NEURORADIOLOGY: Practice to Innovation

November 9-14, 2008
Fairmont Kea Lani, Maui, Hawaii

Course Directors:
Kelly K. Koeller, M.D.
Kent R. Thielen, M.D.
Christopher P. Wood, M.D.

REGISTER NOW!
Mayo Clinic Department of Radiology CME Office 866-246-1581
COURSE DESCRIPTION

*Neuroradiology: Practice to Innovation* is designed for the practicing radiologist whose work involves neuroradiology, or those involved in the neurological sciences, neurosurgery, neurology, and/or related fields. It is intended to provide a practical discussion and review of common diseases involving the brain, head/neck, and spine. It will provide an overview of common imaging strategies and incorporate evolving new modalities. Also, this course will review common endovascular and spinal interventional techniques utilized in neuroradiology.

COURSE LEARNING OBJECTIVES

Upon conclusion of this program, participants should be able to:

- Describe the common imaging features and utility of advanced imaging techniques to assess neoplasms of the central nervous system
- Discuss common manifestations of white matter disease
- Review advantages and limitations of 3T MR imaging of central nervous system
- Explain pathologic correlation with radiologic signs of central nervous system trauma
- Discuss common congenital anomalies of the central nervous system
- Describe the diagnostic tools available for evaluating patients with seizure disorders
- Describe the relevant issues in diagnosing and managing cerebrovascular diseases
- Review current literature and experiences regarding nephrogenic systemic fibrosis (NSF)
- Discuss common diseases of the skull base, orbit and temporal bone
- Identify common inflammatory patterns and neoplasms of the sinuses and nasal cavities
- Describe the characteristic imaging features of intramedullary, intradural, and extradural spinal disease
- Review essential concepts in utilization and implementation of vertebroplasty, kyphoplasty, and the assessment of patients with vertebral body collapse

Attendance at this Mayo course does not indicate nor guarantee competence or proficiency in the performance of any procedures which may be discussed or taught in this course.

INTENDED AUDIENCE

*Neuroradiology: Practice to Innovation* is designed for the practicing radiologist whose work involves neuroradiology, or those involved in the neurological sciences, neurosurgery, neurology, and/or related fields. It is intended to provide an update in new trends, relevant techniques, and applications in diagnostic and/or therapeutic neuroradiology.
CREDIT
Mayo Clinic College of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Mayo Clinic College of Medicine designates this educational activity for a maximum of 23.75 AMA PRA Category 1 Credit(s)™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Other Health Care Professionals
A certificate of attendance will be provided to other health care professionals for requesting credits in accordance with state nursing boards, specialty societies, or other professional associations.

EDUCATIONAL GRANTS
This course is supported, in part, by educational grants from GE Healthcare Medical Diagnostics, Cook Incorporated, and Siemens Medical Solutions, in accordance with ACCME Standards.

At the time of this printing, a complete listing of commercial supporters was not available. Appropriate acknowledgment will be given to all supporters at the time of the meeting.

DATE AND LOCATION
Neuroradiology: Practice to Innovation will be held November 9-14, 2008, at the Fairmont Kea Lani Resort and Spa in beautiful Maui, Hawaii. The Fairmont Kea Lani is in Wailea, a beautiful resort community nested at the base of Haleakala and distinguished by five beautiful, crescent-shaped beaches. The weather in Wailea is just about perfect for outdoor activities with long sunny days and clear, starry nights. There are over 54 holes of golf, award-winning beaches, and great snorkeling too.

REGISTRATION
To register, complete the attached registration form and return by mail or fax. The registration fee includes tuition, comprehensive course syllabus, continental breakfasts (for meeting participants ONLY), break refreshments, and reception. Although it is not Mayo Clinic Department of Radiology’s policy to limit the number of registrants for a course, conference room facilities may necessitate closing of enrollment; therefore, early registration is strongly advised. A letter of confirmation will be sent upon receipt of payment and completed registration form. Please present the confirmation letter when checking in at the meeting registration desk.
CANCELLATION POLICY
Your registration fee, less a $75 administrative fee, will be refunded when written notification is received by the Department of Radiology Continuing Medical Education office (Fax 507-266-3061) before October 10, 2008. No refunds will be made after October 10, 2008, for any reason.

