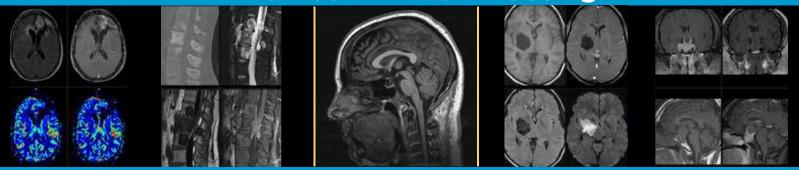


WESTERN NEURORADIOLOGICAL SOCIETY IN JOINT SPONSORSHIP WITH

THE INTERNATIONAL INSTITUTE FOR CONTINUING MEDICAL EDUCATION, INC.

PRESENTS THE

WNRS 45th Annual Meeting



15.0 AMA PRA Category 1 Credits™



Letter From the President

Thank you to everyone who attended and participated in the 44rd Annual Meeting last year in Sedona, Arizona. Feedback has been very positive, reflecting enthusiasm for the site, the program, the speakers, and the social events. The transition of meeting coordination to iiCME went smoothly and the Society looks forward to working with Randy and Wendy Ryals and the rest of the iiCME team. Special thanks to Keith Kortman, our past President, who continues to provide much valued leadership for our Society. Thanks also to the members of the Executive Committee for all the time and input necessary to make the meeting a success. .

Congratulations are in order to Dr. Gary Nesbit, the recipient of the WNRS 2012 Gabriel H. Wilson Award for the best paper presentation, entitled "Direct puncture treatment of Orbital and Peri-orbital Vascular Malformations." Dr. Nesbit's paper and presentation were chosen from a large number of abstract submissions, not only from the western region, but both nationally and internationally. Dr. Nesbit recently presented his paper at the ASNR 51st Annual Meeting in May in San Diego, California.

The 45th Annual Meeting will be held October 16-19 at the Hilton Waikoloa in Waikoloa Village on the Big Island, Hawaii. Because the meeting will be in Hawaii, our meeting pattern will change from the customary 3-day Friday-Sunday schedule to a 4-day Wednesday-Saturday meeting, allowing for one extra day of programming and networking opportunities. Time has been scheduled each day for attendees to visit the technical exhibits, especially during the daily continental breakfasts and mid-morning refreshment breaks. Additional opportunities will include the Opening Reception on Wednesday evening, October 16, the Annual Business Meeting Breakfast on October 19, the WNRS Annual Golf Tournament at the Waikoloa Beach and Golf Resort (http://waikoloabeachgolf.com/golf/the-kings-course) on Friday, October 18 and Closing Reception and Dinner Banquet on Friday, October 18

The big island of Hawaii is one of the most ecologically diverse islands on earth, having beaches and snowcapped mountains as well as deserts and rainforests. Hawaii Volcanoes National Park (http://www.nps.gov/havo/index.htm) is about a two to three hour drive from Waikoloa Village. Star gazers might enjoy a visit to Mauna Kea (http://www.maunakea.com/details.htm.) The island is also home to numerous beaches and golf courses. My strong suggestion is to set aside an extra day or two at the resort in order to fully capture an unforgettable experience (the Society will also be credited with the additional days and this will help avoid any attrition penalties). For more information on the Resort, visit: http://www.hiltonwaikoloavillage. com. For more information on the Big Island of Hawaii, visit: http://www.gohawaii.com/big-island. Online meeting registration is available at: http:// www.iicme.net/. Vendors interested in participating at the WNRS 45th Annual Meeting should contact business manager Ken Cammarata at our headquarters in Oak Brook, Illinois at 630-574-0220, extension 226 or kcammarata@asnr.org.

Dr. John Go has already assembled an outstanding scientific program that will follow a 4-day, morning format, allowing ample time in the afternoon to enjoy other activities with family and other WNRS members. We continue to encourage the membership to submit scientific abstracts and case reports for presentation and look forward to seeing you at the upcoming meeting. As always, if you have fellows or residents at your program, please encourage and mentor them in submitting a scientific paper. We welcome them to become involved with our Society. Please also encourage your non-WNRS-member Neuroradiology colleagues to join the WNRS. Further information regarding the upcoming meeting is available at http://www.iicme. com/. Randy Ryals rryals@iicme.net and his associates at the iiCME are anxious to personally assist you at any time.

I sincerely hope that you will plan on joining us at the WNRS 45th Annual Meeting at the Hilton Waikoloa Resort, October 16-19.

