding Campaign Measures Behavior

Last month, StrategyOne, the research group involved in the “Face of Radiology” branding campaign, surveyed the public in the campaign’s three test markets to discover whether any changes in behavior had occurred. The group assessed such factors as whether more people accessed the campaign’s Web site or visited radiologists for medical imaging. StrategyOne and the ACR are currently analyzing the survey data and we will report the results as soon as possible.

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The All*Access Pass provides your entire residency program or practice unlimited use of all video lectures on the ACR Campus™ online (both with and without CME credits), including any future lectures posted to the Web site during your 12-month subscription year. To purchase and use the pass, follow these steps:

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2. Before using the pass, each resident or member in the program or practice must log in to the ACR Campus (go to http://campus.acr.org and click on “LOGIN”).

3. If you do not have an ACR user name or password or have forgotten it, please contact the ACR Membership Department at 800-347-7748.

4. One or two business days after purchase, you will be notified via e-mail by the ACR that your account is ready to use.

5. Program directors or practice managers will receive an All*Access catalog page link. To open the catalog of lectures, log in and click on any All*Access Pass ticket.

6. You may assign video lectures in any order you prefer or give free choice to your program members. Participants should enroll in each lecture from the catalog page and then move it to their individual “Courses Page.”

3-Day Breast Cancer Walk

At closing ceremonies for the Washington, D.C., Breast Cancer 3-Day, walkers raise a shoe in honor of breast cancer survivors who joined the walk. The 3-Day, 60-mile walk, took place October 3-5 and brought together 3,000 walkers to raise funds for Susan G. Komen for the Cure. The D.C. event, just one of 14 in 2008, raised more than $7 million.

NRC Revises Licensing Guidance

In August, the Nuclear Regulatory Commission (NRC) released revised licensing guidance for TheraSphere® and SIR-Spheres® yttrium-90 (Y-90) microspheres. The revisions were made in collaboration with NRC’s Advisory Committee on the Medical Uses of Isotopes.

The guidance states that in addition to meeting the training and experience requirements of 10 CFR 35.390 or 35.490, a prospective authorized user of Y-90 microspheres must also be trained in the operation of the delivery system, safety procedures, and clinical use for each type of Y-90 microsphere product for which authorization is sought. These additional requirements can be satisfied through a training program provided by either an existing authorized user or the manufacturer. The revised guidance provides specific requirements that must be met for each type of training program.

For additional information on this topic, please visit www.acr.org/gr-econ.
Researchers use gases to light up lungs and diagnose disease.

To the typical person, helium is simply the ingredient that gives a balloon its antigravity characteristic. But to radiologists and medical physicists, it is becoming an essential part of magnetic resonance imaging (MRI) to find disease deep in the lungs.

Several years ago, researchers began studying the application to MRI of the inhalation of harmless hyperpolarized noble gases, such as helium 3 and xenon 129. With the properties conferred by hyperpolarization, the gases can travel into and illuminate air spaces in the lung that are not visible on traditional X-rays or computerized tomography (CT) scans.

Extending MRI’s Reach

This ability to see clearly into areas that are difficult to reach could enable radiologists to make earlier diagnoses of emphysema as well as other lung conditions and diseases, such as asthma or even cystic fibrosis. Just this year, Chengbo Wang, Ph.D., assistant professor of radiology at the University of Virginia, received the W.S. Moore Young Investigator Award for Clinical Science from the International Society for Magnetic Resonance in Medicine when he used the application of helium 3 to identify microstructural alterations deep in the lungs of patients with asthma.

Jim M. Wild, Ph.D., a U.K. physics professor at the University of Sheffield’s Academic Unit of Radiology, has been working with clinicians to assess the role of helium 3 in evaluating pediatric cystic fibrosis. They found that helium 3 has a higher sensitivity to early lung disease than chest X-ray and has equal sensitivity to CT, important factors in this patient group if imaging is to be used as a regular means of follow up, since MRI does not rely on ionizing radiation. The Sheffield group has just completed a study to determine the immediate effects of chest physiotherapy in cystic fibrosis in lung function with helium 3 MRI.

“Being able to detect lung conditions and disease at an early stage could radically affect patients’ life span and quality of life,” says Wild. “For children with cystic fibrosis, it means that, with the right treatment, they could live longer. For smokers, they can directly visualize the effects of lung obstruction in their lungs, and the degree of progression of emphysema can be monitored, both powerful tools that may assist in smoking cessation.”

Room to Move

In its natural state, helium is invisible to MRI. Hyperpolarizing the gas, which is accomplished with lasers, makes the gas measurable by MRI. Images produced with this technique show how far gas molecules have traveled.

In a study1 published in 2006 from the University of Virginia Center for In-Vivo Hyperpolarized Gas Imaging, researchers — including pediatric radiologist Talissa A. Altes, M.D. — studied the abnormalities of lung structures in children with bronchopulmonary dysplasia (BPD) with hyperpolarized helium 3. “In pediatric disease,” says Altes, “hyperpolarized gas MR imaging is very useful because there is no risk to the child from ionizing radiation.”

Altes also found noteworthy results when using hyperpolarized gas MR imaging to determine the effects of secondhand smoke; approximately 30 percent of the people exposed to secondhand smoke were found to have abnormalities in their lungs, as compared with approximately 60 percent of active smokers. Most of those 30 percent — all imaged as adults — were exposed to secondhand smoke during childhood.

“We’re learning new things in the lungs with this technique,” she says. “Previously, pulmonologists thought that in lungs with asthma, the lung was equally affected throughout. Now, it’s looking like some areas of the lungs are more prone to airflow obstruction, that is, more asthmatic than others.” Such a discovery could affect asthma treatment, and pulmonologists could use this technique to guide regional therapies.

ENDNOTE

From Dust to Disease

An ACR symposium examines occupational respiratory disorders.

By Raina Keefer

Next spring, the ACR will continue its partnership of nearly 20 years with the National Institute for Occupational Safety and Health (NIOSH) to educate physicians in the practice of radiographic surveillance of occupational lung diseases through the Symposium on Radiology of the Pneumoconioses.

This symposium, scheduled for April 24-26, 2009, with optional time on April 26 and 27 to take the NIOSH B Reader exams, held at the Westfields Marriott in Chantilly, Va., will feature the latest information on trends in surveillance of and testing for pneumoconiosis, ethical and legal issues, and imaging technology. Led by Daniel A. Henry, M.D., FACR, director of Thoracic Imaging, Medical College of Virginia Hospitals and Virginia Commonwealth University, and chair of the ACR Commission on Pneumoconiosis, the symposium will have a question-and-answer format, with attendees using an audience-response system.

In the last decade, more than 10,000 miners died of coal workers’ pneumoconiosis, commonly called black lung disease.

The course will cover pneumoconiosis from coal, silica, and asbestos, three of the major entities causing occupational respiratory diseases. In the last decade, more than 10,000 miners died of coal workers’ pneumoconiosis, commonly called black lung disease. Since 1995, the incidence of black lung among coal miners with greater than 25 years’ tenure who participate in the NIOSH Coal Workers’ Health Surveillance Program has more than doubled. Even underground miners in their late 30s and 40s have developed advanced cases. This is an important issue given that these younger miners began working after the implementation of disease prevention measures mandated by federal legislation in 1969.

This symposium aims to help radiologists better diagnose the pneumoconioses and understand the application of the International Labor Organization’s International Classification of Radiographs of Pneumoconioses, as well as the pathology and clinical features of the pneumoconioses.

Q&A With NIOSH

David N. Weissman, M.D., is the director of NIOSH’s Division of Respiratory Disease Studies. The ACR Bulletin spoke with him to find out what radiologists should know about pneumoconioses and the symposium.

Q: What are the pneumoconioses?

A: The pneumoconioses are a group of interstitial lung diseases caused by inhaling small particles of dust, especially mineral or metallic dust, deep into the lungs. In 2005, coal workers’ pneumoconiosis (CWP), or black lung, caused or contributed to 653 deaths, asbestosis caused or contributed to 1,423 deaths, and silicosis, 161 deaths. NIOSH has also identified advanced CWP in relatively young, active coal miners; the youngest worker reported by NIOSH to have CWP was a 39-year-old man who had worked in coal mining for 17 years.

Q: Why do you believe younger miners are developing black lung disease?

A: These miners are inhaling too much coal mine dust, and many miners are working longer shifts. There are so-called “hot spots,” or parts of the country where disease risk is greater, but we do not know exactly what is causing that increased risk. In these areas, miners might cut through more rock to reach coal, potentially exposing themselves to dust containing larger amounts of quartz, a form of crystalline silica that is very toxic to the lungs. CWP develops over many years from exposure to coal mine dust, so we usually do not know the past personal exposures of these miners, or if they were above or below the current federal limit for exposure to coal mine dust.

Q: Why should radiologists attend the symposium?

A: The symposium is offered only every three or four years and is the best opportunity for physicians to learn about the International Labor Organization’s system for classifying chest radiographs for pneumoconioses and to receive practical, hands-on training from experts on system use. An update on the pneumoconioses and the NIOSH B Reader certification program are included, as is an on-site opportunity to take the NIOSH B Reader certification exam. This will likely be the last symposium to use film-based chest radiographs; the B Reader certification program is currently transitioning to digital chest imaging.

