



JANUARY 2005

**THE MYELOGON**  
newsletter for the members of the American Society of Spine Radiology



FROM THE

# PRESIDENT

Gordon Sze, M.D.

**A**s President, the past year has proved to be challenging and yet full of rewards. The ASSR is a professional society with two large and somewhat independent contingents of members—those who specialize in diagnostic imaging and those who perform spine interventional procedures. While many, especially those who perform interventional procedures, cross the boundaries, there are significant numbers of members who are solely interested in diagnostic imaging. We have sought to meet the needs of these two groups this coming year at both the *ASSR 2005 Annual Symposium* at the Ritz-Carlton, San Juan Hotel, Casino & Spa in San Juan, Puerto Rico, and at the *ASNR 43rd Annual Meeting* in Toronto.

The *ASSR 2005 Annual Symposium* takes advantage of the unparalleled luxury of the Ritz-Carlton Hotels to offer a splendid setting for the most comprehensive meeting yet. In response to the need for Maintenance of Certificate (MOC) requirements, we are offering the first ever CAQ/MOC course with some of the star speakers of Neuroradiology. These speakers have been selected both by reputation and by the evaluations of years of previous courses at ASSR and ASNR. For the cutting-edge diagnostician, we are offering state-of-the-art spine CT and MR sessions, again featuring speakers who have been shown to be able to communicate the most advanced concepts in a clear, logical manner, all with an eye toward clinical applications. These sessions are intended to provide aggressive diagnosticians with tools that they can apply in the immediate future. Our spine interventional sessions also rely on the experience of years of previous meeting evaluations by offering a wide range of sessions, from hands-on workshops to small group seminars, to the “Ask the Professor” session to didactic lectures. The pool of talented spine interventional speakers at the ASSR is deep and we have selected the best of the best.

Finally, we encourage you to attend the *ASSR 2005 Annual Symposium* just for the pleasure of it all. For hotels of the stature of the Ritz-Carlton in the Caribbean in winter, the room rates are outstanding—approximately half the standard room rate. We also hope to offer a very special meeting experience in terms of the beauty of the meeting setting and the lusciousness of the amenities, from the breakfasts to the coffee breaks to the buffet reception on Thursday, February 24 to all of the facilities of the hotel, spa, and casino. Puerto Rico itself offers an abundance of sights from the El Yunque Rainforest to historic Old San Juan to tropical beaches to the lively and cool restaurant and nightlife scene of San Juan itself, one of the latest capitals of chic.

While it has been a tremendous amount of work, planning this meeting has been very exciting for us. We hope that you will all come and partake of our offerings.

(The complete program for the *ASSR 2005 Annual Symposium* can be found at [www.TheASSR.org](http://www.TheASSR.org).)

## THE 2004 OUTSTANDING PRESENTATION AWARD IN SPINE RADIOLOGY

The ASNR 2004 Outstanding Presentation Award in Spine Radiology presented during the *ASNR 42nd Annual Meeting* in Seattle, Washington was given to Stephen L.G. Rothman, M.D., for his scientific paper (#230) entitled “Can Real Time Video Fluoroscopy of the Cervical Spine Differentiate the Normal From the Abnormal Spine?”

A subcommittee of ASSR members assisted the ASNR Education Committee in judging the presentations.

## ASSR FOCUS SESSIONS AT ASNR 2004, SEATTLE

Brian C. Bowen, M.D., Ph.D., ASSR Vice President

At the ASNR 42nd Annual Meeting in Seattle, Washington, the ASSR hosted four Focus Sessions: "New Imaging Techniques in Spine," "Spinal Vascular Imaging," "Multi-Detector CT for Spine Imaging," and "Dynamic and Upright MRI/Science." These were all well attended with each room filled to capacity.