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Dieter R. Enzmann, MD

Robert W. Jahnke. MD*

William W. M. Lo, MD

Sincerely, John P. Karis, MD WNRS President and Chair, Technical Exhibits Committee

WNRS 2012-2013 **EXECUTIVE COMMITTEE**

WNRS PAST PRESIDENTS

2011

*Deceased

Richard H. Wiggins, III, MD, CIIP

2012 Keith E. Kortman, MD

PRESIDENT	
John P. Karis, MD	
The Barrow Neurological Institute	

Department of Radiology

PRESIDENT-ELECT/PROGRAM CHAIR John L. Go, MD LAC/USC Medical Center **Neuroradiology Division**

SECRETARY/TREASURER Arthur B. Dublin, MD, MBA Univ. of California, Davis Medical Center **Ambulatory Care Center**

RULES COMMITTEE CHAIR Alexander Lerner, MD University of Southern California San Diego, CA

FIRST PAST PRESIDENT Keith E. Kortman, MD San Diego Imaging

SECOND PAST PRESIDENT Richard H. Wiggins, III, MD, CIIP University of Utah Health Sciences Center Department of Radiology

Gabriel H. Wilson, MD*	1992	Joachim F. Seeger, MD
R. Thomas Bergeron, MD	1993	Michael Brant-Zawadzki, MD, FACR
Henry F. W. Pribram, MD	1994	William D. Robertson, MD
Fred K. Sondheimer, MD	1995	Joseph R. Thompson, MD
Robert L. Scanlan, MD*	1996	Charles E. Seibert, MD
James A. Pollock, MD*	1997	Wallace W. Peck, MD
Calvin L. Rumbaugh, MD	1998	Livia Solti-Bohman, MD, FACR
Leon G. Kaseff, MD	1999	John R. Hesselink, MD, FACR
T. Hans Newton, MD*	2000	Stephen T. Hecht, MD
Hervey D. Segall, MD	2001	Marvin D. Nelson, Jr., MD, MBA, FACR
Richard A. Kramer, MD	2002	Joseph E. Heiserman, MD, PhD
John R Bentson, MD	2003	Diane R. Newton, MD
Anton N. Hasso, MD	2004	Gary M. Nesbit, MD
David Norman, MD	2005	William D. Keyes, MD
William H. Marshall, MD	2006	Brian W. Chong, MD, FRCPC
John Howieson, MD	2007	Robert J. Sevick, MD, FRCPC
Barton Lane, MD	2008	Wade H.M. Wong, DO, FACR
John C. Stears, MD*	2009	Walter L. Olsen, MD
Barry D. Pressman, MD	2010	Christopher F. Dowd, MD
	Henry F. W. Pribram, MD Fred K. Sondheimer, MD Robert L. Scanlan, MD* James A. Pollock, MD* Calvin L. Rumbaugh, MD Leon G. Kaseff, MD T. Hans Newton, MD* Hervey D. Segall, MD Richard A. Kramer, MD John R Bentson, MD Anton N. Hasso, MD David Norman, MD William H. Marshall, MD John Howieson, MD Barton Lane, MD John C. Stears, MD*	R. Thomas Bergeron, MD 1993 Henry F. W. Pribram, MD 1994 Fred K. Sondheimer, MD 1995 Robert L. Scanlan, MD* 1996 James A. Pollock, MD* 1997 Calvin L. Rumbaugh, MD 1998 Leon G. Kaseff, MD 1999 T. Hans Newton, MD* 2000 Hervey D. Segall, MD 2001 Richard A. Kramer, MD 2002 John R Bentson, MD 2003 Anton N. Hasso, MD 2004 David Norman, MD 2005 William H. Marshall, MD 2006 John Howieson, MD 2007 Barton Lane, MD 2008 John C. Stears, MD* 2009