ENDNOTES

1. Coal Workers’ Pneumoconiosis: Number of Deaths, Crude and Age-Adjusted Death Rates, U.S. Residents Age 15 and Over, 1968–2004. Available at: www2a.cdc.gov/drds/WorldReportData/FigureTableDetails.asp?FigureTableId=509&GroupRefNumber=F02-01. Accessed Sept. 5, 2008.
Protecting Pediatric Patients

Stakeholders in medical imaging collaborate to make CT scans safer for children.

By Ceela McElveny

In a novel event, representatives from four leading manufacturers of computed tomography (CT) scanners met with radiologists, medical physicists, and radiologic technologists to discuss ways to better protect children undergoing CT exams. At the conclusion of the August meeting at Cincinnati Children’s Hospital, all four companies agreed to collaborate on ways to standardize radiation dose estimates for children.

The agreement was historic. “This agreement is a fundamental change in responsibility and accountability for the kind of dose our children — and actually adults, too — receive during CT exams,” said Donald P. Frush, M.D., FACR, chair of the ACR Commission on Pediatric Radiology.

The event was sponsored by the Alliance for Radiation Safety in Pediatric Imaging, a coalition of 29 organizations dedicated to reducing the radiation doses children receive from medical imaging exams. The alliance launched its Image Gentlysm campaign in January to raise awareness of pediatric radiation doses. CT vendors represented at the meeting were GE Healthcare, Philips Healthcare, Siemens Medical Systems, and Toshiba America Medical Systems.

“Children are three to five times more sensitive to radiation than adults, yet dose estimates are made using adult-sized phantoms.”

— Keith J. Strauss, M.Sc., FAAPM, FACR

“This is an example of how all stakeholders in the medical imaging community can and must work together for the good of our pediatric patients and our profession,” said Marilyn J. Goske, M.D., chair of the alliance, past president of the Society for Pediatric Radiology, and Silverman Chair for Radiology Education, Cincinnati Children’s Hospital Medical Center. “This agreement to work together represents a major step forward in ensuring that medical protocols keep pace with rapidly advancing technology and are properly displayed on our CT equipment.”

New Methods Aim to Reduce Dose

As meeting participants noted, most dose estimates for CT scans greatly underestimate pediatric doses because they are developed from adult models. In addition, dose capture and reporting systems vary from manufacturer to manufacturer, making comparisons difficult.

Keith J. Strauss, M.Sc., FAAPM, FACR, director of Radiology Physics and Engineering at Children’s Hospital, Boston, outlined the critical need to develop a new method for estimating pediatric CT radiation doses. “Children are three to five times more sensitive to radiation than adults, yet dose estimates are made using adult-sized phantoms,” he said.

Typical adult CT phantoms measure 32 centimeters for the body and 16 centimeters for the head. As a result, the radiation dose to a newborn, whose head may measure only 10 centimeters, could be underestimated by 35 percent. For an abdomen exam, the radiation dose for a newborn could be underestimated by as much as 300 percent. Strauss recommended that pediatric models be developed specifically to estimate doses for children undergoing CT exams and that pediatric phantoms be developed to more appropriately take into consideration the size, shape, and composition of children’s anatomies.

“‘The problem we’re addressing today is not new; it’s been around a long time,’” noted Robert A. Phillips, Ph.D., Office of Device Evaluation, Radiological Devices Branch, Center for Devices and Radiological Health, U.S. Food and Drug
The dose received by some patients, particularly children, is higher than desired and must be reduced. There is a CT dose calculation problem that should be corrected.

Educating Technologists

Meeting participants also discussed how equipment vendors can collaborate to educate CT technologists about dose reduction, dose capture, and dose display. “CT technologists not only need to know how to perform the scan, but they also need to understand the dose implications,” said Goske. Greg Morrison, M.S., R.T.(R), CNMT, executive vice president and chief knowledge officer of the American Society of Radiologic Technologists, noted that of approximately 50,000 radiologic technologists performing CT scans, only about 23,000 are certified in CT.

Meeting attendees generated the following list of recommendations for application specialists who train radiologic technologists to use CT equipment:

• Teach the key messages of the Image Gently campaign
• Provide training for all technologists, not just managers
• Provide online materials for technologists who cannot attend in-person training
• Develop uniform language to discuss technological concepts
• Provide a List serv or discussion boards for additional help
• Devise strategies to reduce doses for children

Balancing Image Quality and Safety

Finally, meeting participants discussed the challenges of balancing diagnostic image quality with radiation dose. “We can make the dose absolutely low, so that there’s no dose essentially, but then there’s no picture,” said Hugh Morgan, Ph.D., research scientist, CT Engineering Physics Section, Philips Healthcare. “We have to find the point where the image is still diagnostic and you can still get accurate information at a low dose,” he continued. “We must balance the diagnostic image quality with the dose.” Richard T. Mather, Ph.D., senior manager, clinical sciences, Toshiba America Medical Systems, agreed. “Getting the right dose, for the right context, for the right patient is the key.”

About the Alliance

The Alliance for Radiation Safety in Pediatric Imaging comprises 29 organizations working together to reduce unnecessary radiation exposure from imaging exams in children. It represents more than 500,000 health care professionals. Through its Image Gently campaign, the alliance is raising awareness about the need to “child-size” radiation exposure.

Visit www.imagegently.org to view a complete list of founding and affiliate organizations associated with the campaign as well as recommendations, protocol guidance, and a worksheet for reducing radiation doses during pediatric CT scans. When properly implemented, these guidelines will significantly reduce the risk of harm to pediatric patients. So far, the protocol has been downloaded more than 6,000 times, and more than 1,300 facilities have taken the Image Gently pledge to reduce the radiation dose estimate used in the performance of CT scans on children.

Ceela McElveny (cmcelveny@asrt.org) is EVP/chief marketing and communications officer at the American Society of Radiologic Technologists.
Advancing CT Colonography

ACRIN® trial validates CT colonography for cancer screening.

According to the results of the National CT Colonography Trial conducted by the American College of Radiology Imaging Network® (ACRIN®), computed tomography (CT) colonography, also known as virtual colonoscopy, is comparable to standard colonoscopy in its ability to accurately detect cancer and precancerous polyps and could serve as an initial screening exam for colorectal cancer.

“CT colonography can be adopted into the mainstream of clinical practice as a primary option for colorectal cancer screening,” says the trial’s principal investigator, C. Daniel Johnson, M.D., FACR, of the Mayo Clinic in Scottsdale, Ariz. “We hope that this additional, less invasive option for cancer screening will lead more people to get screened and will ultimately result in fewer deaths from colorectal cancer.”

Trial at a Glance

The long-awaited results of ACRIN’s National CT Colonography Trial were published in The New England Journal of Medicine on Sept. 18, and reported per-patient accuracy of CT colonography using optical colonoscopy as the reference standard. A total of 2,600 participants were recruited for the study, and 15 study sites were used nationwide. Out of the 2,600 participants, 2,531 made data available for analysis.

<table>
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<tr>
<th>Additional Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of patients with CT colonography identified polyps proven correct by optical colonoscopy: 23%</td>
</tr>
<tr>
<td>Percentage of patients determined by CT colonography to not have polyps proven correct by optical colonoscopy: 99%</td>
</tr>
</tbody>
</table>

More About the Trial

A Q&A session provides details on the trial.

Q: With technology advancing so quickly, have there been any major changes in computerized tomographic (CT) colonography technology since the start of this trial?

A: Although 16-slice scanners were state of the art when the trial was first approved, most of the cases were performed with 64-slice scanners. The trial utilized both stool and fluid tagging and thin-section technique. In addition, it also used state-of-the-art 2-D and 3-D software. The results of this trial are just as valid today as when the trial started.
Q: What’s the next step in advancing CT colonography?

A: The validation of CT colonography in the prepared colon is now complete. The next step is to receive insurance coverage for the scans. The Centers for Medicare & Medicaid Services are evaluating the procedure, and the American Cancer Society has included it in its new screening guidelines. The next frontier for investigators will be evaluating the partially or noncathartically prepared colon.

Q: What did you enjoy most about conducting the trial?

A: ACRIN really should be complimented for an outstanding job organizing a large, complex trial. ACRIN worked to secure funding, complete the trial, and report the results in a timely fashion. The statisticians from the Biostatistics Center at Brown University provided invaluable expertise in designing the trial.

The site investigators are the unsung heroes of this research. There were 15 sites across the country, and the doctors and research assistants all worked very hard to recruit patients, read the scans on time, and collect the information needed. A whole army of dedicated people worked together to make this trial a success.

Q: A large amount of data was collected during the trial. What were some of the secondary research results?

A: There will be many reports on the secondary research. For example, we are examining the effects of the different colon preparation methods that were standard at each of the participating sites. We want to evaluate the cost-effectiveness of CT colonography relative to other colorectal screening tests, as well as the willingness of individuals to undergo repeat CT colonography versus colonoscopy. We will determine CT colonography’s ability to detect hard-to-find flat lesions in the colon. We will look at the differences in the computer software the radiologists used to interpret the exams and determine their preferences. Finally, we will evaluate the benefits and costs of the detection of extracolonic abnormalities.

Q: Was there anything that surprised you about the results of the trial?

A: After all these years of hard work, I was delighted with the findings. They show that CT colonography is a highly accurate technique, and I’m hopeful that having an additional option will lead more patients to undergo screening.

Q: What advice would you give radiologists about CT colonography?

