

CT Urography Shows Promise in Detection of Urinary Tract Disease

November 30 - December 5 • Chicago

Also Inside:

- Good Business Practices Leave Time to Practice Good Medicine
- Controllable Lifestyle Attracts Medical Students
- RSNA Editorial Fellow Inspires Medical Writers in Asia
- *Radiology* and *RadioGraphics* Earn High Marks from Readers
- Radiation Oncologist Urges Residents to Find a Mentor

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RSNA News

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Nobel Prize Awarded For Discoveries Leading to MR Imaging

he 2003 Nobel Prize in Physiology or Medicine has been awarded jointly to Paul C. Lauterbur, Ph.D., a professor and director of the Biomedical Magnetic Resonance Laboratory at the University of Illinois at Urbana; and Peter Mansfield, Ph.D., from the Magnetic Resonance Centre at the University of Nottingham in England.

"This year's Nobel Laureates in Physiology or Medicine have made seminal discoveries concerning the use of magnetic resonance to visualize different structures. These discoveries have led to the development of modern magnetic resonance imaging, which represents a breakthrough in medical diagnostics and research," says The Nobel Foundation.

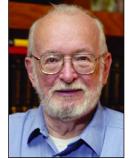
duction of gradients in the magnetic field made it possible to create two-dimensional images of structures that could not be visualized by other techniques. In 1973, he described how addition of gradient magnets to the main magnet made it possible to visualize a cross section of tubes with ordinary water surrounded by heavy water. No other imaging method can differentiate between ordinary and heavy water. Dr. Lauterbur received an RSNA Gold Medal in 1987.

Dr. Mansfield utilized gradients in the magnetic field in order to more precisely show differences in the resonance. He showed how the detected signals rapidly and effectively could be

Theresa C. McLoud,

Gretchen A.W. Gooding,

M.D.





Paul C. Lauterbur. Ph.D.

Peter Mansfield, Ph.D.

analyzed and transformed to an image. This was an essential step in order to obtain a practical method. He also showed how extremely rapid imaging could be achieved by very fast gradient variations (so called echo-planar scanning). This technique became useful in clinical practice a decade later.

AAWR to Honor Four Radiologists at RSNA 2003

The American Association for Women Radiologists (AAWR) will hold its annual award presentations during RSNA 2003.

Dr Lauterbur discovered that intro-

- Theresa C. McLoud, M.D., from Massachusetts General Hospital, will receive the Marie Sklodowska-Curie Award for outstanding contributions to the field of radiology through clinical care, teaching and research.
- Gretchen A.W. Gooding, M.D., from the University of California, San Francisco, will receive the Alice Ettinger Distinguished Achievement Award recognizing outstanding long-term contributions to radiology as a leader, mentor and teacher.
- Pari V. Pandharipande, M.D., from New York University Medical Center, will receive the Lucy Frank Squire Distinguished Resident Award in Diagnostic Radiology.
- M.D. · Karyn A. Goodman, M.D., from Memorial Sloan-Kettering Cancer Center will receive the Eleanor Montague Distinguished Resident Award in Radiation Oncology.

Howell Gets New Role With NIH Clinical Center

R. Edward Howell, vice-president and chief executive officer at the University of Virginia Medical Center in Charlottesville, has been appointed chair

of the Board of Governors for the Clinical Center at the National Institutes of Health (NIH). He had been a member of the Board of Governors

"Ed Howell has vast experience in all aspects of hospital management that he will contribute to the Board of Governors. He has R. Edward Howell

great insight into strategic



planning and implementation of strategic plans as they relate to hospitals," said NIH Director Elias A. Zerhouni, M.D.

Howell brings more than 25 years of hospital leadership to the role having served in executiveand director-level capacities at the University of Iowa Hospitals and Clinics, the Medical College of Georgia Hospital and Clinics and the University of Minnesota Hospitals.

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Leadership Change at CSR

Brent B. Stanfield, Ph.D., has been named acting director of the NIH Center for Scientific Review (CSR) —the organization that coordinates the peer-review groups that evaluate the majority of grant applications submitted to NIH. Dr. Stanfield had been



Brent B. Stanfield, Ph.D.

CSR's deputy director. Ellie Ehrenfeld, Ph.D., left her post as director in September. "I came to NIH to assess the peerreview process and effect changes to accommodate the rapidly changing scope and practice of biomedical research," she said. "We completed the design of the first total reorganization of CSR's review committees, and we are in the process of implementing the new study sections. I am extremely gratified by the support and generous participation of an outstanding team of NIH staff and many others from the extramural research communities."

Dr. Ehrenfeld will continue in her position as chief of the Picornavirus Replication Section in the Laboratory of Infectious Diseases at the National Institute of Allergy and Infectious Diseases.

Former Pharmacia Director Joins ACR

Cindy Moran has been named assistant executive director for government relations for the American College of Radiology (ACR). Moran recently worked at Pharmacia Corporation, where she was a senior director for federal government affairs.

"Radiology has a vital message to deliver to legislative leaders and government agencies and Ms. Moran will unquestionably strengthen the ACR's ability to deliver that message," says ACR Executive Director Harvey L. Neiman, M.D.

Ward Joins Konica Minolta

Bill Ward has been appointed vice-president of marketing and sales at Konica Minolta Medical Imaging USA. Ward will be responsible for field sales and corpo-

rate accounts, as well as marketing and new business development. Since 1976, Ward has worked for firms

including DuPont Diagnostic Imaging, Sterling Diagnostic Imaging, Agfa Corporation North America and ImageCare Inc., where he was most recently executive

and ImageCare Inc., where he was most recently executive vice-president.

Konica and Minolta officially merged on October 1.

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

ANNOUNCEMENTS

Thoracic Radiology Lexicon Developed

A subcommittee of specialists working under the RSNA RadLex Steering Committee and its chair, Dr. Curt Langlotz, has developed a subspecialty lexicon in thoracic radiology. The lexicon will be published in

the next few months

as a Web-based data

source. The lexicon



for thoracic radiology is the first in a series of subspecialty-focused development efforts to build the components of a general radiology lexicon.

When complete, RadLex will provide a standardized vocabulary

that can be used to describe an imaging examination, providing terms for modalities, techniques, visual features, anatomy and pathology. It will be downloadable for use in information tools and resources such as

> teaching files, clinical trials databases and structured clinical reports.

Notably, it will be used in the RSNA Medical Imaging Resource Center (*mirc.rsna.org*) and its teaching file authoring tool, MIRCat.

More information about RadLex is available at www.rsna.org/radlex/.

West Nile Virus MR Imaging Registry

The West Nile Virus MR Imaging Registry has collected more than 1,000 West Nile virus (WNV) images over the past few weeks. The registry is a joint project between the Centers for Disease Control and Prevention and Louisiana State University Health Sciences Center in New Orleans.

Images are available for review on the Universal PACS Web site at *www.unipacs. com/westnile.html* through their WebPACS interface. New case contributions are welcome at *westnile@unipacs.com*.



Cindy Moran

ΚΟΝΙζΛ ΜΙΝΟΙΤΛ

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ANNOUNCEMENTS

IHE Connectathon Held at RSNA Headquarters

In early October, the Integrating the Healthcare Enterprise (IHE) initiative hosted its annual Connectathon at RSNA Headquarters in Oak Brook, Ill. Participating companies completed an extensive program of systems integration testing.

With IHE integration capabilities systems are being adopted by institutions around the world.

IHE classroom sessions and printed materials at RSNA 2003 will offer more information on the testing process and the benefits of implementing the IHE integration capabilities.

IHE 2003-2004 Participants

Aqfa Healthcare

Cerner Corp.

DR Systems, Inc.

Dynamic Imaging

Eastman Kodak Company

CSIST

Algotec Systems, Ltd.

Cedara Software Corp.

FujiFilm Medical Systems USA GE Medical Systems Heartlab Hitachi Medical Corp. Hologic, Inc. IDX Systems Corp. INFINITT Co., Ltd. Instrumentarium Imaging Konica Minolta Medical Imaging, Inc.

New at RSNA 200

Marotech, Inc. McKesson Information Solutions Medcon Merge eFilm Philips Medical Systems Procom Technology Inc. RASNA Imaging Systems Sectra Medical Systems Siemens Medical Solutions

NEW!

Emageon

Sunday Image Interpretation Session Available Online

The RSNA 2003 Sunday Image Interpretation Session will be simulcast on the Web in real time, and then will be available for several weeks afterward. This year, the moderator will be Michael P. Federle, M.D. The panelists will be Faye C. Laing, M.D., Jeffrey S. Klein, M.D., Alec J. Megibow, M.D., M.P.H., Richard B. Towbin, M.D., and Hugh D. Curtin, M.D.

The Webcast, via regular Internet or Internet2, will be on Sunday, November 30 at 4:00 p.m. CT at

www.rsna.org/sunday/index.html. The live Webcast is available for 1.75 CME credits.

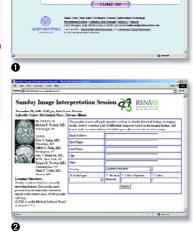
Free advance registration is required for viewing this session. Internet2 users need to download a viewing application.

Prous Science, Video Furnace and Northwestern University International Center for Advanced Internet Research have assisted in the execution of the Webcast by providing in-kind support. Internet2 users, click here to download the viewing application and test your I2 link.
To register for the online session, click here then fill out the registration form.

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RSNA'0











EPOS Demonstration at RSNA 2003

Award-winning exhibits from the 2003 European Congress of Radiology (ECR) will be featured in the Education Exhibits area at RSNA 2003. These exhibits use the new Electronic Poster Online System™ (EPOS) developed by ECR. Twelve computers will be available in the exhibit hall to view the paperless presentations.

An online EPOS database is available with more than 870 electronic posters presented at ECR 2003. RSNA members have free access to the EPOS database at epos.myecr.org/posters/rsna signup.php.



PATIENT

November 30 - December 5 McCormick Place, Chicago

NIH Announces Strategy to Accelerate **Medical Research Progress**

In a move to transform the nation's medical research capabilities and speed the movement of research discoveries from the

bench to the bedside. National Institutes of Health (NIH) Director Elias A. Zerhouni, M.D., has laid out a series of far-reaching initiatives known collectively as the NIH Roadmap for Medical Research.

"There has been a scientific revolution in the last few years," Dr. Zerhouni said in a September 30 press



conference. "The opportunities for discoveries have never been greater, but the complexity of biology remains a daunting challenge. With this new strategy for medical research, NIH is uniquely positioned to spark the changes that must be made to transform scientific knowledge into tangible benefits for people."

An expanded article on the NIH Roadmap will be included in the December issue of RSNA News.

HHS Awards \$26.6 Million for Bioterrorism Training and Curriculum

The U.S. Department of Health and Human Services has announced \$26.6 million in grants to strengthen bioterrorism training and education for the nation's healthcare workforce. The grant recipients are:

Continuing Education Grants

University of Arkansas for Medical Sciences, Little Rock	\$1,494,401
University of California, San Francisco	\$1,496,794
Denver Health & Hospital Authority	\$987,323
Yale New Haven Health System, Bridgeport, Conn.	\$1,282,801
MCHC–Chicago Hospital Council	\$1,046,160
University of Kansas Medical Center, Kansas City	\$1,218,549
University of Louisville Research Foundation	\$1,363,969
Saint Vincent Foundation, Billings, Mont.	\$917,596
University of Medicine and Dentistry of N.J., Newark	\$1,570,090
University of New Mexico, Albuquerque	\$1,140,565
Columbia University, New York City	\$399,597
University of North Dakota, Grand Forks	\$820,761
Oklahoma Area Health Education Center, Tulsa	\$785,733
Thomas Jefferson University Hospital, Philadelphia	\$968,102
Medical University of South Carolina, Charleston	\$1,235,721
University of Tennessee Health Sciences Center, Memphis	\$1,363,747
University of Texas Health Sciences Center, Houston	\$1,838,693
Virginia Commonwealth University, Richmond	\$1,535,597
West Virginia University, Morgantown	\$878,301
TOTAL	: \$22,344,500

Curriculum Development Grants University of Arkansas for Medical Sciences, Little Rock \$216,375 University of California, Los Angeles \$313,430 University of Hawaii, Honolulu \$377,125 University of Illinois, Chicago \$392,027 University of Montana, Missoula \$201,454 University of Nebraska Medical Center, Omaha \$363,777 Columbia University, New York City \$348,360 Ohio State University Research Foundation, Columbus \$429,474 Vanderbilt University Medical Center, Nashville \$384,866 University of Texas Health Sciences Center, San Antonio \$459,222 Shenandoah University, Winchester, Va. \$309.579 University of Washington, Seattle \$425,853 TOTAL: \$4,221,541

GRAND TOTAL: \$26,566,041

For more information, go to www.hrsa.gov/bioterrorism.htm.