The talks in the "New Imaging Techniques" session reflected the ASSR's commitment to educating neuroradiologists, general radiologists, and others interested in spine imaging regarding the latest developments in advanced MR techniques applied to spinal cord imaging. Through case material, Dr. Lawrence Tannenbaum demonstrated the advantages of 3T of commercially-available pulse sequences, such as T1 FLAIR with fat saturation and gadolinium enhancement for the detection of cord lesions against a background of dark CSF, and driven-equilibrium fast-spin-echo sequences (also called "Fast Recovery FSE" or "Restore" by some manufacturers). These accentuate the T2 "myelographic effect" and may improve detection of extramedullary, intradural lesions, as well as lesions of the cauda equina. Dr. Gordon Sze discussed diffusion imaging of the spine and highlighted different MR methods (such as single-shot vs multi-shot echo-planar imaging vs line scan imaging) and various disease entities (cystic intradural extramedullary lesions, or intramedullary lesions such as myelitis vs. cord infarction) in order to illustrate the advantages of some methods over others in selected cases. Dr. Patrick Stroman brought the audience up-to-date on functional MR imaging of the spinal cord, both in the lumbar (thermal stimuli) and cervical regions (sensory-motor activation). He presented results of fMRI of the lumbar cord in control subjects and in patients with upper spinal cord complete injury, and showed the difference in the activation patterns in the two groups in response to a thermal stimulus applied to the L4 dermatome. Based on these and other published studies, he proposed approaches to the implementation of fMRI as a clinical tool for cord imaging in patients with complete or incomplete cord injuries and in patients with multiple sclerosis. Finally, Dr. Massimo Filippi reviewed the current status of magnetization transfer imaging of the spinal cord. He showed that in MS patients a model that combines cervical cord cross-sectional area measurements with MT ratio (MTR), histogram peak height is significantly, although modestly, associated with the level of clinical disability. He indicated, though, that because of the complexity of cervical cord damage in diseases like MS, a multiparametric assessment involving,

for example, diffusion tensor imaging and MTR analyses, may provide the best correlation between objective measures and clinical disability.

The session on Spinal Vascular Imaging provided an opportunity for the audience to learn of the latest MR angiographic techniques for imaging spinal vessels in patients with vascular malformations and vascular tumors. The first speaker, Dr. F. Reed Murtagh, described the vascular anatomy of the spine and spinal cord, focusing on the intradural veins as well as the arteries. The next speaker, Dr. Spyros Kollias, presented his results using a bolus dynamic contrast-enhanced 3D MRA technique with sequential k-space encoding. He illustrated the utility of the technique in identifying and localizing vascular lesions, and he discussed the limitation of the technique in detecting arteries such as the Artery of Adamkiewicz. Dr. Richard Farb presented results from a different MRA method, which he referred to as autotriggered elliptic centric ordered 3D gadolinium-enhanced MRA (ATECO MRA). Again the advantages of noninvasive MRA detection of spinal vascular lesions were emphasized, although the limitations of the technique and future improvements, such as 3T imaging, were also presented. The session concluded with an overview of endovascular approaches to spinal vascular disease presented by Dr. Ajay Wakhloo, who emphasized initial results and the future promise of 3D digital subtraction x-ray angiography. Dr. Wakhloo illustrated the various displays of spinal vessels and lesions available with 3D DSA: 2D cross-sections (MIP views), 3D stereoscopic views, shaded surface display, and fly through (virtual endoscopy). The demonstration of high spatial and temporal resolution with 3D DSA, beyond that currently available with MRA or CTA, provided a fitting summary to the session and a vision of the future for spinal vascular imaging.

The session on multi-detector CT (MDCT) for spine imaging provided an overview of applications of this technology to imaging of trauma and degenerative disorders of the spine. Dr. Diego Nunez first presented practical applications of multi-detector imaging for evaluation of spine fractures using case material and an emphasis on post-processing including multiplanar reformation and 3D rendering techniques. Dr. Craig Blackmore then presented an evidence-based approach on the use of CT screening for cervical spine trauma including accuracy, cost-effectiveness and the use of clinical prediction rules. He presented

*Focus Sessions continued on page 5*

# SOCIETY MEMBERSHIP CLIMBS TO OVER 600!

At the June 10, 2004 Annual Business Meeting in Seattle, Washington, the following 107 candidates were elected into

membership. This brings to 624, the total number of Society members.

Alves, Eric M.

Alzheimer, Daniel R.  
St. Peter's Hospital  
Helena, MT

Anand, Azad K.  
Long Island Diagnostic Imaging  
East Setauket, NY

Bartlett, Michael P.  
Mid Michigan Med Center  
Midland, MI

Behar, Jeffrey V.  
Radiological Consultants  
Association  
Dallas, TX

Benitez-Lopez, Wanda I.  
Hospital Concepcion  
San German, PR

Berg, Thomas D.  
Mercy Hospital  
Iowa City, IA

Blum, Stephen M.

