President’s Letter

Hello everyone. I hope your summer is going well.

Be sure to save the dates of October 30 – November 1, 2009 for Advances in Sonography, our 19th annual meeting, to be held at The Fairmont Chicago in Chicago, IL. This year should be better than ever, as John Cronan and the Program Committee have once again planned a great meeting. Log on to www.sru.org and scroll down to the fifth paragraph on the home page, where you will find links to download the registration brochure, register online and reserve a hotel room online. The deadline for meeting registration is October 2 and the deadline for hotel reservations is October 5.

Congratulations to SRU Fellow Barry Goldberg, who will receive The Lawrence A. Mack Lifetime Achievement Award at the annual meeting. The award was established to honor SRU Fellow Larry Mack, who passed away in 1999. It was his wish that an award be established in his memory, and the award is presented annually to an individual for lifetime achievement in ultrasound, for contributions to ultrasound-related research.

Congratulations also to SRU Fellow Michael Manco-Johnson, who will receive the SRU Distinguished Service Award. The Distinguished Service Award was established in 2007 and is presented annually to an SRU member in recognition of outstanding service to the Society and to the field of radiology.

The Toshiba Residents program, which provides stipends to radiology departments to help defray the travel expenses of residents and fellows to attend the annual meeting, will be available again at the annual meeting. The meeting provides an excellent introduction to clinical ultrasound imaging. Please give some thought to encouraging the residents at your institution to apply for the program. Details about the program have been sent to the membership via e-mail. You may contact the administrative office (sroberts@acr-arrs.org) if you have any questions.

Immediately prior to the annual meeting, the SRU will hold a consensus conference on management of ovarian cysts. SRU Fellows Debbie Levine and Douglas (Rusty) Brown will co-moderate the conference. Participants from radiology, obstetrics, gynecology (including general gynecology, gynecologic oncology, reproductive endocrinology, and minimally invasive surgery) and pathology have been invited to participate. The ultimate goal of the conference is to produce a summary of the most important issues as they relate to management of ovarian cysts, and to arrive at a consensus regarding which cysts require imaging follow-up or surgery, and which cysts do not require follow-up. This conference, like previous SRU consensus conferences, should prove thought-provoking and influential in improving medical care of this important clinical problem.

Rusty Brown and the International Outreach Committee are working with Rochelle Andreotti and the Communications Committee to set up a page on the SRU website addressing opportunities and means to enhance the use of ultrasound in developing countries. Rusty and his group have been very innovative in establishing liaisons with other organizations sharing similar interests.

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Our members continue to give of themselves and their time by attending meetings and conferences representing the SRU. Rick Feld, chair of the Education Committee, and Deb Rubens, vice-chair of the Program Committee, will represent the SRU at a Radiology Education Alliance (REA) meeting that will be held on September 25 in the ACR’s Reston, VA office. SRU Executive Board members Rusty Brown and Peter Doubleit will represent us at the ACR Intersociety Summit Conference (ISC) in July in Banff, along with Ulrike Hamper, who is on both the SRU Executive Board and the ISC Board. The topic of this year’s conference is “Financing Research and Education in Radiology: Current Challenges and Future Solutions”. Rochelle Andreotti, Chair of the Communications Committee, will represent us at the Society for Diagnostic Medical Sonography (SDMS) liaison meeting to be held during the SDMS annual meeting in October in Nashville, TN. I would also like to extend my thanks to SRU Fellow Mitch Tublin and the residents at the University of Pittsburgh Medical Center for the many excellent unknown cases they have provided for the SRU website.

Economic times are tough just now, making it more challenging to increase our membership. We must all step up our efforts to encourage radiologists interested in ultrasound to join. Encourage your colleagues to join the SRU. We are also always looking for opportunities to enhance sonography’s role in radiology. Efforts in education, academics and radiology practice are ongoing. I welcome ideas from the membership to identify future opportunities. Please feel free to contact me with your thoughts. I hope to see you in October in Chicago.

President’s Letter (continued)

The American Institute of Ultrasound in Medicine (AIUM) 54th annual convention was held April 2–5, 2009, in New York, NY. A record-breaking 1900 attendees from all disciplines of medical ultrasound convened at the Marriott Marquis in Times Square to learn about all that is innovative and established in the field. The size, spirit, and course selection of the convention helped to make it the most successful in AIUM history.

Convention courses addressed the most recent developments and applications across specialties in medical ultrasound. The program featured expert discourse on contemporary issues in radiology, obstetrics, and fetal care. It also incorporated the emerging role of ultrasound in emergency medicine, interventional and vascular applications and therapeutic functions. More than 250 scientific papers were presented this year.