A: Performing CT colonography takes considerable training and a specialized skill set. Radiologists aren’t used to evaluating the colon and looking for very small lesions. Learning to operate the specialized software and review the 3-D images takes dedicated training. Radiologists should seek CT colonography courses to gain experience and competency. Good training programs are offered all over the country — through the ACR, academic centers, and other societies. Radiologists should avail themselves of these resources so that we can offer more options to our patients and improve screening rates.
The most recent addition to the ACR Campus™ online (http://campus.acr.org/index.aspx) product lineup is the All*Access Pass. The All* Access Pass provides access to all ACR Campus online video lectures for all designated members of your practice or residency program. To take advantage of this special educational opportunity, you will first need to purchase the pass (see “ACR Headlines,” page 5 or call toll-free, 1-800-227-7762), which gives you unlimited use of all ACR Campus online video lectures and any future lectures developed during your subscription term. Then, you can visit the online campus to begin viewing lectures. Simply follow these steps:

1. Log in to http://campus.acr.org/index.aspx using your ACR user name and password. If you have forgotten your user name or password, please contact the ACR Membership Department at 800-347-7748 or membership@acr.org.

2. Scroll down and click on the ACR All*Access Campus Online Video Lectures link.

3. Click on “Access the catalog of all video lectures” (after purchase of the All* Access Pass).

4. Click on “Enroll now” for any video lecture you wish to view.

5. To see a list of all of the video lectures you have selected to receive, click on “Access your videos.”

6. To view a video lecture, click on “Launch course” under each title. You may view the lecture as many times as you wish.

CME credits: If a video lecture has CME credits available and you want to obtain AMA PRA Category 1 Credits™, you may complete the multiple-choice test following the activity to quality for the CME credits and print your credit certificate. To claim credits, visit http://campus.acr.org, click on “My Education Page,” and follow the prompts.
Economic

Chairman’s Report

Making Time for Trends

To remain at the forefront of imaging economics, the ACR has established the Future Trends Committee within the Commission on Economics to take on the daunting task of staying abreast of the economic issues facing radiology in the future. As described in my column in the June 2008 ACR Bulletin, the commission’s established operational committees deal primarily with issues within the bounds of current federal and private payer payment policy.

While future challenges are often discussed, there has not been a focused group within the ACR designed specifically to think “outside the box” about the future of radiology reimbursement under the myriad of proposals for modifications to the current payment system or to develop entirely new payment systems. Two proven leaders in imaging economics, David C. Levin, M.D., FACR, and Frank J. Lexa, M.D., M.B.A., have agreed to serve as co-chairs of the new Future Trends Committee.

Levin is professor emeritus and former departmental chair at Thomas Jefferson University Hospital. His work in understanding utilization patterns in diagnostic imaging is well known, as is his advocacy for radiology regarding quality in diagnostic imaging and inappropriate self-referral. He delivered the Robert D. Moreton Lecture at the ACR Annual Meeting and Chapter Leadership Conference 2005 on this subject and is an ACR Gold Medalist.

Lexa is a clinical professor of radiology at the University of Pennsylvania Medical Center and an adjunct professor of marketing and project faculty and east Asia manager in the Global Consulting Practicum at The Wharton School, as well as an adjunct professor of biotechnology, Instituto de Empresa, Madrid. Lexa has achieved international recognition for his expertise in market, practice, and industry analyses in the biotechnology, health care, medical device, and pharmaceutical sectors, and has participated in numerous economics programs for the ACR.

The College is fortunate to have members of this stature to lead this committee. They have assembled an outstanding team of leaders in imaging economics,
Treating Breast Cancer With Thermal Ablation

On Sept. 15, the U.S. Food and Drug Administration (FDA) hosted a public workshop titled, “Clinical Trials for Local Treatment of Breast Cancer by Thermal Ablation,” which explored the possibility of standardizing feasibility study protocols on the use of thermal ablation for treating breast cancer. The FDA believes that uniformity in the framework of feasibility studies could facilitate comparative evaluations and enable best practices to be established while potentially serving as the basis for larger, prospective clinical trials.

Mitchell D. Schnall, M.D., Ph.D., chair of the American College of Radiology Imaging Network® (ACRIN®), participated in the workshop activities and offered a presentation on high-intensity focused ultrasound. Julia R. White, M.D., participated on behalf of the Radiation Therapy Oncology Group® (RTOG®).

The Next Step

Although there will be many issues for the new committee to consider, one of the most pressing is the rising cost of health care, which has created a bloom in the activity of the Medicare Payment Advisory Commission (MedPAC) and other governmental and private advisory panels to suggest ways Medicare and other payers can slow the rise in health care spending. Imaging remains a target of such reductions, but in any new payment system, we will face many challenges to maintain appropriate imaging reimbursement.

Specific committee tasks will include monitoring MedPAC and other “think tank” groups to determine which of the myriad of solutions being proposed may get traction with Congress, the Centers for Medicare & Medicaid Services (CMS), and other payers, as well as determine how the College can turn the challenges into opportunities. A related charge will be not only to assess the proposals coming from outside groups but also to think proactively and, if necessary, develop alternative scenarios for future payment systems that emphasize fair reimbursement for radiology services and maintain radiology’s independence from hospitals and other physicians.

Addressing Challenges

The committee will also look at whether ACR economic policies are meeting the needs of academic practices. The Task Force on Economic Issues in Academic Radiology within the Future Trends Committee will be co-chaired by Gerald D. Dodd III, M.D., FACP, department chair at the University of Colorado Health Sciences Center, and Richard Duszak Jr., M.D., FACP, vice chair of the Commission on Economics. The task force’s goal is to determine the unique reimbursement issues related to academic radiology and make recommendations to ensure that the College promotes academic radiology in its economic initiatives with Congress, CMS, and other payers.

Having been involved in economic policy for the ACR for many years, I can attest to an exponential increase in the reimbursement issues faced by the College and its members. Challenges to appropriate reimbursement of radiology services have come from all directions and entities. Dealing with these specific and current threats has made for little time for our existing economics committees to engage in planning and modeling scenarios of future payment systems and future challenges to reimbursement. The Future Trends Committee will be an excellent resource for looking at not only the challenges but also the opportunities of future payment systems for our practices.

Regulatory Affairs Update

By Gloria Romanelli, Esq., and Mike Peters

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In addition to the workshop, the FDA is accepting written comments on the possible role of a registry of breast cancer treatment with thermal ablation devices in advancing the development of this technology. Specifically, the FDA is gathering information on the feasibility, utility, benefits, and costs associated with developing and implementing such a registry. The deadline for submitting comments to the FDA is Nov. 24.

AHRQ Conference Addresses Multiple Issues

The Agency for Healthcare Research and Quality (AHRQ) held its second annual conference on Sept. 7-10 in Bethesda, Md. ACR staff and more than 350 other stakeholders participated in the event. The educational sessions covered a wide variety of topics related to health care quality, safety, and effectiveness, including health information technology, rural access and telemedicine, and public health policy.
Participants could visit an exhibit hall to view information about AHRQ’s extramural and intramural projects, as well as such online offerings as the National Resource Center for Health Information Technology.

For additional information on these topics, visit www.acr.org/gr-econ.

Gloria Romanelli, Esq. (gromanelli@acr.org) is ACR senior director of legislative and regulatory relations in the Government Relations and Economic Policy Department.

Mike Peters (mpeters@acr.org) is ACR regulatory affairs specialist in the Government Relations and Economic Policy Department.

Expect the Unexpected

Next year will bring dramatic changes to health care reform.

By Orrin Marcella

It is widely expected that in 2009, no matter which party has won the White House, there will almost certainly be a push by the Democratic Congress to undertake dramatic health care reform. The overwhelming sense among lawmakers in power is that although the United States has some of the best facilities and providers in the world, its overall health care system is not worth nearly the sum of its parts. The problem, many experts believe, is with our health care delivery system or, more precisely, the lack thereof.

Closing the Coverage Gap

Access to care will be issue number one. The debate about coverage will most certainly begin immediately as the Democrats seek to reauthorize and expand the State Children’s Health Insurance Program, which expires March 31, 2009.

How to cover everyone, however, is not easily agreed upon. Some lawmakers are calling for an end to employer-based coverage and want to replace it with more portable, individual vouchers. Others want to expand government programs, such as Medicare, giving all individuals the opportunity to opt in. There are also some who prefer to encourage individuals to obtain private coverage with tax incentives. Preserving patient choice is a key aspect, and a hybrid approach of both public and private components will likely emerge.

Rewarding Efficiency

As Congress attempts to close the coverage gap, lawmakers will also seek to control costs and increase quality and efficiency in the Medicare system. The focus will most likely be on primary and preventive care initiatives, such as further expansion of the Patient-Centered Medical Home Demonstration. This program provides extra payments to qualifying practices for managing a patient’s care over time.

The Medicare Payment Advisory Commission and others believe that the ways in which we care for patients with chronic conditions and reimburse for that care are fraught with waste and inefficiencies. Congress will surely attempt to correct these problems with incentives for providers who commit to delivering efficient, effective coordinated care.

Health Information Technology

Greater efficiencies will be difficult to achieve without the widespread implementation of health information technology. Several implementation initiatives are already being explored. Legislation currently exists, and more will be drafted, to create federal standards for data interoperability and to provide financial incentives for physicians and hospitals to adopt electronic systems. However, the incentives won’t last forever, and providers will eventually be penalized if they are not compliant by a certain future date.