PROGRAM SCHEDULE

Wednesday, October 16, 2013 7:00-1:00 pm Registration 7:00-7:50 am Continental Breakfast **BRAIN** 8:00-8:30 am 8:30-9:00 am CTA and CT Perfusion: Its Not Just For Stroke......Pablo Villablanca, MD DTI Tratography: Review of Normal Tracts Steven Imbesi, MD 9:00-9:30 am 9:30-10:00 am **Break** 10:00-10:30 am 10:30-11:00 am 11:00-11:30 am 11:30-12:00 pm Break 12:00-1:30 pm Scientific Oral Presentations 6:00-7:00 pm **Opening Reception** Thursday, October 17, 2013 **HEAD & NECK** 7:00-7:50 am Continental Breakfast 8:00-8:30 am Post Operative Neck......Bronwyn Hamilton, MD 8:30-9:00 am 9:00-9:30 am 9:30-10:00 am **Break** 10:00-10:30 am 10:30-11:00 am 11:00-11:30 am 11:30-12:00 pm **Break** Scientific Oral Presentations 12:00-1:30 pm Friday, October 18, 2013 **SPINE** 7:00-7:30 am Annual Business Meeting – Breakfast (Open to all physician attendees and exhibitors) Annual Business Meeting – Business portion (WNRS Members only) 7:30-7:50 am 8:00-8:15 am 8:15-8:45 am 8:45-9:15 am 9:15-9:45 am The Craniocervical Junction Lubdha Shah, MD 9:45-10:15 am **Break** 10:15-10:45 am 10:45-11:15 am 11:15-11:45 am 1:30 pm-Annual Golf Tournament (separate registration required) **Closing Reception and Banquet** 6:00-10:30 pm Saturday, October 19, 2013 **ADVANCED & NIR** 8:00-8:30 am 8:30-9:00 am 9:00-9:30 am Traumatic Brain Injury Edward Quigley, MD, PhD 9:30-10:00 am 10:00-10:30 am 10:30-11:00 am

Spine Interventions Keith E. Kortman, MD, CIIP

11:00-11:30 am

11:30-11:35 am

INVITED FACULTY

John Curran, MD, PhD

Director of Neurology Neuroradiology Associate Professor of Radiologyr University of Arizona Pediatric Neuroradiologist Phoenix Children's Hospital Phoenix, AZ

Roberta Dalley, MD

Associate Professor of Radiology University of Washington Medical Center Radiology/Imaging Services Seattle, WA

Authur Dublin, MD, MBA

Professor of Clinical Radiology UC Davis Medical Center Sacramento, CA

William K. Erly, MD

Professor of Radiology University of Arizona Deartment of Radiology Tucson, AZ

John Grimm, MD

Neuroadiologist Children's Hospital, Los Angeles Los Angeles, CA

Bronwyn Hamilton, MD

Assistant Professor, Department of Radiology Oregon Health and Science University Portland, OR

Steven G. Imbesi, MD

Professor of Radiology University of California, San Diego San Diego, CA

Blake Johnson, MD, FACR

Medical Director and Director of Neuroimaging Center for Diagnostic Imaging Twin Cities, MN

Paul Kim, MD

Assistant Professor of Radiology Keck School of Medicine University of Southern California Los Angeles, CA

Claudia Kirsch, MD

Associate Professor of Radiology Ohio State College of Medicine Departmen of Radiology Columbus, OH

Meng Law, MD, MBBS, FRACR

Professor of Radiology Neurology and Neurosurgery Keck School of Medicine University of Southern California Los Angeles, CA

Alex Lerner, MD

Assistant Professor of Radiology Keck School of Medicine University of Southern California Los Angeles, CA

Gary Nesbit, MD

Professor of Radiology, Department of Radiology Oregon Health and Science University Portland, OR

Greg Peterman, MD

Marshfield Clinic Marshfield, WI

Edward Quigley, MD, PhD

Assistant Professor (Clinical) of Radiology University of Utah University Hospital, Radiology Salt Lake City, UT

Ali Sepahdari, MD

Assistant Professor of Radiology, UCLA Ronald Reagan UCLA Medical Center Los Angeles, CA

Lubdha Shah, MD

Associate Professor of Radiology University of Utah School of Medicine Salt Lake City, UT

Mark Shiroishi, MD

Assistant Professor of Radiology Keck School of Medicine University of Southern California Los Angeles, CA

Gordon Sze, MD

Professor of Radiology Director of Neuroradiology Yale Diagnostic Radiology New Haven, CT

Pablo Villablanca, MD

Professor of Radiology Ronald Reagan UCLA Medical Center Los Angeles, CA

Richard H. Wiggins, III, MD, CIIP

Professor of Radiology University of Utah Health Sciences Center Salt Lake City, UT

Jordan Ziegler, MD

Neuorinterventional Radiologist Kaiser Permanente Diagnostic Imaging Diagnostic Radiology San Diego, CA

COURSE INFORMATION

Target Audience:

The WNRS Annual Meeting is primarily directed towards members of the Western Neuroradiological Society, but is designed for all physicians with an interest in neuroradiologic imaging and neuroradiologic vascular and spine interventions.