Imaging Component of Research on Human Immunity and Biodefense

The National Institute of Allergy and Infectious Diseases (NIAID) has named five cooperative centers that will participate in an \$85 million research project to better understand the human immune response to potential agents of bioterror and to develop countermeasures, such as vaccines and therapies. The centers are:

- Baylor Research Institute, Dallas
- Dana-Farber Cancer Institute, Boston
- · Emory University School of Medicine, Atlanta
- · Stanford University School of Medicine, Calif.
- · University of Massachusetts Medical School, Worcester

"The absence of necessary technologies is a significant barrier in human immune function research," says Helen Quill, Ph.D., of NIAID's Division of Allergy, Immunology and Transplantation (DAIT). To overcome this obstacle, researchers at the cooperative centers will, among other measures, develop new ways to get information from single immune cells, so that very small tissue and blood samples can be tested. Imaging technologies will also be developed to allow non-invasive, real-time views of the body as it reacts to vaccine or infection.

For more information, got to www.niaid.nih.gov/biodefense/.

GE Acquires Triple G, Thales

GE Medical Systems Information Technologies, the healthcare IT business of General Electric Company, has completed its acquisition of Triple G[®] Systems Group, Inc., a leading independent developer of medical laboratory information systems.

"Triple G understands clinical lab workflow and is renowned in the industry for its premier systems and its deep commitment to its customers," said Dow Wilson, president and CEO of GE Medical Systems Information Technologies. "With Triple G's advanced lab information systems, GE will be able to help clinicians provide safer patient care through a paperless process that automates laboratory workflow and allows for faster, more accurate ordering and reporting of patients' lab information."

In July, GE Medical Systems announced that it had completed its acquisition of Thales Ultrasound Probes S.A., a supplier of custom, extended performance transducers for medical ultrasound and other applications based in France.

LETTERTOTHEEDITOR

RSNA

DEAR EDITOR:

Although I'm glad to see that the AMA and the RSNA are addressing the issue of commercialized medical screening (*RSNA*

News, September 2003), I have noted a conspicuous absence in the discussion; the risks of radiation are real and tangible. Without any proven benefit, it is unethical to offer it to the unknowing public, regardless of the referral chain or lack thereof. Isn't part of our role as radiologists to protect the patient popu-

lation from the indiscriminate and liberal use of radiation for purposes of entertainment or paranoia? Why have we as an organization been so silent about this?

Sincerely, Ophelia B. Chang, M.D. Nashua, N.H.

DR. CHANG

RSNA was established as a research and education organization. Though the Society is committed to educating the radiologic community about the benefits and risks of CT dose, it does not make health policy. Rather, it supports the

positions developed by the American College of Radiology (ACR), which has taken on a greater role with the healthcare consuming public. The ACR's statement on screening exams follows:

ACR Statement on CT Screening Exams (supercedes statement of Sept. 27, 2000) The American College of Radiology (ACR) recognizes that an increasing number of computed

tomography (CT) screening

examinations are being performed in the United States. Much CT screening is targeted at specific diseases, such as lung scanning for cancer in current and former smokers, coronary artery calcium scoring as a predictor of cardiac events and CT colonography (virtual colonoscopy) for colon cancer. Early data suggest that these targeted examinations may be clinically valid. Large, prospective, multicenter trials are currently under way or in the planning phase to evaluate whether these screening exams reduce the rate of mortality.

The ACR, at this time, does not believe there is sufficient evidence to justify recommending total body CT screening for patients with no symptoms or a family history suggesting disease. To date, there is no evidence that total body CT screening is cost efficient or effective in prolonging life. In addition, the ACR is concerned that this procedure will lead to the discovery of numerous findings that will not ultimately affect patients' health but will result in unnecessary follow-up examinations and treatments and significant wasted expense.

The ACR will continue to monitor scientific studies concerning these procedures. -September 28, 2002

RSNAMews

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

RSNA Board of Directors Report

s many of our members prepare to attend the Society's 89th Scientific Assembly and Annual Meeting in Chicago, brainstorming sessions are under way to make RSNA 2004 even more professionally stimulating and time efficient for busy healthcare professionals.

Many ideas for improving the educational experience were discussed at the recent RSNA Board of Directors meeting. Here is a synopsis of some of them.

Refresher Courses

The Board reviewed ideas, prepared by the Refresher Course Committee, to improve the effectiveness of the refresher courses. These included greater use of the audience response system, consolidation of tracks and targeting the curriculum to have the basics covered in the Essentials courses while state-of-the-art information is covered in other refresher courses. Another idea is to cluster refresher courses and scientific sessions on related topics in the same location and on the same day to help attendees better tailor their schedules and focus their attention. These ideas will be explored further at the 2004 Education Council Meeting.

As part of the process, RSNA will survey radiologists in private practice for their suggestions on ways to improve the refresher courses. Those ideas, along with ideas from the Brainstorming Meeting and the Education Council, will be brought to the Board next March.

More Digital Access

A new online abstract submission system will be unveiled after RSNA 2003 and will be available for RSNA 2004.

This new system will make it easier for participants to submit abstracts and for the RSNA Program Committee to evaluate submissions. The new abstract submission system will be managed solely by RSNA. Electronic submission of scientific abstracts for the annual meeting was first offered in 1997, but it was managed by an outside firm. Since 2001, all scientific abstract submissions have been only online.

RSNA is also creating a digital presentation system (DPS) for education exhibits and scientific posters. This will be similar to the Electronic Poster Online System[™] (EPOS) from the European Congress (ECR) of Radiology. A pilot test of the RSNA system is planned for RSNA 2004 to determine the desirability and feasibility of a complete transition to electronic exhibits and posters. EPOS will be demonstrated at RSNA 2003 in the Education Exhibits area, displaying award-winning posters from the 2003 ECR meeting.

Additional information on these two advances will be included in future editions of *RSNA News*.

Lifelong Learning

The Board reviewed a project to assist members in developing customized programs of individual learning. An organizational system is being developed that will allow RSNA members to sort and identify educational programming offered by RSNA—during and outside the annual meeting. Members will be able to seek out educational materials and programs that specifically address self-identified needs, based on their own educational goals, practice patterns or areas of deficiency. This program is scheduled to become available to members next spring.



DAVID H. HUSSEY, M.D. Chairman, 2003 RSNA Board of Directors

Residents

The Board has been looking into scientific and educational programs designed to meet the needs of residents. Among those under consideration include a course on emergency radiology for residents, an Essentials of Radiology course designed specifically for residents, and weekend programming for residents who have to stay home during the week so that their colleagues can attend the RSNA annual meeting on weekdays.

The 2004 Education Council will consider these and other ideas for the more than 1,500 residents who attend the RSNA annual meeting.

AAPM

The Board has decided to provide \$36,000 per year for two, two-year residencies (total of \$72,000) in the American Association of Physicists in Medicine's (AAPM) Clinical Residencies in Diagnostic Medical Physics program. The money will be awarded through the *Continued on page 8*

RSNA 2003 Lecture/Oration Previews

hree respected leaders will deliver the honored lectures at RSNA 2003. They are Elias A. Zerhouni, M.D., Donald L. Resnick, M.D., and Lester J. Peters, M.D.

Eugene P. Pendergrass New Horizons Lecture

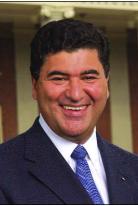
Elias A. Zerhouni, M.D., is one of the most influential radiologists in the world. Described by colleagues as bright, articulate, engaging and a masterful mediator, Dr. Zerhouni is the director of the National Institutes of Health (NIH), guiding the scientific and fiscal matters of 27 institutes and centers, including the National Institute of Biomedical Imaging and Bioengineering (NIBIB).

Dr. Zerhouni will present the New Horizons Lecture on "The NIH Vision," on Monday, December 1.

He'll explain key concepts and issues surrounding the new NIH vision and its three components—new pathways to discovery, research teams of the future and re-engineering the clinical research enterprise. He'll also describe NIH's deep commitment to improving the health of the American people and will address the nation's health burden crisis and the revolutionary changes that will be needed to confront this issue.

Prior to assuming his position as NIH director in May 2002, Dr. Zerhouni spent more than a quarter century at Johns Hopkins University School of Medicine. He was the executive vicedean of the medical school. He was also chair of the Russell H. Morgan Department of Radiology and Radiological Science, a professor of biomedical engineering, and the Martin Donner Professor of Radiology.

During his tenure at Johns Hopkins,



Elias A. Zerhouni, M.D.

he developed a comprehensive strategic plan for research, and helped reorganize the school's academic leadership. He also led efforts to restructure the school of medicine's clinical practice association, and played a leadership role in establishing the Institute for Cell Engineering and the university's first microarray core facility.

As a researcher, Dr. Zerhouni helped to develop a method for using high-resolution CT for physiological and anatomic lung studies and a technique that improved the accuracy of CT densitometry for determining malignancy of lung nodules. He also pioneered a way of assessing heart function using MR imaging.

A respected voice in medicine, Dr. Zerhouni has been a member of the National Academies' Institute of Medicine since 2000. He also served on the National Cancer Institute's board of scientific advisors and was a consultant to the World Health Organization and to the White House under President Ronald Reagan.

An RSNA member since 1982, Dr. Zerhouni has served on a variety of committees including the Public Information Advisors Network. He is a founding







Lester J. Peters, M.D.

member of the Society of Thoracic Radiology and is a member of numerous medical and scientific associations.

Annual Oration in Diagnostic Radiology

Donald L. Resnick, M.D., an internationally renowned researcher, author and lecturer on musculoskeletal imaging, will deliver the 2003 Annual Oration in Diagnostic Radiology titled, "Internal Derangements of Joints: Anatomic-Pathophysiologic Imaging Correlation," on Tuesday, December 2.

For more than 30 years, Dr. Resnick has been a professor of radiology at the University of California, San Diego. He has graduated nearly 200 fellows in musculoskeletal imaging—most of whom have assumed an academic position. Dr. Resnick is also chief of musculoskeletal imaging at the Veterans Administration Medical Center and a clinical associate at Scripps Clinic in San Diego.

During his address, Dr. Resnick will explain the complexity of the synovialtype joint and why dysfunction or derangement of such a joint is a common clinical problem that often requires analysis through imaging, especially

Continued on next page

Continued from previous page

MR imaging.

Dr. Resnick will describe the essential functional anatomy of synoviumlined articulations, mechanisms of failure of structures within these articulations and the MR imaging findings associated with derangements of each of the constituents of a synovium-lined joint.

A prolific researcher, Dr. Resnick is author or coauthor of more than 800 articles, 72 book chapters and 15 books. He has delivered more than 34 national and international named lectures and has won numerous honors and awards.

An RSNA member since 1981, Dr. Resnick was a member of the Refresher Course Committee and the Public Relations Committee.

The Annual Oration in Diagnostic Radiology is dedicated to Isaac Sanders, M.D.

Annual Oration in Radiation Oncology

Internationally respected radiation oncologist Lester J. Peters, M.D., will present this year's Annual Oration in Radiation Oncology on "The Invaluable Role of PET in Radiation Oncology," on Wednesday, December 3.