Comparative Effectiveness

The ever-increasing cost of new technologies, drugs, and procedures is just one of the concerns of Congress. It is widely believed that many newer, expensive aspects of medicine are adopted and paid for without rigorous examination of whether they are actually more effective than what they have replaced. To address this situation, congressional leaders are calling for a new institute to conduct comparative clinical effectiveness research.

This new body would be a vehicle for unbiased research not designed or influenced by private industry. Information on comparative effectiveness would be disseminated to providers, and payment might eventually be tailored to encourage providers to deliver the most effective care on the basis of this research.

Effects on Radiology

What does all of this mean for radiology? What role do radiologists play in health care reform? All physicians will presumably benefit in a scenario in which all patients are covered. But will covering all Americans really pay for itself,
For the past two years, I have written a chairman’s column discussing the importance of RADPAC for both the present and the future of the radiology profession. As my term as chair comes to an end in late November, I have reflected on this experience, and I am proud of what RADPAC has accomplished.

Among the many milestones and records set during my term, I am most proud of the increase in number of contributors. Last year, 10 percent of ACRA™ members contributed to RADPAC — the highest amount ever. While this is a considerable improvement from years past, there is clearly much room for growth.

This 2007–2008 election cycle, RADPAC set a goal to raise $2 million and has, to date, raised more than $1.8 million. Despite such successful fundraising efforts, RADPAC continues to raise money aggressively; $1.6 of the $1.8 million raised was used to support federal candidates.

To borrow an expression from one of my colleagues: “If you’re not at the table, you’re likely to be on the menu.”

Radiology and the new technologies that make it an exciting specialty will certainly be scrutinized under any comparative effectiveness program. The goal of such a program is to better inform coverage decisions. Beyond the basic comparative effectiveness of different modalities for diagnosing certain conditions, larger questions need to be answered: Does the information provided affect the course of treatment? What is the value of ruling something out?

The challenge for radiologists, in a system in which imaging may not necessarily have an effect on an eventual patient outcome, is to define the value of our services within the continuum of care. Of one thing we can at least be certain: Health care reform in 2009 and for years thereafter presents not only many challenges but also opportunities for radiology as a specialty.

**Orrin Marcella** (omarcella@acr.org) is ACR director of congressional affairs in the Government Relations and Economic Policy Department.

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**RADPAC®’s Past, Present, and Future**

*Reflections on accomplishments uncover potential goals.*

By James H. Thrall, M.D., FACR, RADPAC Chair

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as many advocates claim? Will the cost of increased coverage be borne by the public, who directly benefits from increased coverage, or will it be borne by providers? Will universal coverage expose a shortage of physicians, as it has with primary care in Massachusetts?

Boosting primary care delivery is a worthy goal and is intended to foster a system in which providers deliver “health care” and not “sick care.” Primary care is already realizing payment increases within the current valuation system. Will future legislative initiatives seek to add money to the system, or will they be undertaken at the direct expense of specialty reimbursement? Powerful players — in Congress and elsewhere — believe that certain specialties, such as radiology, are overcompensated and that imaging services, in particular, are overvalued.

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**Orrin Marcella** (omarcella@acr.org) is ACR director of congressional affairs in the Government Relations and Economic Policy Department.
Picture Perfect

*Take a photo tour of the new ACR Education Center.*

By Raina Keefer

When you walk into the ACR Education Center in Reston, Va., the floor feels different, hollow even. This is because of the raised flooring installed to accommodate many network and data cables below the entire center. The brightness of the facility may go completely unnoticed by some attendees at the center’s courses because many radiologists are more interested in the technology than the aesthetics. In either category, though, the facility does not disappoint.

The ACR Education Center was built to impress. Flat-screen televisions punctuate the lobby area, and an inviting café area is popular with attendees taking advantage of an opportunity to network with peers during lunches and breaks. Most importantly, the classrooms, with state-of-the-art workstations and 30-inch monitors, customized for each user, can accommodate up to 60 participants. The center has become the place in which to explore and discuss with colleagues new imaging techniques.
The Brain Game

*Functional MRI unravels the secrets of Alzheimer’s disease and autism.*

By Raina Keefer

We all have an inner narrator — the brain. It is not only the origin of every bodily action and every reaction but also a mystery. And researchers are intrigued by mysteries, which are often the basis for theories and hypotheses. So, whether the brain hints at a developmental disorder or provides clues to dementia, scientists are involved in looking for better ways to prevent, diagnose, and treat these life-altering diseases.

However, the brain is difficult to image. Even though a typical magnetic resonance imaging (MRI) or computerized tomography (CT) scan may reveal the “what” — a tumor, aneurysm, or other actual matter — it can’t explain the “why.” Functional MRI (fMRI) is one way to examine this part of the problem. In fact, fMRI has been used for more than a decade, mostly in research settings. It measures the minuscule metabolic changes occurring in active parts of the brain.

“fMRI is unique,” says Daniel Rubin, M.D., M.S., acting assistant professor of radiology medicine (Biomedical Informatics) - courtesy, Stanford University. “It provides indications of brain activity. We’re able to answer the question, ‘What is the brain doing during different tasks?’ Though it is challenging at present to extract all the meaningful information in this rich fMRI data.”

Remember Me?

A recently published article described a study completed by a Stanford University research team that included Rubin; graduate student Kaustubh Supekar, the article’s first author; Michael Greicius, M.D., assistant professor of neurology; Vinon Menon, Ph.D., director of the Cognitive and Systems Neuroscience Laboratory; and Mark Musen, M.D., Ph.D., professor of medicine. The results of this study conducted with fMRI used concepts from the popular social networking Web site Facebook to analyze the brain’s connectedness in patients with Alzheimer’s disease.

Previous research by Supekar and team indicated that brain signals travel along neural paths connected by hubs — a concept known as “small-world networking.” “Each hub connects to several other hubs, and a signal chooses among several options to find the shortest path to its destination,” says Supekar. Social networking sites operate on similar principles. The Facebook example might be, “I’m friends with your cousin’s hairstylist — want to be friends?”

When comparing 21 people with early-stage Alzheimer’s disease and 18 unaffected control subjects who were matched in age and gender, Supekar and colleagues found that those with Alzheimer’s disease had fewer functional hubs. In the Facebook example, it’s like taking the hairstylist out of the mix. Where there were first three connections (you to your cousin, your cousin to the hairstylist, and the hairstylist to your new friend), there is now only one functioning relationship, from you to your cousin, and in Alzheimer’s disease, there are fewer options for you to connect with the new friend.

Using the idea that those with Alzheimer’s had fewer functional hubs, the researchers found that they could correctly identify patients with Alzheimer’s disease about 72 percent of the time and those without the disease about 78 percent of the time. Additionally, although the results of this study cannot yet support the use of this method as a screening test,
the findings could usher in a turning point for the future use of fMRI in clinical applications.

“The practicing radiologist looks at fMRI and doesn’t see it on the radar for clinical practice,” says Rubin. “This could be one way in which fMRI would enter clinical practice. You could detect who is developing Alzheimer’s.”

Greicius believes that using fMRI in this way could actually work in clinical practice. Testing for the study was done during the patients’ resting state. In research with fMRI, participants often are imaged during task activation, such as performing a simple job — to detect which brain regions are being activated. In patients with dementia, “simple” tasks may not be so easy, and observing the brain during the patients’ resting state can be accomplished more easily.

“I could see this emerging as a clinical test,” says Rubin. “Behaviors and diseases may affect multiple areas, like a network. Instead of focusing on one center, we have a potential new image biomarker of network problems derived from image data, and this adds further evidence that the basis of abnormalities is actually related to network phenomena as opposed to single-site problems.”

**Faulty Wiring**

For the developmental disorder autism, research has found that the brains of adults with the disorder are “wired” differently from those of people who don’t have the disorder, and this abnormal pattern of connectivity may be responsible for the social impairments that are characteristic of autism.

Using fMRI, researchers at the University of Washington’s Autism Center found that the most severely socially impaired subjects exhibited the most abnormal pattern of connectivity among a network of brain regions involved in recognizing faces.2

“This study shows that these brain regions are failing to work together efficiently,” says Natalia Kleinmans, Ph.D., a research assistant professor of radiology at the University of Washington. “Our work seems to indicate that the brain pathways of people with autism are not completely disconnected, but they are not as strong as in people without autism.”

This research team used fMRI to scan individuals’ brains while the participants looked at pictures of faces or houses, which were shown more than once, as in a typical memory game. Participants then indicated to the researchers each time they saw the same images. The group with autism and the control group exhibited different patterns of brain activity. Participants with autism and the greatest social impairments showed the lowest level of connectivity between the right fusiform face area and the left amygdala and increased connectivity between the right fusiform face area and the right inferior frontal gyrus.

This research into Alzheimer’s disease and autism with fMRI provides important insight into issues that are almost as complicated as the brain itself. It would have been impossible to draw these conclusions without the use of a promising imaging method that may have its roots in research but that could be used in the clinical environment in the future.

ENDNOTES


Spreading the Word on Tropical Diseases

A renowned book goes global, free of charge.

By Raina Keefer

Published first in 1981 and again in 2001, The Imaging of Tropical Diseases: With Epidemiological, Pathological and Clinical Correlation, by Philip E.S. Palmer, M.D., FRCP, FRCR, and Maurice M. Reeder, M.D., FACR, is now available on DVD.