The convention also hosted the inaugural meetings of the Therapeutic Ultrasound Professional Interest Group and the Contrast-Enhanced Ultrasound Professional Interest Group. Each group represents an evolving area of medical ultrasound in the United States and both groups were established as official AIUM Communities of Practice by the AIUM Board of Governors following the convention.

In the area of basic science, the meeting tackled important issues facing the ultrasound community. There were courses on the bioeffects of ultrasound scanning as well as contrast agent safety. In addition, the AIUM presented an informative session on the Digital Imaging and Communications in Medicine (DICOM) 3D standard.

For the first time, the AIUM offered a half-day residency course to broaden the Student Day experience and benefit all residents completing a program related to medical ultrasound, no matter in what discipline. The course, High-Quality Ultrasound Exams: How to Acquire Them, moderated by Peter Arger, MD, drew more than 65 residents. The course covered physics, machine controls, thyroid and carotid ultrasound, obstetric and gynecologic ultrasound, abdominal ultrasound, and vascular imaging. Students and faculty participated in a question-and-answer session at the end of the program.

The convention also took on another dimension this year by implementing a social network site that helped to connect convention attendees before the meeting and kept them informed throughout the event. The Internet site enhanced the convention experience with blogs, pictures, forums, video interviews, and discussions through the AIUM’s 13 Community of Practice groups. In addition, people who were unable to attend the convention had the opportunity to contribute to the discussions.

The AIUM will hold its 2010 annual convention March 23 – 27, 2010 at the Marriott Hotel and Marina in San Diego, California.
The 2009 American College of Radiology Chapter Leadership Conference (AMCLC) was held May 3-6 in Washington, DC. National advocacy issues centered on the economics of Medicare reimbursement, including cuts to imaging reimbursements from the Deficit Reduction Act of 2005, a multiple service category approach with regard to Medicare reimbursement for physician services, and the role of radiology benefit management in the Medicare program. Specifically, the ACR proposes clinical decision support as the model for assuring appropriate utilization of high-tech imaging for the Medicare program. This does not typically involve diagnostic ultrasound.

During the course of the meeting there were several economic presentations and two open-mike sessions. The economics staff presented updates on activities of the Relative Value Update Committee (RUC) and the CPT Editorial Panel. Other presentations described the issues to be discussed at Capitol Hill visits that had been scheduled for conference participants. One open-mike session concerned state government relations activities and their importance to the state chapters. Another session probed the attendees’ attitudes toward in-office self-referral. During the course of the presentations it became clear to a number of attendees that they were unfamiliar with many of the acronyms being used by various speakers. Subsequently, a document circulated with a glossary of acronyms. The link to this document is: http://amclc.acr.org/LinkClick.aspx?fileticket=kbdjUegXAyU%3d&tabid=123.

There were two keynote lectures at the conference. The first was given by Dr. Elias Zerhouni, former director of the NIH, who described how scientific advances and changing paradigms in the delivery of health care will influence the roles of radiologists and offer strategies for preparing for change. The second, given by Dr. Paul Chang of the University of Chicago, was entitled “Re-engineering Radiology in an Electronic and Flattened World: The Radiologist as Value Innovator”, which probed how informatics and electronic workflow integration will help radiology address significant future challenges, including the fear of commoditization of our specialty.

Two ultrasound-related practice guidelines, Practice Guideline for the Performance of Neurosonography in Neonates and Infants and Practice Guideline for the Performance of Pelvic Ultrasound, were accepted by the ACR Council. The neurosonography guideline was developed collaboratively with the SRU, the American Institute of Ultrasound in Medicine (AIUM) and the Society for Pediatric Radiology (SPR), and the pelvic ultrasound guideline was developed collaboratively with the SRU, the AIUM and the American College of Obstetricians and Gynecologists (ACOG). Details on both practice guidelines can be found on the ACR website (www.acr.org).

Welcome to New Members

The SRU welcomes the following physicians to membership:
Antonio Fargiano, MD
Pittsburgh, PA

Romil Y. Patel, MD
New York, NY
Terry M. Silver, MD was one of the pioneers of ultrasound in North America. He received his MD degree cum laude from the State University of New York (SUNY) Downstate Medical Center. Following his residency in diagnostic radiology at the University of Michigan, he joined the faculty in 1974 and spent his entire career there. Terry had a rapid ascent in academia, becoming a full professor at the age of 37, the youngest full professor in the history of the radiology department.

Terry first started practicing ultrasound shortly after completing his residency in 1974. He served as the director of the ultrasound division from 1976–1987 and was co-director from 1987–1992. Terry was also appointed as the first associate chair of the radiology department in 1984, a position he held until 1992.