Dr. Peters is best known clinically for his expertise in the treatment of head and neck cancers. His research has focused on the integration of radiobiological knowledge into clinical practice with spe-





Isaac Sanders, M.D.

Jerzy Einhorn, M.D.

cial emphasis on radiation dose scheduling and development of protocols for combined chemotherapy regimens.

Since 1996, researchers at the Peter MacCallum Cancer Center in Melbourne, Australia, have conducted a series of prospective studies to investigate the role of positron emission tomography (PET) in radiation oncology. During his oration, Dr. Peters will illustrate the value of PET in defining disease extent, planning radiotherapy and monitoring therapeutic response in patients receiving definitive (chemo)radiotherapy for non-small cell lung cancer and for loco-regionally advanced squamous cell carcinoma of the head and neck. He'll then preview potential new applications of this technology.

Dr. Peters has worked on three continents—Australia, Europe (London) and North America, where, for more than a decade, he was a professor of radiotherapy and chairman of the



Nina Einhorn, M.D., Ph.D.

Department of Radiotherapy at the University of Texas MD Anderson Cancer Center in Houston. Dr. Peters is currently a professor of radiation oncology at the Peter MacCallum Cancer Institute and the University of Melbourne. He is dean of the faculty of radiation oncology of the Royal Australian and New Zealand College of Radiologists.

He is a past-president of the American Society of Therapeutic Radiology and Oncology, and is the recipient of many international honors and awards. He has been president of two major congresses recently held for the first time in Australia—the International Congress of Radiation Oncology (2001) and the International Congress of Radiation Research (2003).

The Annual Oration in Diagnostic Radiology is dedicated in memory of Jerzy Einhorn, M.D., R.N.O., and Nina Einhorn, M.D., Ph.D.

RSNA Board of Directors Report

Continued from previous page

RSNA Research & Education Foundation. The Board has also requested that AAPM develop a long-term strategy for training qualified medical physics professionals.

Other Board Action

- RSNA will introduce Hot Topic Exhibits beginning with next year's annual meeting. The hot topic education exhibit for RSNA 2004 will be on neuroradiology.
- RSNA will contribute \$25,000 to the

Fund for America's Liability Reform, spearheaded by the American Medical Association, in support of federal tort reform efforts.

- 2002 RSNA President R. Nick Bryan, M.D., Ph.D., has been appointed to the ACR Board of Chancellors as the RSNA representative.
- Board Liaison for Education Theresa C. McLoud, M.D., will serve as the RSNA liaison to the Armed Forces Institute of Pathology (AFIP).
- The 2004 Derek Harwood-Nash Fellows will be Raj Kumar Rauniyar,

M.D., of Nepal, and Adina Ioana Chirita, M.D., of Romania.

DAVID H. HUSSEY, M.D. *CHAIRMAN*, 2003 RSNA BOARD OF DIRECTORS

Editor's Note: In our continuing efforts to keep RSNA members informed, the chair of the RSNA Board of Directors will provide a brief report in RSNA News following each board meeting.

The next RSNA Board Meeting will be held at RSNA 2003.

CT Urography Shows Promise in **Detecting Urinary Tract Disease**

omputed tomographic urography (CTU) is proving to be a tool for disclosing very subtle disease and may have better diagnostic potential than routine intravenous urography (IVU).

"There is an investigational push into the idea of making CT the only examination needed for evaluation of urinary tract, kidneys and bladder," says Richard H. Cohan, M.D., professor of radiology at the University of Michigan. "Previously, IVU was the first screening test administered. However, we now know that IVU is not very sensitive for detecting renal stones or masses. CT is widely accepted as being superior to IVU for those two indications."

For now, the only remaining superiority of IVU may be examining the renal collecting systems and ureters for small cancers and for several benign conditions, such as renal tubular ectasia and papillary necrosis. Dr. Cohan says investigators are now studying the ability of thin-section CT to display these and other subtle urinary tract abnormalities.

Dr. Cohan says he and colleagues, including Elaine M. Caoili, M.D., who has taken a lead investigatory role, have been very encouraged by their experience with multidetector CTU (MDCTU). Drs. Cohan and Caoili, a 2001 RSNA Research Scholar, have found that patients tend to prefer MDCTU over IVU because they are subjected to only one diagnostic test. In many cases, patients who undergo IVU are ultimately referred for renal mass CT and then possibly retrograde pyelography or ureteroscopy. Also, patients prefer MDCTU because they are not required to take the preparatory laxative usually utilized prior to IVU.



(left) Average intensity projection image created from an excretory phase axial image data set in a patient with a normal MDCTU. (right) Volume rendered image created from an excretory phase axial image data set in another patient with a normal MDCTU. Source: Richard H. Cohan, M.D.

usually utilized prior to IVU.

-Richard H. Cohan, M.D.

Dr. Cohan adds that referring physicians also like MDCTU because it eliminates imaging algorithms and the

potential for falsenegative results, which are much more frequently seen with IVU.

MDCTU and Cancer Preliminary studies in the United States and Europe are touting the benefits of

MDCTU in detecting cancer. One study, by Nigel C. Cowan, M.D., and colleagues in Oxford, England, found that MDCTU enabled detection of more upper tract cancers than did retrograde pyelography. A number of additional studies are also expected to show that the MDCTU technique can detect most urinary cancers.

Dr. Cohan says most radiologists

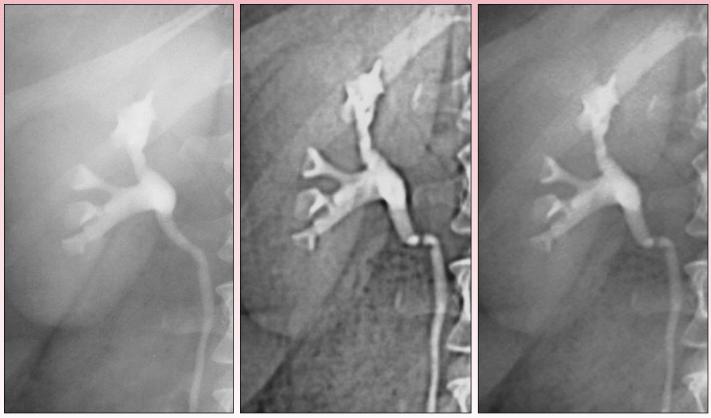
who perform CTU Patients tend to prefer MDCTU utilize an MDCTU technique whereby a over IVU because they are sublarge number of thin *jected to only one diagnostic test* section axial CT images are acquired ... [and] they are not required after injected contrast to take the preparatory laxative material has been excreted in the renal collecting system and ureters. Most then utilize these images

as source images for creating multiplanar reformatted or 3D reconstructions.

CT Combined with IVU

Terri J. Vrtiska, M.D., and her colleagues at the Mayo Clinic in

Continued on next page



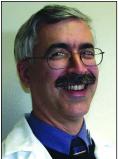
An IVU film (film screen radiograph) (left) compared to the original CT scanned projection radiograph (center) and the improved CT scanned projection radiograph (right). Source: Terri J. Vrtiska, M.D.

Continued from previous page

Rochester, Minn., are practicing an alternative CTU technique that uses a modified multidetector CT scanner. The CT scanner has a tabletop that permits acquisition of both axial CT images and conventional film-screen urographic images using a single injection of IV contrast material. The conventional film-screen urographic images are obtained using an overhead x-ray tube directed to a film-screen cassette positioned under the patient while still on the CT table. The advantage of this technique is that it involves acquisition of only a few immediately available radiographs in a display form, traditionally viewed by radiologists and referring physicians, rather than hundreds of axial images needed for MDCTU acquisition and multiplanar reformation.

The combined exam used at the Mayo Clinic has been very well

accepted clinically with 8,000 patients having undergone CT urography using this technique, including 10-15 CT urographic exams performed daily. "My colleague, Akira Kawashima, M.D., is leading efforts to replace the IVU image with an improved CT-scanned projection radiograph or 'scout' view, which would eliminate the need for the CT tabletop modification and provide image resolution approximating the conventional IVU radiograph," says Dr.



Richard H. Cohan, M.D. Terri J. Vrtiska, M.D. University of Michigan Mayo Clinic

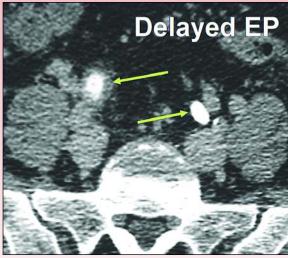


Vrtiska, an assistant professor and physician director of 3D CT at the Mayo Clinic.

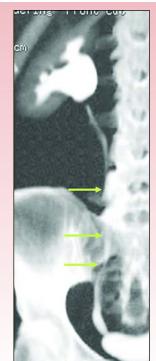
"We are currently studying the sensitivity and specificity of the combined CT and IVU compared to the CT scanned projection radiograph," Dr. Vrtiska says.

Dr. Cohan is a little more cautious about this technique. "We believe that this approach may have some limitations. Like IVU, we don't think you

> can see as much with the scout images as can be seen with thin section axial images or multiplanar reconstructions," he says. This is because only the axial images can show the wall of the renal collecting systems and the ureters as well as the lumen. "We have already encountered a number of patients who had ureteral cancers visualized only on axial images that surrounded a perfectly



Axial image obtained late in the excretory phase while both ureters are well opacified with excreted contrast material (arrows). The right ureter has a markedly thickened wall due to the presence of an infiltrative transitional cell carcinoma.



The ureter appears to relatively normal in caliber on a volume rendered image created from the same data set. The wall thickening is not visible on this image, which only demonstrates the ureteral lumen. Source: Richard H. Cohan, M.D.

normal-appearing ureteral lumen. Although all observations are preliminary, it is possible that MDCTU will ultimately prove to be more sensitive than CT supplemented with the CT

scout view for this reason."

Disadvantages of MDCTU

MDCTU has some it generates a lot of images. That means it takes more time to read," explains Dr.

Cohan. "This comes at a time when we have to work faster and are reimbursed less for the studies we read. The last thing we want is a new study where we have hundreds of images to examine. Second, MDCTU exposes the patient to more radiation than they would have received had they merely had an IVU or even a standard abdominal and pelvic CT and an IVU together."

He adds that radiation reduction efforts are under way through CT technique alterations and advances in CT

hardware and software. MDCTU is also more expensive than IVU.

At the University of Michigan Hospital, Dr. Cohan estimates they have performed MDCTU exams on more

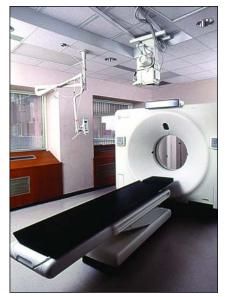
We are currently studying the sensitivity and specificity of the combined CT and IVU disadvantages. "First, compared to the CT scanned projection radiograph. —Terri J. Vrtiska, M.D.

than 1,000 patients. "It is not done at many private hospitals, but radiologists are being encouraged to pursue working on CTU protocols," says Dr.

Cohan, who notes that the technology is still evolving having been first described only

five or six years ago. Dr. Vrtiska expects that within the next year, the CT urography standard will become better defined, perhaps including tailored CTU protocols for specific indications and combination of the two approaches that have been described in this article.

Editor's Note: Drs. Cohan, Caoili, Vrtiska and Kawashima will participate in several scientific and educational sessions on CTU at RSNA 2003. For more information, see the online RSNA Program at rsna2003.rsna.org.



This modified CT scanner used at Mayo Clinic in Rochester includes an overhead x-ray tube and modified CT tabletop.

Controllable Lifestyle Attracts Medical Students

edical students are gravitating toward career specialties associated with a "controllable lifestyle," according to research published in the September 3 issue of *The* Journal of the American Medical Association (JAMA). Characteristics of controllable lifestyle include personal time free of practice requirements and control of total weekly hours spent on professional responsibilities.