The original edition, which came to fruition after Palmer and Reeder had spent 40 years gathering information and images, included a preface by the late radiologist Ben Felson, M.D.; in that preface, Felson wrote, “If a picture says a thousand words — this book speaks millions.” He was referring to the more than 2,500 illustrations within the 1,700 pages covering virtually all aspects of the 70-plus tropical diseases that can be diagnosed with radiologic images. The respected journal, Lancet, reviewed the second edition of the book published in 2001 and called it a “masterpiece,” with other reviewers equally praising the imaging contents and writing.

Those in Need

Given the subject matter, it was evident to Palmer and Reeder that medical communities that would benefit most from such material were those in poorer parts of the world. The cost of producing this massive, two-volume set often exceeded the semiannual incomes of many radiologists and physicians practicing in these areas and hindered delivery of the information to those who could use it most.

Technology to the Rescue

The fairly recent technological development of the DVD enabled Palmer and Reeder, with the help of Chris Quarles, a computer technologist in the department of radiology at the Uniformed Services University of the Health Sciences, to create a DVD version of the text. The authors, after obtaining the copyright to the book through the courtesy of Springer Publishers, have made the DVD available to ACR members at no charge, for only a shipping and handling fee of $9.99.

Because tropical diseases are no longer strictly limited to the tropics and are being seen with great frequency in all parts of the world due to immigration, travel, and conflicts, nonmember radiologists throughout the world can also receive the DVD free, paying only shipping and handling charges at cost.

“Dr. Palmer and I are retired,” says Reeder, “and thus, this text, in written form or DVD version, is likely to be the principal source of information concerning the imaging of these commonplace but often misdiagnosed diseases for the next decade or so, except for the occasional journal article, until younger radiologists are motivated to update our work at some future date.

“It is our hope that the provisions of this treatise to those who see and treat patients with these myriad tropical maladies will result in earlier and more accurate diagnosis and subsequent diminution in their morbidity and mortality,” Reeder adds.

The DVD is easy to use, and directions are included with the program. To find specific information for a particular disease, the user can click on the “Index of Disease,” which brings up the subheads for more than 70 pertinent diseases (e.g., imaging findings in amebiasis or epidemiology of AIDS).

You can gain digital access to the DVD in its entirety by visiting www.isradiology.org and clicking on the DVD cover under “Latest News.” However, to purchase the DVD, you must mail or fax in an order form. Visit www.acr.org/4dimensions, click on “Purchase Traditional Products,” and then click “2008–2009 Radiology Resources: Materials and Publications Catalog.” Browse for the DVD and requisite product code, then print, complete, and send in the order form.

To the Point

- The DVD is free to ACR members, with only a $9.99 fee for shipping and handling. Order from the 2008–2009 Materials and Publications Catalog at the ACR Store on www.acr.org.

- Nonmember radiologists throughout the world can receive the DVD free also, only paying the shipping and handling fees at cost.
Unlocking Success in Radiology

Chapter membership provides keys to professional achievement.

By Trina Zeberlein

A CR members are required to belong to their state chapters, a condition that supports grassroots involvement and unites members with common practice concerns and issues. Membership in your state chapter provides several important benefits.

You Must Play to Win

Ensure that your chapter receives the recognition it deserves by participating in the ACR’s Chapter Recognition Program. The Office of Chapter and Volunteer Development is now accepting submissions for the 2008 awards program. The applications deadline is Dec. 31. Winning chapters will be recognized during a ceremony at the AMCLC in May 2009.

For more information, visit www.acr.org/chapterawards or contact Adrian Kosmicki at 800-227-5463, ext. 4917.

Invest in Radiology’s Future

The Office of Chapter and Volunteer Development is currently collecting names of members-in-training who will be cosponsored by the ACR and their state chapters to attend AMCLC 2009 and the Resident and Fellow Section meeting. Attending these meetings provides residents and fellows with an introduction to the ACR Council, a forum to discuss issues of mutual concern, and an opportunity to participate in leadership development seminars.

The ACR is investing in the future by offering each chapter up to $2,000 to offset the cost of sending at least two members-in-training to the annual meeting. We hope that all chapters will join in this endeavor and help set a new record for member-in-training attendance at the meeting.

For more information, contact Fran Cordero at fcordero@acr.org or 800-227-5463, ext. 4496.

Do You Have Chapter News to Share?

Has your chapter recently held an event that you’d like us to highlight? Perhaps you’ve presented a prestigious award to an ACR member or launched a bold new initiative. If you have chapter news for the ACR Bulletin, contact Trina Zeberlein at tzeberlein@acr.org or 800-227-5463, ext. 4998.

Trina Zeberlein (tzeberlein@acr.org) is ACR assistant director of Chapter and Volunteer Development.

Membership Benefits

Encourages professional involvement — Members know, through their chapter membership, that they are not alone in seeking solutions to current problems in radiology at both national and local levels.

Creates access to ACR Council activities — By participating in your chapter as a councilor or alternate councilor, you can influence decisions affecting national radiology policy during ACR Council meetings and the Annual Meeting and Chapter Leadership Conference (AMCLC).

Delivers your views to state and local politicians — A primary purpose of any chapter is to represent the interests of its members before government. Chapter membership provides the representation necessary to affect federal and state legislation and regulations.

Provides educational opportunities — Chapters fulfill an important function by providing educational opportunities for members. These programs are timely, are selected on the basis of local radiological needs, and often provide important CME credits.

Promotes volunteerism and leadership development — State chapters offer opportunities for volunteerism and leadership. You can serve as an officer, councilor, or committee chair, or perhaps participate in ACR’s commission and committee activities.

Influences decisions related to reimbursement — Through your chapter’s relationship with state Carrier Advisory Committee representatives, you can influence reimbursement decisions at the local level.

For more information, visit www.acr.org/ChapLdrRes.
A Promising Path

ACRIN®’s Fall Meeting reviews discoveries and future explorations.

The 2008 ACRIN Fall Meeting, held Oct. 2-4 in Arlington, Va., provided the ACRIN community with an opportunity to learn more about ACRIN’s past research and chart the organization’s future course.

Sessions Outline Progress

At the plenary session, Mitchell D. Schnall, M.D., Ph.D., network chair of ACRIN, shared results from the first 10 years of investment in ACRIN that have come to fruition. During the past decade, ACRIN has established a strong track record for conducting clinical trials of imaging technology and publishing the results.

Schnall sees several challenges for ACRIN moving forward. The first is achieving a balance in the clinical trials portfolio and ensuring that ACRIN’s studies are in line with its key scientific objectives. The second challenge is continuing to build a publication record to ensure that results are broadly disseminated. The third challenge is working with members of the clinical community.

“This year,” Schnall says, “10 ACRIN research presentations are scheduled at the annual meeting of the Radiological Society of North America [RSNA]. We also hope to have 10 presentations at the American Society of Clinical Oncology’s annual meeting next year. Our goal is to engage the oncology community in our research to help ensure that our research will positively affect clinical practice.”

Committees’ Cutting-Edge Concepts

Members of ACRIN’s scientific committees review the progress of trials currently underway, as well as those approved and in development. They also discuss new technologies and allow collaboration between imagers and other specialists. A key part of their work is to review new concept ideas and recommend the best concepts for further development by ACRIN.

The Experimental Imaging Sciences Committee (EISC) discussed several new protocol concepts that involve novel imaging devices and imaging agents. One concept presented would seek to determine if 18F-Fluoride PET is an effective imaging biomarker for monitoring treatment of metastatic prostate cancer; members of the abdominal committee provided positive feedback on this proposal.

EISC members were also introduced to a concept involving diffuse optical spectroscopic imaging (DOSI) and MRI that is supported by both the EISC and the breast committee. The protocol’s primary aim is to correlate DOSI measure-
ments with the pathological “gold standard” measure of chemotherapy response. Donna M. Hartfeil, R.N., B.S.N., project manager for the EISC, says, “With the strong support of both committees, we are able to move this concept forward and develop a concept with focused primary aims and data collection.”

The Head/Neck/Neuro Committee also reviewed several innovative proposals with meeting attendees. The use of 18F-FLT PET in early-stage head and neck cancers to monitor the effectiveness of chemoradiation treatment early in the course of treatment was discussed. Promising results from single-center studies suggest that 18F-FLT PET can better assess treatment response than FDG-PET for patients receiving radiation treatment.

Also under consideration are several collaborative studies with the Radiation Therapy Oncology Group® and the Adult Brain Tumor Consortium. Bernadine F. Dunning, M.S., RT(R)(T), C.M.D., project manager for the Head/Neck/Neuro Committee, says, “The considerable interest of other groups to incorporate ACRIN imaging aims — many related to imaging biomarkers — demonstrates the growing awareness of how these imaging techniques can potentially improve the management of patient care.”

The Breast Committee focused on tomosynthesis technology for detecting breast cancer. Committee members learned more about the physics behind this promising procedure and received an update from representatives of major equipment vendors about their respective tomosynthesis systems. The committee plans to continue discussions in the near future about a potential ACRIN trial to evaluate this breast-cancer screening technology.

### Scientific Support and Expertise

The imaging core laboratories meeting focused on the theme of adaptive therapy trial design for functional imaging endpoints. Nola M. Hylton, Ph.D., presented plans for an adaptive Phase II trial that would test new agents using functional imaging methods to evaluate response.

Members of the Informatics Committee further discussed adoption of Annotation and Image Mark-up (AIM) as a critical project that seeks to allow information to be captured about the meaning of pixel information in images such that similar meaning in other images can be found and used. Plans for the AIM and other informatics initiatives are under development.