Bok, Edward J.  
Advanced Radiology Services  
Grand Rapids, MI

Bove, Peter  
CDI  
Winter Park, FL

Braff, Steven P.  
Fletcher Allen Health Care-UVM  
Burlington, VT

Brandser, Eric A.  
Radiology Associates of  
Northern Kentucky  
Edgewood, KY

Bronen, Richard A.  
Yale University  
New Haven, CT

Brook, Allan L.  
Montefiore Medical Center  
Bronx, NY

Burgos, Ricardo M.  
University Of Virginia Hospital  
Charlottesville, VA

Campbell, Scott E.  
Central Texas Radiology & Spine  
Consultants  
Austin, TX

Carmody, Timothy J.  
Radiology Associates of Muncie  
Muncie, IN

Chepuri, Neeraj B.  
Abbott-Northwestern Hospital  
Minneapolis, MN

Christopherson, LucyAnn R.  
Memorial Medical Center  
Springfield, IL

Chundi, Vijaya V.  
Advanced Medical Imaging of  
Stuart  
Stuart, FL

Cooper, James A.  
Radiology Medical Group  
San Diego, CA

Cory, Richard C.  
Diagnostic Imaging Specialists  
Atlanta, GA

D'Angelo, Elizabeth G.  
Coastal Radiology  
New Bern, NC

DeLano, Mark C.  
Michigan State University  
East Lansing, MI

DeLaurentis, Mark  
Virtua Hospital Voorhees Division  
Voorhees, NJ

Eisenberg, Robert A.  
Gwinnett Medical Center  
Lawrenceville, GA

Enterline, David S.  
Duke University Medical Center  
Durham, NC

Errico, Vito  
Milford Hospital  
Millford, CT

Fagan, Steven J.  
Naval Hospital  
North Charleston, SC

Faliszek, James  
Village Radiology  
Oak Park, IL

Fobben, Edward S.  
St. Barnabas Medical Center  
Livingston, NJ

Ford, William J.  
Edina Imaging Center  
Edina, MN

Franchetto, Arlene A.  
Hamilton General Hospital  
Hamilton, Ontario, Canada

Gershon, Abner S.  
Invision Medical, LLC  
Avon, CT

Gulka, Irene B.  
London Health Sciences Centre,  
Univ.  
London, Ontario, Canada

Hall, James A.  
Radiology Consultants of  
Lynchburg, Inc.  
Lynchburg, VA

Halsted, Mark J.  
Cincinnati Children's Hospital  
Med. Ctr.  
Cincinnati, OH

Hassankhani, Alvand  
Brookhaven Memorial Hosp.  
Med. Ctr.  
Patchogue, NY

Hudson, C. Alex  
Hattiesburg Radiology Group,  
PLLC  
Hattiesburg, MS

Hunt, Steven T.  
Mountain Medical Physicians  
Salt Lake City, UT

Jeffries, Barry F.  
Atlanta Medical Center  
Atlanta, GA

Johnson, Carl E.  
New York-Presbyterian Hospital  
New York, NY

Jones, Kevin C.  
WADTS L.L.C.  
Savannah, GA

Katz, Kevin C.  
Santa Teresa Medical Center  
San Jose, CA

Kemp, Susan S.  
Riverside Methodist Hospital  
Columbus, OH

Kim, Francine M.  
Children's Memorial Hospital  
Chicago, IL

Kim, Paul E.  
Univ of Southern California Med  
Center  
Los Angeles, CA

Kistler, Michael W.  
Open Air MRI  
Murrieta, CA

Klym, Robert P.  
Hendersonville Radiology  
Consultants  
Hendersonville, NC

Krantz, Jeffrey S.  
MRI Specialists Of Tulsa  
Tulsa, OK

Lajaunie, Michele M.  
Diversified Radiology of  
Colorado  
Denver, CO

LaValley, Antoinette L.

Lefkowitz, David M.  
University of Maryland  
Baltimore, MD

Lev, Steven  
North Shore Hospital  
Manhasset, NY

Lewis, Linda  
Franklin & Seidelmann  
Rancho Santa Fe, CA

Mafee, Mahmood F.  
Univ. Of Illinois Hospital  
Chicago, IL

Malkani, Prakash  
Berkshire Medical Center  
Pittsfield, MA

Martinez, Hilario  
Radiology Associates, PC  
Middletown, NY

McKinnon, Sally G.  
Madison Radiologists, SC  
Madison, WI

McKinstry, Robert C.  
Washington Univ./Mallinckrodt  
Inst. of Radiology  
St. Louis, MO