The term "controllable lifestyle" was coined more than a decade ago by Richard W. Schwartz, M.D., professor of surgery at the University of Kentucky Chandler Medical Center in Louisville. In published research examining students' attitudes about specialty selection, Dr. Schwartz proposed that top students considered lifestyle when selecting specialties. The most attractive were dermatology, emergency medicine, neurology, ophthalmology, pathology, psychiatry and radiology. The researchers wrote, "the choice of 'noncontrollable lifestyle' specialties such as family practice, internal medicine, obstetrics/gynecology and

pediatrics was negatively affected by this trend."

In this latest study, researchers at Northwestand Northeastern Ohio

Universities in Rootstown set out to determine whether, and to what degree, controllable lifestyle and other characteristics are associated with recent changes in the specialty preferences of senior medical students.

"We looked at trends from the national residency matching program and noted that indeed there was a tendency for students to pick dermatology, radiology, ophthalmology and anesthesiology while there was a downward

trend for primary care, internal medicine, family practice and general surgery," says Gregory W. Rutecki, M.D., the E. Stephen Kurtides Chair of Medical Education at Evanston Northwestern Hospital in suburban Chicago.

To get a handle on what factors might be influencing students' decisions, Dr. Rutecki and his team created log-linear models of lifestyle, income, work hours and years of general medical education. After controlling for income, work hours and years of training, the researchers found that the percentage of variability accounted for by controllable lifestyle increased from 37 percent to 55 percent from 1996 to 2002. Income, work hours and years of general medical education each explained a statistically significant proportion of the variability in preference, but did not approach the explanatory power of controllable lifestyle.

Dr. Rutecki was surprised by the degree of influence that lifestyle apparently exerts. "I had thought before the study that it was going to be a split

This generation values lifestyle and income, and time over money. ern University in Chicago — Richard W. Schwartz, M.D. making. So it seems that

between controllable yet income was only nine percent of the decisionif we look at this as a

culture-wide phenomenon, then this generation values time over money and this study suggests that it carries over to their choice of a career," he says.

In Dr. Rutecki's JAMA study, he cites a survey of practicing physicians. "Of 720 respondents, 123 in practice went back to train again so they could change from what they considered an uncontrollable practice to a controllable one," he says. "I find that flabbergasting because these are young people in practice who have amassed an impressive degree of indebtedness and they were going back to train at lower income. So at some time in the 1990s, there was a change in the cultural perception of what students really wanted as they chose a career."

Trends in Radiology

Dr. Rutecki's study looked only at general diagnostic radiology. From 1996 to 2002, the popularity of diagnostic radiology as the medical specialty of choice nearly doubled from 3.3 percent to 6.1 percent—not quite as dramatic as the increase in dermatology (0.02 percent to 2.3 percent), but welcomed news to a specialty that's been under a staffing shortage.

"It's nice to see the data. It's what we've been talking about and suspecting," says Carol M. Rumack, M.D., associate dean for graduate medical education and professor of radiology and pediatrics at the University of Colorado Health Sciences Center in Denver.

Although diagnostic radiology may be gaining at the expense of less controllable specialties, the same is not holding true for interventional radiology. "There is clearly a decline in applications for fellowships in vascular/interventional radiology" says William J. Casarella, M.D., chairman of the Department of Radiology at the Emory University School of Medicine in Atlanta.

"In 2003, the National Resident Matching Program reported only 70 fellows being matched to 203 positions. In the past, all of these positions have been filled. The cause may not be lifestyle related, but rather the perception by residents that vascular/interventional radiology is being taken over by non-radiologists," Dr. Casarella says.

US Senior Medical Students Ranking Selected Specialties as Their Top Choice*							
	No. (%) of Senior Medical Students						
	1996	1997	1998	1999	2000	2001	2002
Specialty	(n = 14972)	(n = 15122)	(n = 15174)	(n = 15160)	(n = 14966)	(n = 14936)	(n = 14827)
Anesthesiology	172 (1.1)	243 (1.6)	382 (2.5)	417 (2.8)	546 (3.6)	742 (5.0)	944 (6.4)
Dermatology	33 (0.2)	244 (1.6)	351 (2.3)	317 (2.1)	348 (2.3)	350 (2.3)	338 (2.3)
Emergency medicine	1035 (6.9)	915 (6.1)	880 (5.8)	884 (5.8)	988 (6.6)	1030 (6.9)	1064 (7.2)
Family practice	2415 (16.1)	2437 (16.1)	2223 (14.6)	2039 (13.5)	1829 (12.2)	1526 (10.2)	1404 (9.5)
Internal medicine	3985 (26.6)	3988 (26.4)	4077 (26.9)	3989 (26.3)	3870 (25.9)	3753 (25.1)	3683 (24.8)
Neurology	212 (1.4)	248 (1.6)	278 (1.8)	264 (1.7)	352 (2.4)	314 (2.1)	324 (2.2)
Obstetrics and gynecology	1120 (7.5)	1186 (7.8)	1020 (6.7)	963 (6.4)	880 (5.9)	889 (6.0)	891 (6.0)
Ophthalmology	371 (2.5)	371 (2.5)	375 (2.5)	445 (2.9)	455 (3.0)	457 (3.1)	492 (3.3)
Orthopedic surgery	596 (4.0)	624 (4.1)	671 (4.4)	671 (4.4)	614 (4.1)	658 (4.4)	663 (4.5)
Otolaryngology	335 (2.2)	308 (2.0)	301 (2.0)	315 (2.1)	276 (1.8)	280 (1.9)	274 (1.8)
Pathology	239 (1.6)	142 (0.9)	133 (0.9)	154 (1.0)	127 (0.8)	177 (1.2)	200 (1.3)
Pediatrics	1681 (11.2)	1739 (11.5)	1904 (12.5)	1884 (12.4)	1747 (11.7)	1785 (12.0)	1652 (11.1)
Psychiatry	482 (3.2)	522 (3.5)	454 (3.0)	528 (3.5)	519 (3.5)	568 (3.8)	608 (4.1)
Radiology (diagnostic)	499 (3.3)	463 (3.1)	597 (3.9)	703 (4.6)	867 (5.8)	958 (6.4)	903 (6.1)
Surgery (general)	1559 (10.4)	1437 (9.5)	1269 (8.4)	1291 (8.5)	1278 (8.5)	1185 (7.9)	1123 (7.6)
Urology	238 (1.6)	255 (1.7)	259 (1.7)	296 (2.0)	270 (1.8)	264 (1.8)	264 (1.8)
*Percentages may not sum to	100 due to round	lina.					

*Percentages may not sum to 100 due to rounding.

He adds that he's doubtful this is the case. "It represents a disturbing trend that could lead to a self-fulfilling prophecy due to lack of dedicated interventional radiologists in the future," Dr. Casarella warns.

Two young radiologists who recently graduated from residency training at the University of Cincinnati confirmed the importance of lifestyle considerations.

Upon completion of a one-year neuroradiology fellowship, Jason White, M.D., plans to become a diagnostic radiologist at a small, private practice hospital. "That position will allow me to do teleradiology from home so that I don't have to physically be on campus reading images after hours." says Dr. White, whose wife is expecting their first child.

Edson Cortes, M.D., is completing a six-month fellowship in MR imaging at the Proscan Imaging Foundation in Cincinnati. He'll then go into a general practice with a group in Florida. "I chose diagnostic radiology over interventional radiology because of lifestyle," says Dr. Cortes, who is married with two children. "Interventional radiology is a lot harder on the family and the liability issues are more complex."

The trend away from subspecialty training is being felt in academic med-

Characteristics of the Selected Specialties				
Specialty	Lifestyle	Average Income, \$ in Thousands	Average Work Hours per Week	Years of Graduate Medical Education Required
Anesthesiology	Controllable	225	61.0	4
Dermatology	Controllable	221	45.5	4
Emergency medicine	Controllable	183	46.0	4
Family practice	Uncontrollable	132	52.5	3
Internal medicine	Uncontrollable	158	57.0	3
Neurology	Controllable	172	55.5	4
Obstetrics and gynecology	Uncontrollable	224	61.0	4
Ophthalmology	Controllable	225	47.0	4
Orthopedic surgery	Uncontrollable	323	58.0	5
Otolaryngology	Controllable	242	53.5	5
Pathology	Controllable	202	45.5	4
Pediatrics	Uncontrollable	138	54.0	3
Psychiatry	Controllable	134	48.0	4
Radiology (diagnostic)	Controllable	263	58.0	4
Surgery (general)	Uncontrollable	238	60.0	5
Urology	Uncontrollable	245	60.5	5
Average for the above	Not applicable	208	53.9	4 specialties

ical centers, where faculty shortages have people talking about hiring physician extenders. "We need fellows to help run our clinical programs," says Janet L. Strife, M.D., a professor of radiology and pediatrics at Children's Hospital Medical Center in Cincinnati and president of the Association of Program Directors in Radiology. "Some subspecialties, such as pediatric radiology, have been adversely affected. We used to have 35 or 40 people in training per year. Two years ago we were down to 12. Fortunately, more recently there has been a rebound." But how much of this change is due to a new generation's desire for better lifestyles remains a topic for discussion. Dr. Rutecki says we shouldn't forget that more women are going into medicine—women "who have the extra burden of being a wife, a mother and a doctor simultaneously," he says.

Dr. Rumack concludes that the desire of more residents to choose diagnostic radiology is good for the specialty, "but if too many faculty go into private practice, we won't be able to train enough physicians."

Good Business Practices Leave Time to Practice Good Medicine

oday's radiologist often plays a dual role as medical professional and the CEO of a mid-size company. To do that most effectively, one expert recommends planning ahead for what you want to accomplish and how to achieve it.

"I think that in times such as these. virtually anyone can be relatively successful. However, times always change," says Lawrence R. Muroff, M.D., chief executive officer of Imaging Consultants in Tampa, and a professor of radiology at the Universities of Florida and South Florida. "In order to ensure your success, you should form a well-governed group with a proactive approach to problems and a clear sense of direction as to how you will behave or act."

That is not what he sees in many radiology practices today. "They're not governed appropriately," he says. "They act haphazardly. Although at this time most appear to be successful, it's because there's a shortage of radiologists. These groups are successful in spite of what they do, not because of it."

How does a radiology group go about changing that? Dr. Muroff suggests that in many cases, there may be too many cooks stirring the pot.

"Most radiology practices, at least in private practice, are very democratic and have evolved to a point where everyone believes that he or she should have a say about everything," he says. "That doesn't work because radiology practices are in fact mid-size companies. They are dealing with revenue streams that can be anywhere from \$5 million to over \$100 million a year. They have to start governing themselves appropriately as businesses of that size."

Dr. Muroff recommends a two-step process-establishing a mission statement and coupling the mission statement with a business plan.

Planning should start with a group retreat. "That's usually the only way that you can get most of the key decision-makers together and get them in a place where distractions will be at a minimum," Dr. Muroff points out. He recommends bringing in a nonpartisan facilitator who is knowledgeable about radiology and who understands the dynamics and culture of the specific group.

In this setting, he says the decisionmakers can adopt a mission statement that describes who and what they are and come up with a specific business plan that offers a blueprint for how and what they need to do in order to accomplish their mission.

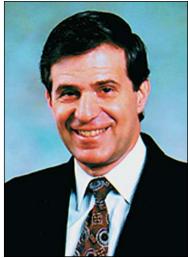
For example, the mission statement might say the radiology practice is devoted to high-quality diagnostic imaging, radiation oncology and interventional radiology in a particular geo-

graphic area. It might also state that the prac- Practicing good business tice is devoted to costeffective subspecialty care for patients.

"Then you can set up a business plan. For example, you might

say that over the next year you're going to need two radiologists-one who was trained in a musculoskeletal fellowship and the other who was trained in a nuclear medicine fellowship," he suggests. "The group also needs to hire a director of information systems by April 15."

If a new hospital is being built within the geographic area of the prac-



Lawrence R. Muroff, M.D. Universities of Florida and South Florida

tice, the business plan could include communicating with the hospital administrator about a hospital contract. Or it might include locating an imaging center in a specific place within the geographic area of the practice.

"All of these things tie into your mission statement and provide you with

> a specific business plan that directs you to take action," Dr. Muroff says.