### An Expanding Network

This year, ACRIN welcomed new attendees from a variety of organizations and programs. As Charles Apgar, M.B.A., ACRIN senior director, notes, “Both members of the ACRIN Cardiovascular Committee and investigators participating in the ACRIN Pennsylvania Network trials met in person for the first time at this meeting. In addition, the attendance of leaders from the Society of Nuclear Medicine and participants from the Clinical and Translational Science Awards consortium demonstrates ACRIN’s expanding network of collaborators.”

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**Treatment Response Assessment**

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Nola M. Hylton, Ph.D., principal investigator of the trial “Contrast-Enhanced Breast MRI for Evaluation of Patients Undergoing Neoadjuvant Treatment for Locally Advanced Breast Cancer” (ACRIN 6657), presented preliminary study results at the 2008 ACRIN Fall Meeting. Above, specialized MRI software used in the ACRIN 6657 trial creates a tumor map that takes into account tumor diameter, volume, and microvasculature. The tumor maps demonstrate a correlation with the MRI images of tumor response to treatment.
Diagnosis: Malpractice

We take another look at medical-legal issues in radiology.

By Bill Shields and Tom Hoffman

FOREWORD

Legal issues have become a significant part of the practicing radiologist’s world. Most physicians receive little or no information about these issues in their training, and radiologists are no exception. This handbook is an attempt by the American College of Radiology to partially remedy this situation by providing basic information about legal issues to the radiologist-in-training preparing to enter private or academic practice.

—Harry Zibners, M.D., J.D., FACR
—John J. Smith, M.D., J.D.
Medical-Legal Committee

Do I Have to Pay for That?

Most contracts for radiology services explicitly provide malpractice insurance coverage, although the level of coverage detail is variable. If malpractice insurance is not mentioned in a contract, then there is the distinct possibility that a practice does not pay for it, a strategy that has been used to make starting salaries appear artificially high. If malpractice insurance is provided, it is important that a radiologist determine the type of coverage offered.

Malpractice insurance is available in two distinct forms, “occurrence” and “claims made,” the selection of which has important financial implications for radiologists. Occurrence policies provide coverage for any legal action that may result from an incident that occurs during the time period in which the policies are in effect, regardless of when that action is brought. For example, if an occurrence policy is in effect in the calendar year 2001 and a radiologist misses a small, potentially curable lung cancer during that year, that 2001 policy provides coverage for a subsequent lawsuit related to that missed diagnosis, regardless of when the suit is brought.

Claims-made policies are quite different and provide coverage only for legal actions brought during the time period in which the policies are in effect. Returning to the example of a lung lesion missed in 2001, if a lawsuit were brought in 2003, coverage would depend on whether a claims-made policy was in force when the action was actually brought, as the claims-made policy covering 2001 would have expired. Given the volatility of the medical liability insurance market in recent years and the fact that it is much easier for insurance companies to determine radiologist malpractice exposure on an annual basis, claims-made policies now constitute the majority of policies written in the United States.

Covering Your “Tail”

There are important considerations for a radiologist wishing to move to a new practice from a practice that provides claims-made malpractice insurance coverage. Specifically, claims-made policies generally expire when a radiologist leaves a group, and subsequent claims-made policies at the new practice often exclude coverage for actions stemming from incidents that occurred at the previous practice. Therefore, insurance must be purchased to cover claims that may be brought in the future for incidents that occurred at the previous practice; this insurance is commonly referred to as “tail” coverage. Typically, radiology practices with claims-made policies do not provide tail coverage, at least in the first two or three years at a practice. Such coverage can cost tens of thousands of dollars, generating a substantial, often unanticipated expense if a radiologist decides to leave a practice. Radiologists should try to negotiate for tail coverage as part of an employment contract or partnership agreement.

Benefits

Most radiology contracts provide for health and life insurance coverage, though the documents frequently only allude to
benefits provided by the group and not to specific policy provisions. It is always prudent to carefully review the practice’s current benefits package to determine its suitability for personal needs, bearing in mind that packages outside of the contract can generally be altered at any time.

Disability and dental insurance may or may not be provided for in a radiology contract. While dental insurance could be important to individual radiologists, disability insurance, which provides compensation should a radiologist no longer be able to practice, is considered crucial for any individual whose livelihood depends on his or her professional activities. Given the rising cost of physician disability insurance and the purchasing advantage that may be gained by obtaining such coverage through an employer, it is prudent to explore whether a practice is willing to provide disability insurance as part of the employment package.

Reference to retirement plans is also included in many radiology contracts, though as is the case with health and life insurance, specifics are not often part of the contract. It is always best to fully explore what type of plan a practice has in place, such as provisions for a 401(k) plan and practice contributions to any retirement plan. Even in large organizations, it is rare to see “defined benefit” plans, in which benefits upon retirement are guaranteed. Rather, most employer contributions take the form of “defined contribution” plans, and the practice will either contribute a certain amount to the employee’s retirement accounts (usually based on salary, up to a limit provided for by law) or match an employee’s own contributions to such an account.

ENDNOTES

1. When a radiologist moves to a new job with a different claims-made policy, the new insurance company sometimes provides coverage for claims that may be brought in the future for incidents that occurred at the previous practice; this insurance is called “nose” coverage. There is no guarantee, of course, that such coverage will be provided.

2. “Tail” coverage usually costs at least twice the previous year’s premium. For example, if a radiologist’s premium for the last year before leaving a practice was $20,000, then the tail coverage could be expected to cost at least $40,000. Given the sums involved, the radiologist and the group should have a clear (contractual) understanding of how this coverage will be paid for.

3. The basic types of “defined contribution plans” are 401(k) plans, money-purchase plans, and profit-sharing plans. The amount of pretax dollars that can be set aside for retirement annually differs according to the type of plan, as do the employer’s obligations under the plan. In 2004, 401(k) plans were limited to a maximum employee contribution of $13,000 (or $16,000 for individuals ages 50 and over) annually. In 2008, the revised pension law limits employee contributions to $15,000; the maximum amount an employee can contribute to the catch-up plan for individuals ages 50 and over depends on the nature of the 401(k) plan. The employer may (but is not obligated to) contribute additional amounts to the plan. Under a money-purchase plan, the employer may contribute up to 25 percent of an employee’s salary with a $40,000 maximum contribution. Once the level of contribution is set, the employer must make the contribution annually even if the company has no profits. Under a profit-sharing plan, the employer may make discretionary contributions to the retirement plan annually based on profits with the same limits as under a money-purchase plan. A combination of money-purchase and profit-sharing plans is possible. For a truly frightening experience, delve into the U.S. Tax Code at www.fourmilab.ch/ustax/ustax.html.

Bill Shields (bshields@acr.org) is ACR general counsel.

Tom Hoffman (thoffman@acr.org) is ACR associate general counsel.

The ACR Legal Office exists to represent the College and to provide legal advice to the College leadership and the executive director, as well as to handle the day-to-day legal activities of the College. The attorneys are not licensed in all 50 states, the District of Columbia, Puerto Rico, Guam, and Canada, and therefore, cannot give direct legal advice to members or represent chapters, practices, or individual members. The office can provide general information of interest to members as well as general guidance on a variety of legal topics. All information is provided with the express understanding that no attorney-client relationship exists and that members, practices, and chapters should always consult their personal or corporate counsel on matters of concern.

The Medical-Legal Issues in Radiology booklet was initially developed by the ACR Medical-Legal Committee as an informational resource for radiology residents and as a teaching tool for radiology program directors. More recently, the committee has updated and expanded the booklet, turning it into a resource for all members and making it available as a CD-ROM. Since the September 2007 issue of the Bulletin, one section of Medical-Legal Issues in Radiology has been and will continue to be published in every other issue.

Seeking ACR Leaders

The 2008-2009 College Nominating Committee (CNC) will recommend candidates to fill the offices of president, vice president, elected positions on the board of chancellors, speaker, vice speaker, Council Steering Committee (CSC), CNC, members-in-training, and a private-practice representative, who will attend the Intersociety Summer Conference.

Candidates must provide a current curriculum vitae, a recent black-and-white photograph, at least two letters of support, and a completed questionnaire describing the nature of their practice and their position on issues important to the College. The information is reviewed by the CNC and used for publishing in the election manual.

Any member can forward recommendations for any of the positions to the CNC in care of the ACR executive office on or before Dec. 31, 2008. The questionnaire and nomination information will be available on www.acr.org or through the ACR office. All information can be mailed or forwarded electronically to Mary Jane Donahue at mjdonahue@acr.org.
Call for 2010 Nominations

The ACR Seeks Gold Medalists and Honorary Fellows.

By Mary Jane Donahue

The Board of Chancellors (BOC) awards the ACR Gold Medal to individuals who have contributed distinguished and extraordinary service to the ACR or to the discipline of radiology. Service to radiology can encompass teaching, basic research, clinical investigation, or radiologic statesmanship, such as outstanding contributions to the ACR, other medical organizations, government agencies, and quasi-medical organizations. Since 1927, this award has been presented to 164 diagnostic radiologists, radiation oncologists, and physicists who have attained notable stature in the specialty of radiology.

The BOC also elects honorary fellows in recognition of preeminent contributions to the science or practice of radiology by individuals who are ineligible for admission as members of the College. Since 1947, this award has been presented to 182 outstanding individuals worldwide.