Course Description:

The WNRS Annual Meeting is designed to introduce clinically relevant advances in neuroradiology and provide in-depth review of topics within neuroradiology. The meeting has Focus Sessions in pediatric neuroradiology, spine imagine, brain imaging, as well as neurosurgical and endovascular treatments.

Accreditation Statement: This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the International Institute for Continuing Medical Education, Inc. and The Western Neuroradiological Society.

Designation Statement: The International Institute for Continuing Medical Education, Inc. designates this live activity for a maximum for **15.0 AMA PRA Category 1 Credits™.** Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Course Objectives:

Upon completion of this educational activity, the participant should be better able to:

- Identify key neuroimaging findings in pediatric patients with both hydrocephalus and seizures.
- Identify which patients with intracranial aneurysms are best treated with endovascular techniques and identify new intraoperative neurosurgical techniques.
- Better comprehend human visual perception in accountable care organizations (ACO's)
- · Better comprehend the utilization of technology in ACO's.
- · Better comprehend zoomed perfusion and diffusion imaging.
- · Better comprehend incomplete spinal cord syndromes.
- Better comprehend stroke and perfusion imaging of the adult brain.
- Better comprehend spread of tumor in the ENT patient as well as imaging of sinonasal tumors.





ACCOMMODATIONS

45th Annual Meeting WESTERN NEURORADIOLOGICAL SOCIETY October 15-19, 2013

Hilton Waikoloa Village 425 Waikoloa Beach Drive Waikoloa, HI 96738 Phone: 800-445-8667

Island View - \$195.00 • Partial Ocean - \$ 225.00 Deluxe Ocean - \$255.00

Room rates quoted above are based on single/double occupancy and subject to tax, which is currently 13.416%. Additional per person charge is \$50.00 plus tax, per night. Individual reservations must be made on or before **September 16, 2013** to receive the group rate. Any reservation requests made after the cut-off date will be confirmed based on room and rate availability. Reservations can be cancelled 14 days prior to arrival to avoid any charges. Cancellations within 14 days of date of arrival will be charged and one-night's deposit.

Experience Hilton Waikoloa Village, a unique resort in Waikoloa set in 62 oceanfront acres of the exclusive Kohala Coast on Hawaii Island. Just 20 minutes north of Kona International Airport, this Waikoloa resort features tropical gardens with waterways, exotic wildlife and a museum walkway with Asian and Polynesian artwork. Travel around the resort on trams and canal boats or stroll the garden paths. Enjoy recreational amenities including two championship golf courses, eight tennis courts, three swimming pools, dolphin encounters, and watersports in the lagoon.

Guest rooms and suites at this Waikoloa hotel are based in three unique towers all with balconies and high-speed internet access. Décor is a subtle blend of Island textures and tones.

With 235,000 sq. ft. of flexible indoor and outdoor meeting space, Hilton Waikoloa Village is a stunning venue for events. Hold weddings in the oceanside pavilion and chapel. Keep in touch at the business center, taking advantage of the supportive services and WiFi.

Enjoy indoor and outdoor dining at Hilton Waikoloa Village. With 14 restaurants and lounges in exotic settings, savor Japanese, Pacific Rim and American cuisines. Try the Legends of the Pacific luau buffet at Kamehameha's Court while enjoying the music and dance of the Pacific Rim.

Indulge with a treatment or massage in the Kohala Spa. Exercise in the gym or stroll the meditative gardens. Snorkel or kayak in the ocean-fed lagoon, filled with tropical fish. Kids will love Club Keiki with daily entertainment and cultural programs.

Things to Do in Waikoloa

Located in the Waikoloa Beach Resort, on a stretch of sundrenched shoreline known as the Kohala Coast, this impressive Waikoloa resort boasts tropical scenery, magnificent waterfalls and miles of glorious Pacific shoreline against a backdrop of ancient volcanoes.

Take part in water sports and dolphin interaction encounters. Enjoy a round of golf on one of two championship golf courses. Browse the resort's shops, specializing in clothing, artwork and jewelry, searching for the perfect gift. Enjoy live entertainment or the festive luau. Rent cruiser bikes and ride to the sandy beach of Anaeho'omalu Bay.