It also provides the group with a way to measure accomplishments. "Most groups might have a mission

statement, but they don't have a specific business plan tied to it so there's no way of knowing how they're doing," Dr. Muroff says. "You have to have benchmarks against which you can measure, and therefore know how you are doing."

In addition to a group-developed and -approved mission statement and business plan, Dr. Muroff emphasizes

enables you to practice better medicine. — Lawrence R. Muroff, M.D. that the practice needs to have a good governing structure. He suggests that the structure should consist of a strong business operation headed by a business manager, and a physician group headed by a president and a small executive committee or board representing different aspects of the practice.

"I think there should be the belief that the physician president—as long as he or she is an effective leader—will be in a relatively permanent position. That allows room for the person to grow into the position and not leave just as he or she is developing the expertise needed," he asserts.

"I think the board members can be rotated and can serve as a source of refreshing the leadership—a source of good opinions, as well as action," he continues. "Basically, a radiology group has a governing structure that's much like a corporation of comparable size."

The business manager of the operation may have a hundred non-physician employees under his or her direction. "If you're a radiology group that practices in offices, either with or without hospital affiliations, all of the technologists, transcriptionists, billing people and information people are the group's employees," Dr. Muroff points out. "A radiology practice that might not even be very large in terms of the number of



Lawrence R. Muroff, M.D., and Thomas Greeson, J.D., take questions from the audiences during RSNA's "Strategies for Running a Successful Radiology Practice," held in July in Oak Brook, Ill. Dr. Muroff will serve again as course director for a similar course to be offered by RSNA in July 2004.

radiologists might have a substantial number of non-physician employees."

With sound planning and good governing, Dr. Muroff believes today's radiologists can balance their dual roles.

"There's nothing that in any way says that you can't practice good business and good medicine," he concludes. "I would argue—I hope, persuasively that practicing good business enables you to practice better medicine."

Dr. Muroff served as course director as well as an instructor at RSNA's

"Strategies for Running a Successful Radiology Practice," held in July in Oak Brook, Ill. Dr. Muroff will serve again as course director for a similar course to be offered by RSNA in July 2004.

The December issue of *RSNA News* will feature an article with another instructor from the RSNA course, Fred Gaschen, M.B.A. The article will provide tips on how to get the information you need to compete.

Tips for Running a Successful Radiology Business

- · Establish a mission statement
- · Develop a business plan
- Govern the business as a business

Mission Statement/Business Plan

- . Define who you are and what you want to do
- List specific goals that fit with stated aims
- · Periodically measure progress
- · Reject business that doesn't fit with plan
- Review statement and plan

How Do You Start/Implement Strategic Planning?

- Select a small committee to draft a concise mission statement and business plan
- Have the board of directors review and possibly modify the statement and plan prior to distribution
- Partners and senior partner-track physicians should discuss the statement and plan at a group retreat
- · Hire a facilitator/consultant to moderate the session
- Make absolutely sure the moderator is knowledgeable about radiology
 practices and the culture of radiology
- Every partner should agree to the plan (or at least have all objections thoroughly discussed)

RSNA Editorial Fellow Inspires Medical Writers in Asia

hen Wilfred C.G. Peh, M.D., applied for an RSNA Editorial Fellowship in 1998, he was already an experienced author, scientific paper presenter and manuscript reviewer. He was also the editor-inchief of the newly launched Journal of the Hong Kong College of Radiologists (JHKCR).

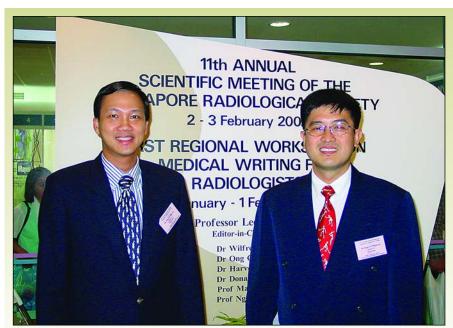
Since he had "learned the ropes" in an informal manner, he thought he could significantly benefit from the RSNA fellowship's one-on-one contact with Radiology Editor Anthony V. Proto, M.D., RadioGraphics Editor William W. Olmsted, M.D., and the publications and communications staff at RSNA headquarters.

"Dr. Peh showed total commitment to, and interest in, every aspect and phase of the editorial process in the Radiology editorial office," says Dr. Proto. "It was clear to me that when he arrived, he already had a lot of experience. It was also clear that he wanted to expand his horizons as much as possible. He would arrive very early in the

morning and stay with us until late in the evening to make sure his experience was as extensive as it could be while he was with us."

similar memory of Dr. Peh. "What struck me about Dr. Peh during his editorial fel-

lowship was that he had some really great ideas for launching JHKCR. He's always thinking about how to present important radiologic information in new and interesting ways," Dr. Olmsted explains.



Wilfred C.G. Peh, M.D. (right), organizing chairman of the 1st Regional Workshop in Medical Writing for Radiologists, with Harvey Teo, M.D. (left), organizing chairman of the 11th Annual Scientific Meeting of the Singapore Radiological Society.

The 1998 RSNA fellowship not only taught Dr. Peh about the finer points of editing and reviewing, but it also inspired him to teach others about the vision and phi-

journal.

losophy of editing a

"While I could

mentor some of my

guide some young

authors as an editor,

I felt that a much

larger number of

radiologists would

junior colleagues and

I had, almost by accident, discovered a hunger to learn to write effectively among the radiologic community in the Dr. Olmsted has a region, and hence a need for such workshops. —Wilfred C.G. Peh, M.D.

> benefit by attending a well-structured workshop that was instructed by experts," says Dr. Peh. But as is the case with many novel ideas, getting others to recognize their importance and their potential benefit can be a slow process.

His opportunity came in 2000 on his return to his native Singapore. He became actively involved with the Singapore Radiological Society (SRS) and had worked with the Asian Musculoskeletal Society to organize a successful joint national radiologic scientific congress in 2001. He was also helping to coordinate a visit by two American radiologists participating in the RSNA International Visiting Professor program, which helps to enhance continuing medical education in emerging nations.

Donald P. Frush, M.D., from Duke University, and Peter J. Strouse, M.D., from the University of Michigan, were traveling to Singapore in January 2002 and planned to attend the SRS Annual Scientific Meeting. Dr. Frush, the other 1998 RSNA Editorial Fellow, and Dr. Strouse agreed to help Dr. Peh by

teaching at the first Regional Workshop on Medical Writing for Radiologists, which was held prior to the SRS annual meeting.

"Wilfred put together a very valuable course on medical journalism," says Dr. Frush. "The speakers covered a broad range of topics including medical writing and presentation, the review process and general editorial function. His foresight is astounding. This course could and should serve as a model for many countries—whether they are developing their medical imaging capabilities or are on the cutting edge of medical imaging. Even here in the United States, a lot of people could benefit from a program like this."

Recognizing the course's value, the audience response was overwhelming. "There were well over 200 registrants for the four days of the workshop and congress," explains Dr. Peh. "Besides Singapore radiologists, attendees included our clinical colleagues and radiologists from neighboring countries such as Malaysia, Indonesia, Thailand, Hong Kong, Japan, Sri Lanka and even from Europe."

The initial workshop consisted of didactic lectures organized into topics, with time given for question-andanswer sessions. "The discussions were enthusiastic and lively, by Asian standards anyway," jokes Dr. Peh. "In the three subsequent workshops, we also incorporated practical sessions where the participants were divided into small groups of about 10. They did group exercises, and had to critique and improve selected manuscripts and articles. With guidance from workshop faculty, participants presented their findings at the end of each session."

Although attendees pay for the course, the workshops have been so popular, many have been turned away. "I had, almost by accident, discovered a hunger to learn to write effectively among the radiologic community in the region, and hence a need for such workshops," says Dr. Peh. After the success of the Singapore workshop,



Participants at the Workshop on Scientific Writing for Medical Practitioners held in Kuantan, Malaysia, in February 2003. The workshop was jointly organized with the Faculty of Medicine of the Islamic International University.

radiology colleagues from other countries approached him about organizing similar workshops.

To date, Dr. Peh has organized four medical writing workshops:

- Singapore, Singapore (January 2002) in conjunction with the 11th Annual Scientific Meeting of SRS
- Kuala Lumpur, Malaysia (October 2002) in conjunction with the Silver Jubilee Annual Scientific Meeting of the College of Radiology of Malaysia
- Kuantan, Malaysia (February 2003) jointly organized with the Faculty of Medicine of the Islamic International University
- Colombo, Sri Lanka (April 2003) in conjunction with the Annual Academic Sessions of the College of Radiologists of Sri Lanka

The SARS outbreak temporarily put a damper on future workshops, but now that the situation is under control, Dr. Peh is planning more workshops. "The Islamic International University is keen to continue the basic workshop annually and also start an advanced workshop for the basic workshop graduates in 2004," he says. "There are also plans to organize a workshop focusing on effective scientific presentations and speaking with the College of Radiology of Malaysia. There is interest in running a workshop on medical writing for radiologists in Thailand."

How has the series of workshops changed medical journalism in Southeast Asia? "Over the recent half year or so, there have been a number of submissions from radiologists in Singapore and Malaysia to the local journals with which I am affiliated, but I cannot honestly be certain that it is a direct result of the courses," says Dr. Peh. "What we hope to achieve is to stimulate an interest in research and medical writing, and to effect a 'cultural' change. So the outcome may be apparent only over the longer term."

The friendship between Drs. Peh and Frush, which began with their 1998 RSNA Editorial Fellowship, will reach a new level later this year. "We're probably going to be more involved with each other because Duke has an affiliation with Singapore Health Services where Dr. Peh is a senior consultant radiologist with the graduate medical school project," explains Dr. Frush. "T'm looking forward to our continued collaboration."

Dr. Proto adds, "Dr. Peh is a very dedicated person who is sincerely interested in elevating medical writing in his homeland area and throughout the world."

Radiology and *RadioGraphics* Earn High Marks from Readers

Radiology and RadioGraphics are very highly regarded for the quality and usefulness of their contents.

The 2002 *Radiology* and *Radio-Graphics* surveys were each mailed to 3,200 randomly selected RSNA mem-

bers and journal subscribers. The response rate was 52 percent (1,656) for *Radiology* and 54 percent (1,725) for *RadioGraphics*.

Results for Radiology

Nearly everyone (97 percent) surveyed rated the quality of the contents of the print version of *Radiology* as excellent, very good or good, and 99 percent thought

the quality of the medical images in *Radiology* was excellent, very good or good. Both ratings were up from

1997—the last time a readership survey was conducted.

"I was very pleased the readership

survey showed that the quality of our journal is considered to be very high since we devote a substantial amount of time to ensuring that we have high quality in terms of text, images and illustrations," says *Radiology* Editor Anthony V. Proto, M.D. "The quality

results in a major way from the quality of the manuscripts submitted by authors and the outstanding efforts and commitment of our editorial board members and reviewers. I am gratified that a high percent of our readers believe *Radiology* is must reading for them."

The survey showed that clinical review articles in *Radiology* are the most frequently read material.

"We have a wide variety of readers —radiologists in academic practice,

> radiologists in private practice, retired radiologists, radiation oncologists, medical physicists, residents, fellows and non-radiologists," Dr. Proto notes. "All of these individuals have different needs from a journal at different times in their careers or based on the career choices they have made. It is important to me to make sure we are committed to having a

journal with content for all those who read our journal."