Melville, Dean F.  
Community General Hospital  
Syracuse, NY

Messina, Albert V.  
Park Avenue Radiologists, PC  
New York, NY

Mewborne, Jeffrey D.  
Eastern Radiologists, Inc.  
Greenville, NC

Moore, William D.  
Memorial Med. Center  
Springfield, IL

Morales, Robert E.  
Univ. of Maryland Medical  
Systems  
Baltimore, MD

Nassar, Jose R.  
Jose A. Nassar & Associates  
Humacao, PR

Nguyen, Dan Thach Dam  
Georgetown University Hospital  
Washington, DC

Nijensohn, Eduardo  
Mt. Sinai Hospital  
Chicago, IL

Norbash, Alexander M.  
Boston University  
Boston, MA

Nov, Asher A.  
Group Health Cooperative  
Seattle, WA

Nunez, Diego B.  
Hospital Of St. Raphael  
New Haven, CT

Ochi, Robert P.  
Kaiser  
Roseville, CA

Olan, Wayne J.  
Suburban Hospital  
Bethesda, MD

Ong, Kenneth C.  
Good Samaritan Hospital  
San Jose, CA

Orraca-Tetteh, Kingsley Attoh  
Knox Community Hospital  
Mt. Vernon, OH

Pace, Mitchell T.  
Henry Ford Hospital  
Detroit, MI

Pjura, George A.  
Cape Radiology Group, Inc.  
Cape Girardeau, MO

Pobiel, Ronald S.  
Center for Diagnostic Imaging  
St. Louis Park, MN

Polansky, Andrew D.  
Palomar Medical Center  
Escondido, CA

Pomerantz, Stuart R.  
Massachusetts General Hosp.  
Boston, MA

Rapoport, Robert J.  
St. Peter's Hospital  
Albany, NY

Rickards, Paul J.  
Valley Radiology Consultants  
Escondido, CA

Rippe, David J.  
Florida Radiology Associates  
Altamonte Springs, FL

Robbins, Mark B.  
Hot Springs Radiology Services,  
Ltd  
Hot Springs, AR

Rossi, Andrea  
G. Gaslini Children's Hospital  
Genova, Italy

Rothbarth, Leo J.  
Diversified Radiology of  
Colorado, PC  
Denver, CO

Rumboldt, Zoran  
Medical Univ. of South Carolina  
Charleston, SC

Schwartz, Eric D.  
Hospital of the Univ. of  
Pennsylvania  
Philadelphia, PA

Schwartzberg, Ross E.  
X-ray Medical Group  
La Mesa, CA

Slonim, Suzanne M.  
Radiological Consultants  
Association  
Dallas, TX

Solsberg, M. David  
Invision  
Greenwood Village, CO

Spera, Thomas D.

Steinberg, David L.  
Steinberg Diagnostic Medical  
Imaging  
Las Vegas, NV

Stoane, Jason M.  
St. Joseph's Hospital  
Bellingham, WA

Strimling, Bradley S.  
Global Medical Imaging, S.C.  
Gurnee, IL

Tali, E. Turgut  
Gazi University School of  
Medicine  
Besevler, Ankara, CT Turkey

Thompson, William E.  
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Tran, Duc D.  
Lima Memorial Hospital  
Lima, OH

Truhlar, Scott M.  
Univ. of Iowa Hospital & Clinics  
Iowa City, IA

Tsuruda, Jay S.  
Neurografix  
Santa Monica, CA

Verma, Dibendu Joy

Watson, Vance E.  
Georgetown Univ. Med. Center  
Washington, DC

Wells, Sean D.  
Radiology Assoc. of Northern  
Kentucky  
Edgewood, KY

West, Andrew E.  
Cape Radiology Group  
Cape Girardeau, MO

Westesson, Per-Lennart A.  
Univ. Of Rochester Med. Center  
Rochester, NY

Westman, David G.  
Emory University Hospital  
Atlanta, GA

Wriedt, Christian H.R.  
MIA Group Ltd  
Malvern, Australia

## NASS 2005 RESEARCH GRANT AND FELLOWSHIP AWARDS

The North American Spine Society (NASS) is the leading multidisciplinary organization representing caregivers and research scientists in the field of spinal disorders. Part of the NASS' mission is to encourage and support basic and clinical science performed with integrity and a goal toward improving quality spine care for patients along with understanding underlying disorders. A sample of the special interest topics is available on our Web site, [www.spine.org](http://www.spine.org), as well as inside the research application; however, any spine-related proposal will be considered.