Terry helped popularize the modality with his clinical research, lectures, and as an educator and course director for postgraduate ultrasound courses. He is the author or co-author of 81 scientific articles in peer-reviewed journals and numerous exhibits, abstracts and book chapters. Terry has given more than 125 presentations and lectures at national and international meetings and courses, including being a visiting professor at 27 medical centers and universities. However, his most important contribution to ultrasound may be as course director of the very successful and well-attended Seminar in Diagnostic Ultrasound, held from 1977 until 2000 in Ann Arbor, Michigan. He was also a director for Radiology in the Desert in Scottsdale, Arizona from 1994 until 2002. Terry also established a cross-sectional fellowship and mentored numerous residents and fellows.

His service to radiology and ultrasound is outstanding. Terry was one of the original 30 members of the SRU. He was the Chair of the Fellowship Committee and served on the Executive, Membership, and External Affairs committees. He was also active in many other radiology societies, serving on numerous committees and boards. He was an oral examiner for the American Board of Radiology approximately 16 times. He was also a journal reviewer for five medical journals, serving on the editorial boards of three, and also served as co-editor of the Yearbook of Diagnostic Radiology.

Many honors have been bestowed upon Terry during his career, including fellowship status in four societies, the SRU, the American College of Radiology (ACR), the Society of Uroradiology (SUR), and the American Institute of Ultrasound in Medicine (AIUM). He also received the Harry Z. Mellins Master Teacher Award in Radiology and a Distinguished Service to the Medical Profession and Community Award from the alumni society of his medical school, as well as the Distinguished Service Award from the American Board of Radiology.

In summary, Terry Silver was one of the true pioneers of ultrasound and distinguished himself as a clinical researcher, lecturer, and educator. He is now enjoying his retirement with his children and grandchildren, playing golf and, as a sports enthusiast, particularly his beloved Michigan Wolverines. ♦
We invite all members to submit questions to Ask the Expert regarding the practice of radiology. Questions can be technical, clinical, political or socioeconomic in nature. We will refer your question to the right person and publish an answer. If we can’t answer your question in print we will try to obtain an “off-line” answer for you.

**Question:** What can we do to minimize the effect of obesity on fetal anatomic evaluations in the obese pregnant patient?

**Answer:** Obesity is a major global public health concern, with rising trends of obesity in virtually all study populations. In the USA over 60% of women are overweight, with approximately one-third considered obese. Obesity is considered the commonest clinical risk factor in obstetric practice. Increased fetal morbidity includes macrosomia, prematurity, stillbirth, and major congenital anomalies. The increased risk of fetal structural anomalies remains independent of other maternal risk factors such as diabetes1-3. It is well documented that an elevated body mass index (BMI) adversely affects the ability to visualize the fetal anatomy with the fetal spine, cardiac structures, and facial structures most affected4, 5. Simply put, as the maternal BMI increases, the rate of completion of anatomic surveys decreases and the number of scans required increases5. This is in contrast to the underweight population, where completion rates of the anatomic survey at 15-18 weeks are similar to that at 18-22 weeks6. In unselected populations, completion rates progressively rise between 18 and 22 weeks5, 7. Accurate assessment of fetal anatomy is pivotal to directing management and counseling, perhaps even more so in the high-risk population, where completion rates of the anatomic survey remain unknown; however, studies have variably demonstrated that delaying, repeating or increasing the duration of the examination may only partially, if at all, mitigate the technical limitations that obesity imposes on visualization6-8, 10. There is a growing body of evidence that suggests that fetal anatomic evaluation can be accomplished via the transvaginal (TV) route, resulting in a trend to providing prenatal diagnosis in the first or early second trimester11-16. Rosati et al reported overall completion of fetal anatomy in 85% of patients at 15 and 16 weeks7.

Imaging of the heart is possibly the most controversial area with respect to timing. Although one can begin to evaluate the fetal heart as early as 13 weeks, there is no doubt that the larger the heart is, the easier it is to image. Nonetheless, there is a growing body of evidence indicating that major cardiac malformations can be ruled out at the early anatomic evaluation. Yagel et al performed over 6,000 fetal echocardiography examinations at 13-16 weeks and found that full cardiac anatomy could be visualized in 95% of cases at 11-12 weeks and 100% at 13-15 weeks gestation, with a favorable lie via transvaginal route8, 9. Thus, early transvaginal cardiac assessment in expert hands can provide a detailed cardiac assessment by 12-15 weeks with high rates of sensitivity and specificity approaching the mid-trimester examination8, 9.