Nearly all survey respondents found *Radiology* extremely or somewhat useful clinically. This was true for private practitioners, academics and

residents. In addition, a

majority of the respon-

dents strongly agreed or

agreed that the articles in

Radiology are relevant to

their practice, with private

I am gratified that a high percent of our readers believe Radiology is must reading for them. —Anthony V. Proto, M.D.

is must practitioners (82 percent) *r them.* finding the articles most relevant, followed by academics (80 percent) and residents (68 percent). In regard to *Radiology Online,* the majority of the survey respondents (68 percent) said they do not read the journal online, but of those who do

read it online, residents led the field,

followed by academics and private



Quality of the Print Journal Percentage of respondents who rate

the quality of the print journal as excellent, very good or good

2002	97%
1997	95%
1991	98%

Most Popular Features or Sections

Percentage of respondents who read the features or sections regularly or occasionally

State of the Art	95%
Reviews	92%
Signs in Imaging	88%
How I Do It	87%
Editorials	86%
Diagnosis Please	84%
Viewpoint	78%
Evidence-based Practice	77%
Special Reports	77%
From the Editor	77%
Letters to the Editor	75%

practice radiologists. Readers of the online version use it most often to access the full text of articles, search for articles in their area of interest, access article abstracts and print a PDF file of an article. As a result of reading *Radiology* either in print or online, 79 percent of respondents reported they adopted a new process or modified a procedure.

"I am hopeful readers will familiarize themselves with *Radiology Online* because the online version has many



Anthony V. Proto, M.D. Radiology Editor

RSNA NEWS NOVEMBER 2003

positive features," Dr. Proto says. "For example, one feature introduced in 2001 is called Continuous Publishing. In it, we publish online an article that will appear in print perhaps four to seven weeks later. Our goal is to make our readers aware of ongoing developments a month or two earlier than when the article would appear in the printed journal."

He says he believes most people will continue to read the printed journal because readers are comfortable with the printed journal. "The printed journal is portable and friendly to use. But we have all learned the virtues of the online version over the last few years, and as we become more familiar with it, readers will meet their needs in some ways from the printed journal and in other ways from the online version," Dr. Proto says.

Results for RadioGraphics

Readers' responses to *RadioGraphics* followed a similar pattern to those of *Radiology* readers. More than 98 per-

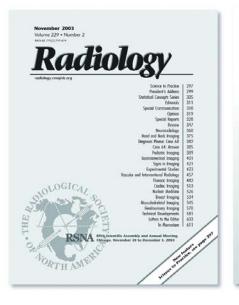
cent of the survey respondents rated the quality of *Radio-Graphics* as excellent or good. When asked to compare the quality of the publication today with that of five years ago, 66 percent of respondents indicated the quality is better today. Over 90 percent strongly agreed or



William W. Olmsted, M.D. RadioGraphics Editor

agreed that *RadioGraphics* was relevant to their clinical practices. This is up from 74 percent in 1997.

"The results of the survey were very gratifying. I am pleased that people regarded the quality and usefulness of the journal as very high, and that the ratings have increased significantly since the last two surveys in 1991 and 1997," says *RadioGraphics* Editor William W. Olmsted, M.D.



Over 90 percent of respondents found *RadioGraphics* to be extremely useful or useful, and 80 percent thought nothing needs to be done to improve the journal's usefulness. That compares to 34 percent in 1997. As a result of reading *RadioGraphics*, 68 percent of respondents reported they adopted a new process or modified a procedure.

> The majority of respondents (66 percent) strongly agreed or agreed that *Radio-Graphics* is must reading, and the same percentage of respondents said they read all features in *Radio-Graphics* regularly or occasionally. In

addition, reader interest has increased steadily over time. "A lot of people have

worked hard to make sure *Radio-Graphics* has increased in quality over the last five years," Dr. Olmsted says. "The same editorial team has been in place during this period, and the increase in quality is due to their efforts and the efforts of the authors, panelists, reviewers and the Education Editorial Board."

According to the survey, the most frequently read articles or sections in



RadioGraphics are:

- AFIP Archives
- Education Exhibits
- Refresher Courses

Readers also requested more CME activities; more articles on basic, practical and general topics; and more indepth articles or articles on advanced techniques.

There were few differences

A lot of people have worked hard to make sure RadioGraphics has increased in quality over the last five years. —William W. Olmsted, M.D. between the reading habits of radiologists in academic practice versus those in private practice, except that private practitioners expressed greater interest in articles that carried CME credit.

Like the online version of *Radiol-ogy, RadioGraphics Online* was not read by most respondents (76 percent). Of those who said they did read the online journal, residents read it more often than radiologists in academic or private practice.

"Initially, we thought *Radio-Graphics Online* might be very popular for general reading," Dr. Olmsted says. "What we are seeing now is that people prefer the print journal for general reading and use *RadioGraphics Online Continued on next page*

Continued from previous page

to search for specific information. Will that change over time? Will people begin to use the online journal more than the print journal? I think we need to stay flexible and watch over time."

The online journal has some advantages because it contains articles and CME material that do not appear in the print journal, along with such features as movies, images and sound that cannot be put in print.

Both Drs. Olmsted and Proto find that readership surveys are valuable to them as journal editors. "Readership surveys are exceptionally valuable because they provide a benchmark for how we editors are doing in meeting the needs of readers and what changes need to be made, if any," Dr. Olmsted says. "Performance comparisons done over a number of years are especially useful."

RadioGraphics

Quality of the Print Journal

Percentage of respondents who rate the quality of the print journal as excellent, very good or good 2003 99% 1997 96% 1991 96%

Most Popular Features or Sections

Percentage of respondents who read the feat or sections regularly or occasionally	
AFIP/Best Cases	91%
Refresher Courses	90%
RSNA Education Exhibit Articles	88%
Plenary Sessions	75%
Editor's Page/Editorials	75%
Continuing Medical Education Tests	71%
Imaging and Therapeutic Technology	70%
infoRAD: Informatics in Radiology	68%

JOURNALS

Radiology in Public Focus

A press release has been sent to the medical news media for the following scientific article appearing in the November issue of *Radiology (radiology.rsnajnls.org)*:

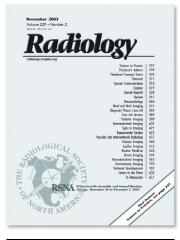
Liver Metastases: Neoadjuvant Downsizing with Transarterial Chemoembolization before Laser-Induced Thermotherapy

Repeated transarterial chemoembolization (TACE) can help reduce the size of unresectable liver metastases so that local ablation treatments may be used.

Thomas J. Vogl, M.D., and colleagues from the University Hospital Frankfurt in Germany, used TACE on 162 patients, with a lesion size of up to 80 mm in diameter and no more than four lesions.

They found that in 82 patients (50.6 percent), TACE helped to reduce the tumor size to less than 50 mm. Those patients were then safely able to undergo laser-induced thermotherapy. The median survival of patients who responded to this combined treatment was 26.2 months; in patients treated with only TACE, median survival was 12.8 months.

The researchers write, "Hepatic TACE combined with MR imagingguided thermal ablation of liver metastases appears to be a safe and useful therapeutic approach in patients with previously untreatable large liver metastases, thus enabling the destruction of focal tumors with imaging guidance in a minimally invasive way." (*Radiology* 2003; 229: 457-464)



RSNA press releases are available at www2.rsna.org/pr/pr1.cfm.

Working For You

Residents Lounge at RSNA 2003

All residents are invited to visit the Residents Lounge during RSNA 2003. Located in the Lakeside Center Ballroom, Level 3, the lounge provides a place to relax and network with colleagues while enjoying complimentary refreshments. Complimentary issues of *Radiology, RadioGraphics, RSNA News* and the 2003 *Education Center Catalog* also will be available.

Residents are invited to attend a special Residents Reception on Monday, Dec. 1, from 4:30 p.m. to 5:30 p.m. in Residents Lounge Lakeside Center Ballroom

Sun., Nov. 30 – Thurs., Dec. 4 8:00 a.m. – 6:00 p.m.

the Regency Ballroom of the Hyatt McCormick Place. RSNA President Peggy J. Fritzsche, M.D., will greet the residents. Complimentary beverages and light snacks will be served.



Membership Renewal Online

Save time and postage by renewing your RSNA membership online at *www.rsna.org*. At the top of the page, click Members LOGIN and follow the instructions.

Invoices for 2004 RSNA membership will be mailed this month. Because online access to *Radiology* and *RadioGraphics* is tied to membership status, payment not received by December 31, 2003, may trigger automatic inactivation of online subscriptions.

2004 Membership Dues		
N	ORTH AMERICA	NON-NORTH AMERICA
Membership Dues (print and online journals) \$315	\$405
Membership Dues (online journals only)	N/A	\$315
Retired Members (online journals only) (Print journals available at a reduced subscription rate)	Free	Free
Members-In-Training (online journals) (reduced subscription rate for print journals	Free) \$80	Free \$190

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

SMRI Opens Radiology Education Center



With support from RSNA, the Mexican Society of Radiology and Imaging (SMRI) unveiled its new multimedia education center this summer in Mexico City. The



RSNA Education Center contributed 174 slide/ audiotape sets, 246 videotapes, syllabi from 1998 through 2002, teleradiology handbooks and a box full of education programs on CD-ROM.

If you have a colleague who would like to become an RSNA member, you can download an application at www.rsna.org/about/membership/memberapps.html, or contact the RSNA Membership and Subscription Department at (877) RSNA-MEM [776-2636] (U.S. and Canada), (630) 571-7873 or membership@rsna.org.

Working For You

Press Conferences at RSNA 2003

Some of the scientific studies and exhibits at RSNA 2003 will be presented to the news media via a series of press conferences. Topics include:

- The Measurement of Lung Structural Changes Due to Anorexia Nervosa Using CT
- PGA Hip Tour: Labral Injuries
- Altered Auditory-Visual Interactions in Dyslexia: An fMRI Study
- fMRI of Auditory Activation from Language Stimulation in Neonates
- Degenerative Disc Disease—How Early Does It Occur? An MRI Study of 10-Year-Old Children
- Screening for Colorectal Neoplasia with Multidetector CT Colonography (Virtual Colonoscopy)

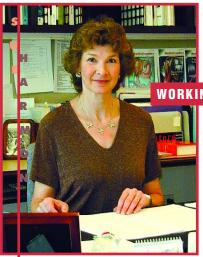
- External Beam Radiotherapy as Treatment for Primary Prostate Cancer in Very Elderly Patients
- Embryonic Congestive Heart Failure
- Spectrum of Complications Following Roux-En-Y Gastric Bypass For Morbid Obesity—Five Years Experience
- Ultrafast Imaging in Acute Stroke: Utility of an Integrated Three-Minute Neuro MR Protocol



- Neuronal Cell Injury Precedes Brain Atrophy in Multiple Sclerosis
- A Multi-Scanner, Multi-Manufacturer, International Standard for the Quantification of Coronary Artery Calcium Using Cardiac CT

SERVICE TO MEMBERS:

As Managing Editor of *RadioGraphics*, I direct editorial production of RSNA's bimonthly journal of continuing med-



NAME: Sue Harmon POSITION: Managing Editor, *RadioGraphics* WITH RSNA SINCE: March 1, 1985 ical education for radiologists. I work closely with *RadioGraphics* Editor William W. Olmsted, M.D., and his staff in

VORKING FOR YOU PROFILE

Bethesda, Md., who handle solicitation and review of manuscripts that are based on education exhibits from the annual RSNA meetings. Once manuscripts are accepted for publication, I work with two manuscript

editors and the production staff to publish *RG* (as it's affectionately known).

WORK PHILOSOPHY:

Before I came to RSNA to work as a manuscript editor on *Radiology*, I was the only editor in a hospital consulting firm for four years. I worked with healthcare planning professionals to prepare large reports under tight deadlines. The steady, resolute character and resourceful habits I developed there proved invaluable when I became not only the first managing editor of *RadioGraphics* but also its sole editorial staff in late 1989, when Dr. Olmsted became editor of *RG*. Together, we developed a new standard for the journal that emphasized the educational message of the text as well as its pictorial content. Under Dr. Olmsted's leadership, *RG* has grown from 1,170 pages in 1990 to 2,048 pages in the years since 1999, when we published our first monograph (a seventh special issue in addition to our standard six).