The ACR Committee on Awards and Honors seeks nominations for the 2010 awards. Nominations and supporting materials for candidates must be submitted by July 1, 2009. The awards will be presented in May 2010 at the College’s annual meeting in Washington, D.C.

Who Can Nominate Candidates?

Any ACR member or fellow may submit a nomination for gold medalist. A College member or fellow can serve only once each year as either a primary nominator or a sponsor of a nominee for gold medalist. For example, a College member or a fellow cannot be the primary nominator for one nominee and a sponsor for another nominee or act in either capacity for more than one candidate each year.

Any ACR fellow may submit a nomination for honorary fellow. A fellow can serve only twice each year as a primary nominator or sponsor of a nominee for honorary fellow. For example, a fellow can serve as the primary nominator for one candidate and as a sponsor for another candidate or in either capacity for no more than two candidates each year.

Members of the Committee on Awards and Honors, current College officers and members of the BOC, the executive director, and ACR staff are excluded from nominating or sponsoring candidates.

Reactivation Rules

Reactivation of an individual’s nomination for gold medalist is permissible for one year only. If the individual is not chosen for the gold medal during the first year, then the primary nominator can reactivate the candidate’s nomination the next year without submitting additional supporting materials. A candidate who is not recommended for the medal after reactivation of a nomination is ineligible for one year before a new nomination can be brought forward for consideration.

A candidate for honorary fellow can be nominated one year, and the nomination can be reactivated the next year. A candidate who is not recommended for the award after such reactivation is ineligible for one year before a new nomination can be brought forward for consideration.

All reactivation letters must be received by Jan. 15 for consideration the second year.

How to Submit Nominations

Nominations must be submitted in writing, and accompanying materials must include detailed background information on the nominee’s qualifications for the award and a comprehensive curriculum vitae. Additionally, at least two letters of recommendation from sponsors are required.

Send nominations, including all supporting materials, by e-mail to mjdonahue@acr.org or mail your package to:

W. Max Cloud, M.D., F.A.C.R.
Chair of the Committee on Awards and Honors
1891 Preston White Drive
Reston, VA 20191
Attention: Harvey L. Neiman, M.D., F.A.C.R.

Mary Jane Donahue (mjdonahue@acr.org) is the ACR’s assistant director of BOC/Executive Projects.
Classified Ads — NEW Offer!

These job listings are paid advertisements. The ACR now offers a bundled advertising package entitling advertisers who purchase an online and ACR Bulletin classified ad to a 15 percent discount on a classified ad in the Journal of the American College of Radiology. To learn more about this new, bundled offer, contact Samantha Siffring at ssiffring@acr.org.

Rates:
ACR members: $50 per online and Bulletin ad, maximum 50 words. Nonmembers: $125 per online and Bulletin ad, maximum 50 words.

Advertising instructions, rate information, and complete policies are available at www.acr.org under the “Jobs-Career Dev” tab.

Publication of a job listing does not constitute a recommendation by the ACR. The ACR and the ACR Professional Bureau assume no responsibility for accuracy of information or liability for any personnel decisions and selections made by the employer. These job listings previously appeared on the ACR Professional Bureau Web site. Only jobs posted on the Web site are eligible to appear in the ACR Bulletin, on a space-available basis.

ARIZONA - Locums Opportunity - Ongoing - General radiologist, digital mammographer, or MSK radiologist needed. No call or weekends. Skills in plain film, US, CT, and mammo a plus. Great location. Contact: Shelly Hillman by phone at 800-759-8203, ext. 140, or by e-mail at shillman@alliancerr.com.

CALIFORNIA - Fairfield - Radiologist Partnership Opportunity - Full-service general radiology including CT, MR, and US, with all modern equipment. BC/BE. Desired: Cardiac CT certified/trained and experience in MR-directed breast imaging. Contact: James Bronk by phone at 707-486-2154 or by e-mail at strshpbrnk@photodance.com.

CALIFORNIA - Rancho Cucamonga - General Radiologist - Full-time, performing CT- or US-guided biopsies and responsible for reading CT, plain film, US, fluoroscopy, and mammography. Competitive pay, excellent benefits, no on-call duty/night shifts/weekends, 8 weeks of PTO, paid holidays, 401k, credit union membership, and more. Contact: E-mail your resume to barbara.ray@radnet.com.

CALIFORNIA - San Leandro - General Radiologist - Full-time, performing CT- or US-guided biopsies and responsible for reading CT, plain film, US, fluoroscopy, and mammography. Competitive pay, excellent benefits, no on-call duty/night shifts/weekends, 8 weeks of PTO, paid holidays, 401k, credit union membership, and more. Contact: E-mail your resume to barbara.ray@radnet.com.

CALIFORNIA - Ventura - General Radiologist - Full-time, performing CT- or US-guided biopsies and responsible for reading CT, plain film, ultrasound, fluoroscopy, and mammography. Competitive pay, excellent benefits, no on-call duty/night shifts/weekends, 8 weeks of PTO, paid holidays, 401k, credit union membership, and more. Contact: E-mail your resume to barbara.ray@radnet.com.

COLORADO - Grand Junction - General Radiologist - Digital mammographer. BC/BE. Excellent benefits. Contact: Jill Avendano by phone at 970-241-0800, ext. 2148 by e-mail at jill.avendano@rahmail.net.

COLORADO - Downtown - Radiologist - Fellowship-trained interventional radiologist to join our busy interventional service. Contact: By phone at 719-633-3700.

FLORIDA - Coastal - Great Partnership - Partnership package for $650,000 plus total compensation package, 12 weeks of vacation, competitive salary, short partnership, relocation provided, major metropolitan city, cultural activities, professional/collegiate sports, outstanding schools, close to Disney World, Busch Gardens, Miami’s famous South Beach. Contact: Larry Achler by phone at 813-899-6227 or by e-mail at lachler@tampabayradiology.com.

FLORIDA - Hollywood - Mammography Radiologist - Large subspecialized radiology group undergoing significant growth is currently seeking a breast imager. Can offer per diem position with 4 day week/no call and mammo rotation schedule only or mammo only full partnership track. Contact: Jill Avendano by phone at 954-437-4800, ext. 2148 or by e-mail at jill.avendano@rahmail.net.

FLORIDA - Jacksonville - Pediatric Radiologist - Broad spectrum of pediatric radiology. Position offers a competitive income along with a full and comprehensive benefits package. You will participate in a shared call arrangement, which will include coverage from radiology residents and nighthawks. Contact: Tammy Dolores by phone at 904-858-3688 or by e-mail at tdolores@nemours.org.

FLORIDA - St. Petersburg - Body Imaging - Digital mammographer. BC/BE. Excellent benefits. Contact: By phone at 727-893-2500 or by e-mail at fkalmar@grcimagingcenters.com.

ILLINOIS - Gurnee, Libertyville, and Bannockburn - Radiologist - Friendly subspecialized radiologist for busy, cutting-edge, outpatient imaging. Must read most modalities. No call, Sundays, or holidays. One year to partnership with full salary and 1/2 bonus first year. Large benefit package, ample vacation, and healthy salary. Contact: Frank Kalmar by phone at 847-366-8725 or by e-mail at fkalmar@grcimagingcenters.com.

KANSAS - Topeka - Diagnostic Radiologist/Mammographer - Part-time or full-time in dedicated mammography suites, including screening and diagnostic mammograms, CAD, US, biopsy, and MRI. Plenty of time off with coverage, adequate education/meeting allowance, and salary competitive commensurate with your education and experience. Contact: By phone at 785-234-3451 or by e-mail at dcpett@taiol.com.

MARYLAND - Bethesda - Nuclear Medicine Fellowship - Molecular Imaging Program. Fellows will gain experience in PET/radiouclide studies in humans/animals and develop skills in clinical PET and cross sectional imaging. Applicants must have a U.S. medical degree or equivalent. Contact: Peter Choyke, M.D., by e-mail to pchoyke@nih.gov and include your CV.

MONTANA - Kalispell - Interventional Radiologist - Progressive 11-person radiology group with one dedicated special procedure RPA, seeking motivated IR for 1 year to full partnership track in a unique professional environment. No turf issues. Superb relationship with administration. Very competitive income/vacation. Contact: Tyler Weber by phone at 406-751-7545 or by e-mail to twebert@hcrvmrt.com.

NEBRASKA - Lincoln - Expanding Services to add Radiologists - A premier radiology opportunity in Lincoln. A well-established private practice located in a family-oriented university community, boasting top-notch education and resources, is looking to expand. This position offers outstanding professional and financial rewards. Contact: Georgie Bobaum by phone at 402-540-6595 or by e-mail at Bobaum@animaging.com.

OHIO - Batavia - General Radiologist - General Radiologist to join group of 7 providing service to 1 suburban hospital, 2 rural hospitals, and 1 outpatient imaging center in the greater Cincinnati area. Total exams 147,000/year. Contact: E-mail resumes to jimmy_dado@cmpminc.com, fax to 614-717-9845, or mail to Robert Wahlinbrink, M.D., Radiology, Mercy Hospital Clermont, 3000 Hospital Drive, Batavia, Ohio 45103.

OHIO - Columbus - Body Imaging - Riverside Radiology Associates is a subspecialty practice with internal nighthawk services. We cover locations throughout the state of Ohio. A significant business and technology infrastructure provides opportunities to augment other groups. Contact: Philip Weinerman by phone at 614-340-7748 or by e-mail at mflghterry@riversiderad.com.