The trend toward early fetal diagnosis has been advocated more extensively in Europe as compared to the United States, perhaps based in part on a challenging learning curve and in part on economic issues10, 11. Despite examination in expert hands, a concern remains that the early fetal assessment will always need to be paired with a later examination to assess anatomic areas that are not yet developed adequately for assessment at the time, thus increasing the overall healthcare burden. In the obese population, utilizing transvaginal ultrasound (TV US) to bypass the abdominal pannus may provide the only satisfactory window for evaluating fetal anatomy. The optimal timing of a TV US fetal anatomic survey in the obese population remains unknown; however, delaying the examination until 14-15 weeks will permit additional fetal structural development while remaining in the range of the TV probe.

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In conclusion, a slightly later routine anatomic evaluation performed at mid-20–22 weeks rather than 18-20 weeks gestation is recommended. An early anatomic fetal evaluation via TV US may provide an opportunity for detailed fetal assessment. More work remains to be done to elucidate the best approach in the obese gravida patient.

Phyllis Glanc, MD
Women’s College Hospital, Toronto, ON, Canada

References
SRU Fellow Harvey Nisenbaum Becomes President of AIUM

Harvey L. Nisenbaum, M.D., FACR, FAIUM, FSRU, Associate Professor of Radiology at the University of Pennsylvania School of Medicine and Chairman of the Department of Medical Imaging at Penn Presbyterian Medical Center in Philadelphia, PA, became the 28th President of the American Institute of Ultrasound in Medicine (AIUM) at its Annual Meeting in New York City, NY April 3-5, 2009. Dr. Nisenbaum is a Fellow of the SRU and Chair of the Professional Practice and Standards Committee.

The AIUM is a multidisciplinary association consisting of approximately 8,000 members including physicians, sonographers, scientists, engineers, other healthcare providers, and manufacturers of ultrasound equipment. The AIUM is dedicated to advancing the safe and effective use of ultrasound in medicine through professional and public education, research, development of guidelines, and accreditation.

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SRU Emeritus Fellow Jon W. Meilstrup, MD

Mary C. Frates, MD

Jon Meilstrup was raised in Salt Lake City, Utah, and graduated from the University of Utah in 1970 with a magna cum laude degree in organ music. He then “saw the light” and received his medical degree from the same institution in 1976. After internship and radiology residency at the University of Missouri-Columbia Medical Center, he served as an active duty medical officer in the Army Medical Corps, where he attained the rank of Major. During that time, he received the Army Achievement Medal and the Meritorious Service Medal as a staff radiologist at Walter Reed Army Medical Center in Washington, DC. It was during this appointment that Jon’s interest in ultrasound became apparent, and he was the officer in charge of the ultrasound section from 1980 to 1983, and officer in charge of ultrasound and CT from 1983 to 1985.

After discharge from the Army and three years at Montgomery General Hospital in Maryland, Jon was appointed as an assistant professor of radiology at Pennsylvania State University and a member of the staff of the Milton S. Hershey Medical Center in Hershey, PA. He spent the rest of his career at Hershey until his retirement in June, 2008. He was named chief of the ultrasound section in 1993, and was promoted to associate professor of radiology in 1998. He served on numerous committees in the radiology department and in the Medical Center over his 20 years on staff. A particular interest was radiology resident teaching, and he served as a mentor to numerous medical students and residents.

As a member of the AIUM, Jon was a member of the Education Committee and the Clinical Standards Committee for many years, rising to become Chair of the Clinical Standards Committee from 2003 to 2005. For six years he served as the AIUM’s liaison member to the ACR Committee for Standards and Accreditation of the Commission on Ultrasound. In this role, he was instrumental in promoting joint sponsorship of the ACR-AIUM clinical guidelines, which has since become the standard for ultrasound guidelines. For these efforts, Jon received the Recognition Award from the AIUM in 2002, for outstanding contributions and service to the expanding future of ultrasound in medicine. He has been a member of the SRU Program Committee and a reviewer for Radiology, AJR, Radiographics and Ultrasound Quarterly.

Jon is co-author of many original research papers and book chapters as well as multiple award-winning educational exhibits, particularly at the RSNA. His role as mentor is notable, and many of the exhibits were undertaken with radiology residents and fellows. Jon became a Fellow of the AIUM in 2002, a Fellow of the ACR in 2004 and a Fellow of the SRU in 2006. He was awarded the AIUM Presidential Recognition Award in June 2008 for outstanding contributions and service to the expanding future of ultrasound in medicine.

In addition to his accomplishments in ultrasonography and radiology, Jon is the father of eight children and a minister for the Church of Latter Day Saints, and has been the organist for the Hershey Ward of The Church of Latter Day Saints since 1998. He is a bright, thoughtful and caring individual, and the field of ultrasound has been enhanced by his presence.

Future Meeting Dates

October 30–November 1, 2009
The Fairmont Chicago
Chicago, IL.

October 22-24, 2010
Grand Hotel Las Vegas at the Cosmopolitan Resort and Casino
Las Vegas, NV.