RadioGraphics is a great journal, but its greatness is achieved through the efforts of many people: its authors, the institutions that support them, the radiologists who review exhibits at the annual meeting, our *RG* editorial board and reviewers, Dr. Olmsted, his hard-working staff and the dedicated editorial staff at headquarters. RSNA is truly an outstanding organization, not only in its support of research and education, but also in the voluntary allegiance that it commands from so many talented, wonderful radiologists. I serve *RG* and RSNA with great thankfulness to be part of such extraordinary endeavors.

Radiation Oncologist Urges Residents to Find a Mentor



In real estate, the key to finding a new home is location, location, location. In radiation oncol-

ogy, the key to success is "find a mentor, find a mentor, find a mentor," according to Jay Locke, M.D., an assistant professor of radiation oncology at the Mallinckrodt Institute of Radiology at Washington University School of Medicine in St. Louis.

"Choose a mentor at an institution with a rich library of things to do," he says. "Find a place with access to lectures, strong core facilities and access to animal handling."

Dr. Locke is board certified in radiation oncology. His areas of clinical interest include adult radiation oncology, genitourinary oncology and breast cancer. In his research, he is testing the use of anti-inflammatory drugs to see if they enhance the cancerous tumor cell kill when combined with heat and radiation. He also has investigations into

other radiation sensitizers such as 17-AAG, the clinical version of Geldanamycin. Additionally, he has ongoing collaborations with other scientists in viral and hypoxic imaging.

Dr. Locke was the 2000-2002 RSNA

Research & Education Foundation Research Fellow for his project, "The Cellular and Cytotoxic Effect of Heat Shock." He was also the 1999-2000 RSNA Research & Education Foundation Research Resident for his project. "Mechanism of Heat Inhibition of Radiation-Induced Activation of NF-KB."

"The residency award from RSNA provided me with critical time to let me conduct research and work with my then-residency director and mentor, David Gius, M.D., Ph.D.," Dr. Locke says. "I received the second award near the end of my residency. The years of support from RSNA helped me succeed in achieving the next step in the ladder of research funding."

Dr. Locke has completed the first year of his five-year Mentored Clinical Scientist Award, a K08, from the National Institutes of Health (NIH) for his project, "Indomethacin and p38 Regulating AP-1 in Heat Shock." His lab has grown to include two technicians and two part-time undergraduate students. "I'm gaining experience running a lab while applying for grants. The RSNA and K08 grants are stepping stones to becoming an independent investigator," he adds.

"Without the support of RSNA, none of this would have been possible. Convincing a chairman to give substantial time off as a resident and then as a

The years of support from RSNA helped me succeed in achieving the next step in the ladder of research funding. Jay Locke, M.D.

junior staff member is not an easy task. Because of the funding RSNA provided me as a resident and fellow, my request became a reality," Dr. Locke says.

Dr. Gius, is now a principal investigator and chief of the Molecular

tion at the National Cancer Institute at NIH. "He is a good mentor to me both here and there," Dr. Locke says.

Dr. Gius is also complimentary of his former student. "Dr. Locke has matured into his developing position as a clinician and physician scientist at Washington University and is now starting to train young scientists much as he was several years ago," Dr. Gius says.



Jay Locke, M.D. 2000-2002 RSNA Research & Education Foundation Research Fellow

"He is carrying on the noble tradition in science that the accomplishments of our many trainees should be greater than our individual contributions. As an academic radiation oncologist, this is and continues to be central to our profession. Nothing has given me more pride than in watching his career develop in this manner. I look forward to not only his future academic accomplishments but also those of his trainees."

The Student Becomes a Mentor

While it is early in his career, Dr. Locke is already mentoring two undergraduate students at Washington University. "They have the capacity and the drive to be research physicians. It's good for them to gain exposure to the approach of a research physician versus a research scientist," he says.

Dr. Locke received his bachelor of science degree in biochemistry and molecular biology, graduating with distinction from the University of

Continued on next page

Radiation Oncology Sec-

Program and Grant Announcements

Register for BIROW II

Online registration is available at www.birow.org for the 2004 Biomedical Imaging Research **Opportunities Workshop** (BIROW II) scheduled for February 25-26 at the Biomedical Bethesda Marriott Hotel. Imaging Nearly 200 leading radio-Research **Opportunities** logic researchers, physicists workshop 2 and engineers are expected to participate in the workshop.

This workshop is the second in a series being sponsored by RSNA,

American Association of Physicists in Medicine, Biomedical Engineer-

ing Society, Academy of Radiology Research and American Institute for Medical and Biological Engineering.

The official report from BIROW I, includ-

ing an introduction and summaries from the breakout com-

mittees, is available at *www.birow.org*.

Deadline Approaches for RSNA Research Grants

The application deadline is January 15 for six of the eight types of research grants offered by the RSNA Research & Education Foundation. They are:

Research Grants	Deadline
Research Seed	January 15
Holman Pathway Research Resident Seed Grant	January 15
Research Resident	January 15
Research Fellow (2004 Topic of Interest: Cardiac Imaging)	January 15
Research Fellow in Basic Radiologic Sciences	January 15
Research Scholar	January 15
Medical Student/Scholar Assistant (Must be nominated by Scholar)	Year-round
Medical Student Departmental	Year-round

For more information, contact Scott Walter at *swalter@rsna.org* or (800) 381-6660 x7816. To download an application form, go to *www.rsna.org/research/foundation/application.html*.

Effective Investment Strategies

Register online at *www.rsna.org/education/ shortcourses* for this one-day course to be held Saturday, November 29, 2003, 8:30 a.m.

- 4:00 p.m., at McCormick Place in Chicago.
 Presented by National Tax & Investment
- Seminars, topics to be discussed will include:
- Online Trading: Appreciate Its Benefits but Watch for the Pitfalls
- Why Money Managers Don't Want You to Know About Index Funds
- Strategies to Protect Profits and Lower Risk in Volatile Markets
- Selecting Mutual Funds Suited to Your Needs Not Wall Street's
- Day Trading: If It's Investing, Why Isn't It Called Day Investing
- Exchange Traded Funds: Are They Really Superior to Stock Index Funds?
- Funding the High Cost of Your Children's College Education

Each attendee will receive a copy of the *Effective Investment Strategies* textbook. Written specifically for this course, the textbook is an invaluable post-seminar resource.

Registration Fees:

RSNA Members \$169 RSNA Members-in-Training \$99 Non-members \$189

For more information, contact the RSNA Education Center at (800) 381-6660 x3747 or *ed-ctr@rsna.org*.

Radiation Oncologist Urges Residents to Find a Mentor

Continued from previous page

Wisconsin in Madison. He obtained his medical degree from the Boston University School of Medicine. He completed his radiation oncology training at the Washington University School of Medicine in St. Louis in 2000.

Dr. Locke says he chose a career in radiation oncology so that he could always work at the forefront of technology. It is a challenging experience, and he says he learns something new each day. "We've just about reached the limits to how much radiation we can safely deliver. We are likely to take the next big step toward improved outcomes with rigorous molecular biology investigation. Biochemical and biological pathways will ultimately help clinicians treat patients," he says. Dr. Locke says he wants to make a difference in the lives of people with cancer. "I intend to translate relevant laboratory findings into the clinic as quickly as possible. Hopefully this will occur as my career progresses into a position of leadership within radiation oncology," he says.

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Research & Education Foundation Donors

THE BOARD OF TRUSTEES of the RSNA Research & Education Foundation and its recipients I of research and educational grant support gratefully acknowledge the contributions made to the Foundation between August 28 – September 29, 2003.

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EXHIBITOR'S CIRCLE

MRS

Reporting Systems, Inc. **BRONZE \$1,000**

Mammography

Mitsubishi Digital Electronics MEDICAL IMAGING America, Inc.

BRONZE \$1,000

One year ago, at RSNA 2002, the Foundation launched the Exhibitor's Circle program. It was a way for small and mid-size companies to support research at more modest levels than the \$200,000 commitment required with the Vanguard program.

BRONZE \$1,000 BRONZE \$1,000

SenoRx, Inc.

SenoRx

The Foundation is proud to say that on the program's first anniversary, 11 companies are members of the Exhibitor's Circle-doing their part to fund radiology's future.

SoftMed Systems, Inc.

RSNA **PRESIDENT'S CIRCLE MEMBERS**



BRONZE (\$1 - \$199)

President's Circle (\$1,500) Michael M. Abiri, M.D. Jean & R. Nick Bryan, M.D., Ph.D. David M. Hovsepian, M.D. Jean & Brian C. Lentle, M.D. Donald R. Logan, M.D. Judy & C. Leon Partain, M.D., Ph.D. Drs. Nargis & Suresh K. Patel James H. Thrall, M.D. Jacob Valk, M.D., Ph.D.

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Susan M. Ascher, M.D. In memory of Janis Brown, M.D. Mrs. Earl E. Brant In memory of Earl E. Brant, M.D. Maria Vittoria Chiechi, M.D. In memory of Michele Antonio Chiechi, M.D. Dr. & Mrs. Leland Cropper In memory of our parents Svein-Dag Eggesbo, M.D. In memory of my father, Bernhard Dr. & Mrs. Gerhardt Fitz In honor of Jonathan & Alma Fitz Georgiana Gibson, M.D. In memory of Helen C. Redman, M.D. Dr. & Mrs. Thomas Harle In memory of our parents Daniel L. Seale, M.D. In honor of McClure H. Hall, M.D., on the occasion of his retirement Garv T. Smith, M.D. In honor of Edward Buonocore, M.D. Dr. & Mrs. Robert Steiner In memory of Dr. Simon Kramer Julie K. Timins, M.D. In memory of Helen C. Redman, M.D.

Online donations can be made at www.rsna.org/research/foundation/donation.

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News about RSNA 2003

Badge Wallets

RSNA 2003 badge wallets have been mailed to North American attendees who registered by October 31 and to Non-North American attendees who registered by October 10, 2003.

Non-North American registrations received October 11 – October 31 require attendees to pick up their badge wallet onsite at the Lakeside Center, Hall E, Level 2.

The badge wallet contains a

RSNA 2003 Highlights

The October issue of RSNA News contains an extensive listing of highlights and other important information for RSNA 2003, as well as a Chicago restaurant guide. The issue is available on the Internet at *rsnanews.org*.

The online *RSNA Program* was launched October 10 at *rsna2003.rsna.org*.

One-Day Badge

A one-day badge is available to view the technical exhibits area only. The badge can be purchased onsite for \$300 at the Exhibitor Registration Desk in the Grand Concourse, Level 3. Attendance for more than one day requires a full-conference purchase.



name badge, tickets and attendance vouchers. Those who did not meet the deadline will need to register onsite. **Registration rates increase \$100 onsite.** Students (technical, medical and nursing) are eligible to register onsite at no charge with proper student identification.





Onsite Registration

Lakeside Center, Hall E, Level 2

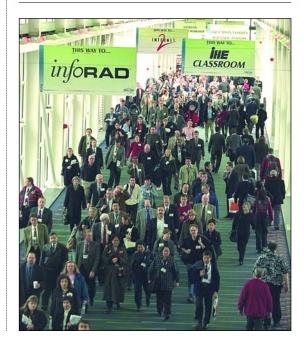
Saturday (Nov. 29)	12:00 p.m6:00 p.m.
Sun. – Mon. (Nov. 30–Dec. 1)	7:00 a.m. – 6:00 p.m.
Tuesday – Thursday (Dec. 2-4)	7:00 a.m. – 5:00 p.m.

Registration Fees

ONSITE

\$100 RSN	A Member,	AAPM	Member
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- \$0 Member Presenter
- \$0 RSNA Member-in-Training and RSNA Student Member
- \$0 Non-Member Refresher Course Instructor, Paper Presenter, Poster Presenter, Education or Electronic (*info*RAD) Demonstrator
- \$210 Non-Member Resident/Trainee
- \$210 Radiology Support Personnel
- \$620 Non-member Radiologist, Physicist or Physician
- \$620 Hospital Executive, Research and Development Personnel, Medical Service Organization, Healthcare Consultant, Industry Personnel
- \$300 One-day badge registration to view only the Technical Exhibits area.



For more information about registration at RSNA 2003, visit www.rsna.org, call (630) 571-7862 or e-mail reginfo@rsna.org.