OREGON - Portland - Radiologist - Northwest Permanente, PC, a phy-mndg multi-spec group providing care to 475,000 members of Kaiser Permanente in Oregon and Washington is seeking 2 BC/BE radiologists for a 25% nuc med and 75% gen rad practice. Fellowship training and/or extensive experience in nuc med req’d. Contact: Call 800-813-3763 for information.

OREGON - Salem - General Radiologist - Seeking a BC/BE radiologist for NWP, a multi-specialty phy-managed group. Practice opportunity is primarily for an outpatient center. MRI, US, fluoroscopy/plain films, mammography, and breast intervention required. No night call; nighthawk services/PACS utilized. Contact: Apply at http://physiciancareers.kp.org/nw and click on “Career Opportunities.” For more information, please call 800-813-3763.

PENNSYLVANIA - Abington - Interventional Radiologist - Radiology Group of Abington seeks fellowship-trained interventional radiologist to join our 30-person practice. Partnership tract. The practice spans the gamut of vascular/interventional services and has a collegial relationship with vascular surgery. Contact: Peter Villas, M.D., by phone at 215-481-2536 or by e-mail at pvillas@amh.org.
Pennsylvania - Philadelphia - Nuclear Medicine - We offer a competitive compensation package and a congenial work environment. Part-time position, no evenings or weekends. Qualified applicant should be ABNM certified and have PET/CT training. Visit our Web site at www.diliradiology.com. Contact: Elaine Tomaschik by phone at 215-612-5157 or fax CV to 215-612-5077.

Pennsylvania - Pittsburgh - Radiologist - U of Pittsburgh Med Center, Passavant Hosp - 300-bed evolving tertiary care hospital; a 25-bed community hospital; a multimodality outpatient imaging facility with a comprehensive breast center; and an MRI-only outpatient center near the main hospital site. Contact: Barry McCook by phone at 412-647-1972 or by e-mail at rippelcn@upmc.edu.

Pennsylvania - Wilkes-Barre, Danville, State College - Interventional and Other Subspecialty Radiology - Geisinger has excellent opportunities in clinical/academic radiology with state-of-the-art resources, and an impressive supporting cast. Financially sound and a growing health system, presently hosting 75 medical and surgical specialties. Visit www.geisinger.org. Contact: Elaine Tomaschik by phone at 570-271-7003 or by e-mail at etomaschik@geisinger.edu.

Pennsylvania - Various Locations - Neuroradiology - Geisinger is a physician-led institution with an excellent blend of clinical/academics/research, affording a balanced lifestyle. Approximately 700 physicians practice in 75 medical and surgical specialties, with over 30 residency and fellowship programs, including radiology residency. Benefits include paid med-mal. Visit us at: www.geisinger.org. Contact: Elaine Tomaschik by phone at 570-271-7003 or by e-mail at etomaschik@geisinger.edu.

Rhode Island - Providence - Mammographer - Fifty radiologist practice with 3 hospitals and 6 private offices. Academic affiliation and great quality of life. Contact: John Cronan by phone at 401-444-5184 or by e-mail at jcronan@lifespan.org.

Texas - Abilene - General/Body Imaging Radiologist - Eleven-person group covering multiple hospitals in Abilene and West Central Texas, most by teleradiology. Fellowship training preferred. Interventional capabilities helpful. Practice includes hospital and office settings. Part ownership in Imaging Center available. Partnership track/salary positions available, benefits included. Average compensation. Contact: E-mail inquires and CV to mojcak1@cs.com.

Texas - Austin - Body Imagery - Austin Radiological Association is looking for a body imager. Applicant will be expected to do minor procedures such as lung biopsy, liver biopsy, paracentesis, and thoracentesis. The position focuses on cross-sectional imaging with very little MSK. Contact: Please reply with CV via e-mail to Andrew Reifsnyder, M.D., at reifsnyderamd@ausrad.com.

Texas - Austin - Interventional Radiologist - Austin Radiological Association, a group of over 80 radiologists, is looking for a full-time partnership-track interventional radiologist. Full outpatient IR clinic and suite. IR rad should expect between 30 to 50% IR with loads of general radiology and some mammography. Contact: E-mail your CV to jhaverirmd@ausrad.com.

Texas - Texarkana - Partnership Position - Radiology Consultants, LLP, a partnership based at CHRISTUS St.Michael Health Care Center, is seeking a BC/BE radiologist to join our 6-person partnership. Contact: Joe Robbins, M.D., by phone at 903-614-2950 or by e-mail at robinsj01@cableone.net or Phyllis Wilson by phone at 903-223-1014 or by e-mail at pawradcom@cableone.net.

Texas - Teleradiology - Radiology Reading Centers of America (RRCA) is actively seeking ABR-certified radiologists licensed in Texas for interpretations. Earn top compensation and enjoy flexible scheduling. You do not need to work with us exclusively. Final interpretations required. Contact: Daniel R. Roubein, M.D., by phone at 832-778-9729, fax resume to 832-778-9727, or e-mail to info@radiologyreadingcenter.com.

Virginia - Chesapeake - Radiologist - Well-established private practice group of 8 in beach resort community offering full-time partnership-track position. Hospital-based with onsite state-of-the-art outpatient facility providing CT, MRI, digital mammo, and mammography interventional services. Approximately 200,000 exams per year at present. Contact: David Cohen by e-mail at d.cohen10@cox.net.

Washington - Moses Lake - BC Radiologist - Wenatchee Valley Medical Center offers excellent opportunity for a BC radiologist. Join a department of 2 within a multisite team. Interpret plain film, US, CT, mammography, nuclear medicine, and MRI and utilize teleradiology with PACS. Learn more at www.wvmedical.com Contact: Send CV to David Weber, M.D., at JoinUs@wvmedical.com.

Nationwide - Teleradiologists, All Specialties - Telerays LLC, an online auction, seeks radiologists of all specialties to provide interpretations for clients nationwide. No requirements to work exclusively for Telerays. Prequalified radiologists will bid for contracts on auction. The lowest bid wins the contract. Must satisfy credentialing process. HIPAA compliant. Contact: Call 866-972-9362; resumes to info@telerays.com; fax 832-778-9727.

If you would like to see more job ads, visit our Web site at http://jobs.acr.org.

Interview Service

The ACR Career Center will host its on-site interview service at the RSNA Annual Meeting Nov. 30-Dec. 4, 2008. Registration for this service is now available on the ACR Web site; current users can update their accounts and register for this year’s interviewing event; new users can register to use the Career Center and participate in the interview service. Visit the ACR Career Center at http://jobs.acr.org.

Are You Going Green?

Some radiology practices are joining the environmental movement. If your practice is implementing ways to reduce its environmental footprint, the ACR Bulletin would like to hear about what you’re doing. Examples include efforts to reduce the use of toxic materials, minimize chemical waste, and lower total waste volume through such efforts as recycling and reducing water and energy consumption. We’d also like to hear how these activities may actually be saving you money. Please contact us about your green practices at bulletin@acr.org.
ACR 2008–2009
CME Calendar of Events

ACR-Dartmouth PET/CT Course
Dec. 8-10, 2008; April 6-8, 2009; June 29-July 1, 2009;
Sept. 14-16, 2009; Dec. 7-9, 2009
The ACR Education Center, Reston, Va.
This preceptorship led by Dartmouth faculty provides practicing radiologists and nuclear medicine physicians with intensive, hands-on experience in reading PET/CT. You will interpret in a frontline fashion more than 150 PET/CT scans covering all clinical applications.
CME: 33 AMA PRA Category 1 Credits™

CT Colonography: Supervised Case Review
Dec. 13-14, 2008; Feb. 23-24, 2009; April 20-21, 2009
The ACR Education Center, Reston, Va.
Learn the technique, performance, and interpretation of CTC through the supervised review of a minimum of 50 cases. This course will also provide a forum for discussing research initiatives, regulatory issues, and the reimbursement environment.
CME: 19.5 AMA PRA Category 1 Credits™

Breast MR With Guided Biopsy
Feb. 5-6, 2009; May 19-20, 2009; Aug. 6-7, 2009; Nov. 9-10, 2009
The ACR Education Center, Reston, Va.
This 100-case course provides practicing radiologists with an intensive, hands-on experience in reading breast MRI under expert supervision. Participants will develop their interpretive skills through extensive case reviews at individual workstations.
CME: 19 AMA PRA Category 1 Credits™

Coronary CT Angiography
The ACR Education Center, Reston, Va.
Optimize your clinical practice skills with this intensive training course interpreting coronary CTA examinations under the supervision of expert faculty. Most cases include clinical scenarios and coronary catheter angiography correlation.
CME: 28 AMA PRA Category 1 Credits™

New! ACR/NIOSH Symposium on Radiology of the Pneumoconioses
April 24-27, 2009
Westfields Marriott, Chantilly, Va.
For the first time since 2004, the ACR will collaborate with the National Institute of Occupational Safety and Health to discuss pneumoconioses. Upon completion of the symposium, physicians will increase their ability to diagnose pneumoconioses from coal, silica, and asbestos, three of the major occupational respiratory entities. Online registration will be available soon.

To learn about the ACR’s broad portfolio of educational products and services, visit www.acr.org/4dimensions.
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The American College of Radiology is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The American College of Radiology designates these educational activities for AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity.
RSNA: 94th Scientific Assembly and Annual Meeting  
McCormick Place Convention Center, Chicago  
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