Ask the helpful Recreation Desk about helicopter and airplane excursions, whale watching and manta ray diving and trips to the quaint village of Kailua-Kona, 30 minutes away.



REGISTRATION

A letter of verification from the Department Chairman must accompany the registration of anyone wishing to qualify for the fellow/trainee fee.

Enrollment will be confirmed on the basis of registration fee. We do not process registrations without payment.

We cannot guarantee course materials on site for a registration received after September 16, 2013.

REFUNDS: Cancellations received in writing by September 16, 2013, will receive a refund minus a \$75 handling fee. There will be no refunds for cancellations received after that date.

REGISTRATION: Registration will begin on Wednesday, October 16, 2013 at 7:00 a.m. in the foyer of the hotel.

PLEASE NOTE: You will receive registration confirmation via regular mail from the International Institute of Continuing Medical Education, Inc. approximately two weeks after your registration is received. Sorry, we are unable to confirm your registration by fax or email.

TRAVEL

American Airlines is pleased to offer all attendees the following special discounted fares for domestic flights:

- 5% off applicable fares, AA/oneworld only
- 10% off full coach fares, AA/oneworld only
- 10% off business fares, AA/oneworld only
- 10% off first class fares, AA/oneworld only
- 10% off premium fares, AA/oneworld only

To take advantage of these offers, please call American Airlines directly and refer to the following authorization number.

Call 1-800-433-1790

American Airlines Authorization Number: A59H3BI

RENTAL CARS: HERTZ CV# 01VA0149

Hertz is our official rental car supplier. Special low rates have been negotiated to reduce your travel costs. Call the Hertz Convention ControlCenter at (800) 654-2240 and refer to the CV# above.

POLICIES

A SPECIAL NOTE TO THE DISABLED

The International Institute for Continuing Medical Education, Inc. wishes to ensure that no individual with a disability is excluded, denied services, segregated or otherwise treated differently than other individuals because of the absence of auxiliary aids or services. If you need any auxiliary aids or services identified in the Americans with Disabilities Act, please indicate so on your registration form.

DISCLAIMER

The International Institute for Continuing Medical Education, Inc., and WNRS as co-sponsors of this meeting, claim no responsibility for the acts of any supplier to this meeting nor for the safety of any attendee while in transit to or from this event. The total amount of liability during the meeting will be limited to a refund of the attendance fee. Purchase non-refundable airline tickets at your own risk.

DISCLOSURE STATEMENT

It is the policy of the International Institute for Continuing Medical Education, Inc. to comply with the Accreditation Council for Continuing Medical Education (ACCME) Standards for commercial support of CME activities. All faculty participants in IICME programs are required to disclose to the program audience any real or apparent conflict(s) of interest related to this meeting or its content. Faculty disclosure forms are included in the course syllabus and are available at the registration desk for participating review. In addition, faculty disclosures will be made at the beginning of each lecture.



REGISTRATION FORM

45th Annual Meeting WESTERN NEURORADIOLOGICAL SOCIETY

Please make check or money order payable to WNRS 2012. All foreign payments must be made by a draft on a United States bank. Register online at: **www.iicme.net** or

Mail/Fax to: The International Institute for Continuing Medical Education, Inc. P.O. Box 350, Springville, AL 35146. FAX (205) 467-0195. (Please indicate handicap and index) TOTAL \$_____ One registrant per form, please photocopy for others. Please print. First Name _____ MI ____ Last Name____ Please circle your title: MD DO PhD MPH RN RT(R) RT(R)(M) Address _____ City______ State____ Zip_____ Home Phone (____) _____ Office Phone (____) ____ Fax Number (_____ Email _____ Name of Registered Guest _____ Additional Registered Guest _____ CREDIT CARD: ☐ Visa ☐ MasterCard ☐ Discover ☐ American Express Please note: A 3.25% fee will be added if using American Express Account No. _____ Expiration Date _____ Cardholders Billing Address ____ For \$ ☐ Please check if you have any special needs/disabilities and a WNRS representative will contact you. Special Requirements: If you are physically challenged and have any special needs, please list them here. **Social Event Registration** Name of Registered Guest _____ Additional Registered Guest _____ Wednesday Opening Reception #: _____ will attend Friday Banquet #: _____ Will you be attending the Friday Annual Business Meeting Breakfast? ___ Yes ___ No Please indicate any special dietary needs: ☐ Kosher ☐ Vegetarian ☐ Other _____ CONF: REC'D **OFFICE** CHK: USE ONLY AMT: \$