RSNA 2003 Exhibitor News

RSNA Meeting Chicago's Third Largest Convention

The RSNA Scientific Assembly and Annual Meeting is ranked third on the list of Chicago's largest conventions in 2002, and the only medical meeting to make the top 10. In terms of economic impact on the city, RSNA's meeting ranks second.

CONVENTION	ATTENDANCE	ECONOMIC IMPACT/1 (Millions)	DESCRIPTION
1 International Manufacturing Technology Show Sept. 4-11, 2002	85,030	\$158.5	Trade show for manufacturing equipment and technology
2 Restaurant Hotel-Motel Show May 18-21, 2002	75,189	\$105.1	Annual show featuring products and services for the hospitality industry
Badiological Society of North America Scientific Assembly and Annual Meeting Dec. 1-6, 2002	59,538	\$111.0	Medical conference for the Radiological Society of North America
4 Kitchen and Bath Industry Show and Conference April 4-7, 2002	56,430	\$78.9	Trade show for designs and trends in kitchen and bath products
5 Jan. 13-15, 2002	55,959	\$52.2	Venue for housewares and home decor products
13 Chicago Dental Society Midwinter Meeting Feb. 21-24, 2002	30,666	\$42.9	Annual meeting for dentist professionals
14 American Heart Association Scientific Sessions Nov. 17-20, 2002	29,854	\$41.7	Annual meeting of scientists and healthcare professionals devoted to cardiovascular disease and stroke

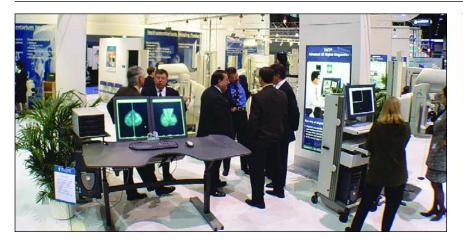
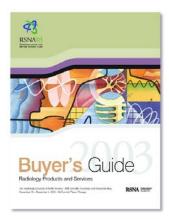


Exhibit Space Summary

As of October 2, 2003, total exhibit space sold was 438,650 square feet with 633 companies registered to exhibit, including more than 96 first-time exhibitors.

RSNA 2003 Exhibitor News



Buyer's Guide Available Soon

The 2003 Buyer's Guide: Radiology Products and Services will be available at the end of November. Each exhibitor will receive a copy by mail. The publication will also be available online at www.rsna.org/buversguide.html.

The *Buyer's Guide* is the official guide to the technical exhibits at RSNA 2003 showcas-

ing radiology product offerings and services. Designed for yearround use, the *Buyer's Guide* includes important reference material for purchasers and decision makers. The publication will also be available in distribution racks in the exhibit halls.

Important Exhibitor Dates for RSNA 2003

November 24	Technical Exhibit Target move-in begins
November 26	Hands-on Computer Workshop move-in begins
November 28	General Technical Exhibit move-in begins
Nov. 30 – Dec. 5	RSNA 89th Scientific Assembly and

Annual Meeting

Technical Exhibits Installation

Mon. – Wed., Nov. $24 - 26^*$	8:00 a.m. – 4:30 p.m.
Thurs., Nov. 27	
(Thanksgiving Day)	6:00 a.m. – 2:30 p.m.
Fri. – Sat., Nov. 28 – 29	8:00 a.m. – 4:30 p.m.
Sun., Nov. 30	6:00 a.m. – 8:00 a.m.
*Target Move-in Assignments can b online RSNA Technical Exhibitor Set www.rsna.org/rsna/te/index.html.	

Technical Exhibit Hours

Sun Wed., Nov. 30 - Dec. 3	10:00 a.m. – 5:00 p.m.
Thurs., Dec. 4	10:00 a.m. – 2:00 p.m.

Dismantle

Thurs., Dec. 4	. 2:30 p.m. – 8:00 p.m.
Fri. – Sat., Dec. 5 – 6	. 8:00 a.m. – 4:30 p.m.
Sun., Dec. 7	. Hall Closed
Mon., Dec. 8	. 8:00 a.m. – 4:30 p.m.

For more information, contact RSNA Technical Exhibits at (630) 571-7851 or e-mail: *exhibits@rsna.org.*

ADVERTISEMENT

MARK YOUR CALENDAR

WE WOULD LIKE TO EXTEND AN INVITATION TO ATTEND the 23rd International Congress of Radiology (ICR) to be held in Montreal from June 25 to 29, 2004 at the Palais des Congrès de Montréal.

About 3,000 attendees are expected from around the world. Along with taking a glimpse into

new approaches and new applications of medical imaging technology, this event will allow you to keep track of any



changes that we may have to confront in the everevolving world of radiology. The goal of the meeting is to represent the international context in which radiology is both done and managed. Fifteen concurrent tracks as well as five symposia will be held. For more information please visit our Web site at *www.icr2004.com*.

We hope you will join us and participate actively in our 2004 meeting, hosted by the friendly and cosmopolitan city of Montreal, Canada. $\Box \Box \Box$

www.rsna.org

RSNA 2003 Certificate of Attendance

Certificates of attendance for the RSNA Scientific Assembly will no longer be available as preprinted cards at the Help Center at McCormick Place. If you need a certificate of attendance for RSNA 2003, here's what you do:

1. Log in with your badge number at any RSNA Link Onsite terminal at McCormick Place. Your name will appear automatically on the certificate.

- 2. To print the certificate, you have three choices:
- A. Print it from the RSNA Link Onsite terminal
- B. Send the certificate as a PDF to your e-mail account
- C. Go to the Help Center, where an assistant can help you get a printout

Access to online certificates of attendance will be available only during the week of RSNA 2003. Should you need a certificate of attendance after December 5, please send your request to reginfo@rsna.org or call RSNA at (800) 381-6660 x7850.

Dining in Chicago

For the convenience of meeting attendees, an expanded version of the list of Chicago restaurants that appeared in the October issue of RSNA News is posted on RSNA Link Onsite (rsna2003.rsna.org). In the left-hand navigation column, click on More Info and then Restaurants.

Need more? The Around Town page (also under More Info) contains
links to city guides that provide restaurant lists or search facilities for fine
dining in the city famous for deep-dish pizza.

BIROW 2004

The home page for the 2004 Biomedical Imaging Research Opportunities Workshop (www.birow.org) includes important details about the workshop and links to:

- online registration
- · abstract submission forms and

information

- hotel information
- white papers from BIROW 2003 RSNA is organizing the 2004 workshop. For more information, see page 24.



New Membership Benefit

RSNA members can now enjoy a new benefit of membership-free access to the Community of Science (COS) Funding Opportunities and Funding Alert.

COS is a Web site for the global research and development community. To date, COS has 480,000 members who use the site to promote their work, find funding, access experts, and consult and collaborate with colleagues.

COS Funding Opportunities is a comprehensive database containing more than 23,000 listings of available funding sources. COS Funding Alert is a weekly e-mail notification containing a customized list of funding opportunities.

Many RSNA members already belong to COS through their institutions. A list of participating institutions can be found at www.cos.com/cgi-bin/institutions.cgi. For RSNA members whose institutions are not subscribers, go to www.rsna.org/research/ cos.html.

CONNECTIONS Your online links to RSNA

RSNA Link www.rsna.org Radiology Online radiology.rsnajnls.org Radiology Manuscript Central radiology.manuscript central.com RadioGraphics Online

radiographics.rsnajnls.org

RSNA Virtual Journal Club vjc.rsna.org Education Portal www.rsna.org/education/ etoc.html **CME Credit Repository**

www.rsna.org/cme **RSNA Medical Imaging Resource Center** mirc.rsna.org

RSNA Index to Imaging Literature rsnaindex.rsnajnls.org **RSNA Career Connections** careers rsna org RadiologyInfo[™]

RSNA-ACR public information Web site www.radiologyinfo.org

RSNA Online Products and Services www.rsna.org/member services

RSNA Research & Education Foundation Make a Donation www.rsna.org/research/ foundation/donation

History of the RSNA Series www.rsna.org/about/ history/index.html

NEW 2003 RSNA Program rsna2003.rsna.org/

NEW

Community of Science www.rsna.org/research/ cos.html

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CALENDAR

Medical Meetings December 2003 – April 2004

NOVEMBER 29

Effective Investment Strategies (prior to RSNA 2003), McCormick Place, Chicago • (800) 381–6660 x7715 or *ed–ctr@rsna.org*

NOVEMBER 30-DECEMBER 5

RSNA 2003, 89th Scientific Assembly and Annual Meeting, McCormick Place, Chicago • www.rsna.org

DECEMBER 6–11

American Medical Association (AMA), Interim Meeting, Hilton Hawaiian Village, Honolulu • www.ama-assn.org

JANUARY 17-19

International Conference on Applications of Neuroimaging to Alcoholism (ICANA), Medical Campus of Yale University in New Haven, Conn.• *info.med.yale.edu/ctna/icana.html*

JANUARY 28-31

International Society for Clinical Densitometry (ISCD), Annual Scientific Meeting, Hotel Inter–Continental, Miami • www.iscd.org

FEBRUARY 4-8

Sociedad Mexicana de Radiologia E Imagen (SMRI), Annual Meeting, Mexico City • *www.smri.org.mx*

FEBRUARY 5–8

Society of Nuclear Medicine (SNM), Mid-Winter Meeting, Disneyland Hotel, Anaheim, Calif. • www.snm.org

FEBRUARY 13-15

American Institute of Ultrasound in Medicine, Practical Aspects of Obstetric and Gynecologic Ultrasound, Four Seasons Hotel, Las Vegas • *www.aium.org*

FEBRUARY 22-26

Healthcare Information and Management Systems Society (HIMSS), 2004 Annual Conference and Exhibition, Orange County Convention Center, Orlando • *www.himss.org*

MARCH 5-9

European Congress of Radiology, ECR 2004, Vienna, Austria • *www.ecr.org*

MARCH 7-10

Society of Skeletal Radiology (SSR), Annual Meeting, Lowes Ventana Canyon Resort, Tucson, Ariz. • www.skeletalrad.org

MARCH 7-12

Society of Gastrointestinal Radiologists (SGR) and Society of Uroradiology (SUR), Abdominal Radiology Course, Westin Kierland Resort, Scottsdale, Ariz. • *www.sgr.org*

MARCH 22-26

Society of Computed Body Tomography & Magnetic Resonance (SCBT/MR), 27th Annual Meeting, Lake Las Vegas Resort, Henderson, Nev. • *www.scbtmr.org*

MARCH 25-30

Society of Interventional Radiology (SIR), 29th Annual Scientific Meeting, Phoenix Civic Plaza, Phoenix, Ariz. • www.sirweb.org

MARCH 28-31

Academy of Molecular Imaging (AMI), Annual Conference, Gaylord Palms Resort & Convention Center, Orlando • www.ami-imaging.org

MARCH 28-APRIL 1

Society of Thoracic Radiology (STR), Annual Meeting, Westin Mission Hills Resort, Rancho Mirage, Calif. • www.thoracicrad.org

APRIL 8-10

Japan Radiological Society (JRS), 63rd Annual Meeting, Pacific Convention Plaza, Yokohama, Japan • www.radiology.or.jp/english/index.htm

APRIL 21-24

Association of University Radiologists (AUR)/Society of Chairmen of Academic Radiology Departments (SCARD)/Association of Program Directors in Radiology (APDR)/American Association of Academic Chief Residents in Radiology (A3CR2), 52nd Annual Meeting, San Francisco Marriott, San Francisco • www.aur.org

APRIL 21-24

Sociedade Paulista de Radiologia e Diagnóstico por Imagem (SPR), 34th Sao Paulo Radiology Meeting, ITM Expo Convention Center, Sao Paulo, Brazil • *www.spr.org.br*

APRIL 24-25

American Osteopathic College of Radiology (AOCR), Mid–Year Conference – Mammography, Hilton Chicago O'Hare Airport, Chicago • *www.aocr.org*



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