To receive an application, contact the NASS office toll free at (877) 774-6337, or visit the following link at <http://www.spine.org/Research/ResearchProgram.cfm>

### Research Grants

For investigative research on the spine

### Clinical Traveling Fellowship

At least one month must be spent in three to five different medical centers studying spine techniques

### Research Traveling Fellowship

At least five months must be spent at one medical center (other than the facility at which the applicant currently practices)

### Deadline:

*Must be received in the NASS office by May 6, 2005.  
Applications or questions may be addressed to:*

Research Department  
North American Spine Society  
8320 St. Moritz Drive  
Spring Grove, IL 60081  
Phone: (815) 675-0021  
Fax: (815) 675-3137  
Email: [Hintz@spine.org](mailto:Hintz@spine.org)

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compelling evidence for primary CT imaging of spine trauma in select adult trauma patients with a high probability for cervical spine injury. Dr. Jeffrey Stone subsequently discussed the role of MDCT for imaging degenerative spine disease. He emphasized the use of this technology to evaluate the neural foramen, spinal alignment and post-operative fusion including common complications. The final speaker was Dr. James Kofler, who reviewed some basic principles of MDCT physics and emphasized optimal scan parameters to reduce radiation exposure while maintaining diagnostic integrity. Several practical radiation dose reduction strategies were emphasized.

Finally, the session on Dynamic and Upright MRI/Science, presented by Dr. Randy Jinkins, yielded some heated discussion on the need for, and implementation of, upright, weight-bearing, and dynamic-kinetic MR imaging of the spine. A thorough discussion of Spinal Stability by Dr. Luigi Manfre was highlighted by examples of CT and MR images obtained before and during spine compression using an axial loading device attached to the patient. The remainder of session was devoted to more technical and biomechanical considerations of the intervertebral disk (Drs. Jeffrey Silber and Kurt Schellhas) and vertebral body mechanics (Dr. Stephen Belkoff).

## **2004-2005 EXECUTIVE COMMITTEE TAKES OFFICE IN SEATTLE**

The following members of the ASSR 2004-2005 Executive Committee assumed office immediately after the June 10, 2004 Annual Business Meeting in Seattle, Washington. They will each serve in the positions listed below through the May 2005 Annual Business Meeting in Toronto, Ontario, Canada. A special thank you goes to Scott D. Agran, M.D., Andrew L. Wagner, M.D., Wade H.M. Wong, D.O., and Chi-Shin Zee, M.D. who completed their terms on the Executive Committee after the Annual Business Meeting.

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AMERICAN SOCIETY OF SPINE RADIOLOGY

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Jayne Eikman, *CMP, Meeting Coordinator*  
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## ASSR AWARD WINNERS FOR 2004

A total of nine Mentor Award presentations were given at the ASSR 2004 Annual Symposium. The following four presentations were recipients of the **2004 ASSR Mentor Award** as selected by the Ad Hoc Mentor Award Committee:

### Best Overall Presentation

Huy M. Do, M.D. Stanford University Medical Center, Stanford, California  
*Prospective Analysis of Clinical Outcomes After Percutaneous Vertebroplasty for Painful Osteoporotic Vertebral Body Fractures*

### Other Award Recipients

David Dansie, M.D. Mayo Clinic, St. Mary's Hospital, Rochester, Minnesota  
*Post-Vertebroplasty Spine MRI According to Origin of Recurrent Back Pain*

Asante Dickson, M.D. Winthrop University Hospital, Mineola, New York  
*16 Channel Multislice CT/Discography and Improved Visualization of Disc Pathology*

Sanjay Saluja, M.D. and Gordon Sze, M.D. Yale Medical Center, New Haven, Connecticut  
*Diffusion Weighted Imaging for the Diagnosis of Spine Osteomyelitis*

The ASSR Ad Hoc Research Committee selected the following two recipients for the first **ASSR/ArthroCare Corporation Spine Research Award** out of a total of four submitted applications:

Sanjay Saluja, M.D. Yale University Hospital, New Haven, Connecticut *Line Scan Diffusion Imaging of the Spine*

A. Orlando, Ortiz, M.D., M.B.A. Winthrop University Hospital, Mineola, New York  
*The Effect of Vertebral Augmentation on Pulmonary Function: A Prospective Study*

For information on the 2005 ASSR Mentor Award Program, visit [www.TheASSR.org](http://www.TheASSR.org).