TRAVEL
The Fairmont Kea Lani does not provide complimentary airport shuttle service. SpeediShuttle Door-to-Door airport Services operates air-conditioned vans between the airport and the resort. Telephone 808-875-8070 directly or use the courtesy phones at all baggage claim areas by simply dialing 65. Reservations are required. Departure reservations must be made at least two hours in advance. The shuttle operates from 5 a.m. until 10 p.m. daily.

Taxi service is available by Wailea Taxi Service. Phone 808-874-5000. Rate from the airport to the resort is approximately $35.

LODGING ACCOMMODATIONS
Hotel reservations are the sole responsibility of the individual registrant. The Fairmont Kea Lani (meeting headquarters) offers luxury all-suite accommodations. The resort rests gracefully on the white sands of Polo Beach in Wailea. Located close to Wailea’s three championship golf courses, 14 tennis courts, and boutique shopping this resort also offers a full activities program.

The Fairmont Kea Lani is offering a special group rate per night to meeting participants:
Run of House $340
Service charges and taxes are not included in the above mentioned rate. Reservations can be made by identifying yourself as a participant in the Mayo Clinic “Neuroradiology: Practice to Innovation” course. To make reservations please call 808-875-4100. A two-night’s deposit is required at the time of booking the reservation. Please note that sleeping rooms are limited, and you are encouraged to make your reservations early to avoid disappointment.

SOCIAL PROGRAMS
Welcome Reception – Sunday, November 9, 2008
Attendees and their guest(s) are cordially invited to join the course faculty for the Welcome Reception on Sunday, November 9, 2008. This casual reception welcomes you to Hawaii, officially opens the course, and offers you the perfect opportunity to make connections with existing and new colleagues. Pre-registration is requested.

FACULTY DISCLOSURE
As a provider accredited by ACCME, College of Medicine, Mayo Clinic, must ensure balance, independence, objectivity and scientific rigor in its educational activities. Course director(s), planning committee, faculty, and all others who are in a position to control the content of this educational activity are required to disclose all relevant financial relationships with any commercial interest related to the subject matter of the educational activity. Safeguards against commercial bias have been put in place. Faculty also will disclose any off-label and/or investigational use of pharmaceuticals or instruments discussed in their presentation. Disclosure of this information will be published in course materials so those participants in the activity may formulate their own judgments regarding the presentation.
General Information

FACULTY

Mayo Clinic in Arizona
Joseph M. Hoxworth, M.D.
Kent D. Nelson, M.D.

Mayo Clinic in Jacksonville
Leo F. Czervionke, M.D.
Steven M. Weindling, M.D.

Mayo Clinic in Rochester
Harry Cloft, M.D., Ph.D.
David R. DeLone, M.D.
Bradley J. Erickson, M.D., Ph.D.
John Huston, III, M.D.
David F. Kallmes, M.D.
Kelly K. Koeller, M.D.
Karl N. Krecke, M.D.
John (Jack) I. Lane, M.D.
Kent R. Thielen, M.D.
John T. Wald, M.D.
Robert E. Watson, Jr. M.D., Ph.D.
Kirk M. Welker, M.D.
Eric E. Williamson, M.D.
Robert J. Witte, M.D.
Christopher P. Wood, M.D.
FUTURE MAYO CLINIC DEPARTMENT OF RADIOLOGY CME OPPORTUNITIES:

Current Topics in Noninvasive Cardiovascular Imaging including the Advanced Radiology Life Support™ Course

*June 22-27, 2008*
La Jolla, California
The Lodge at Torrey Pines

**Diagnostic Imaging in Alaska**

*August 15-22, 2008*
Hubbard Glacier Cruise
Celebrity’s Infinity

**Advances in Diagnostic Radiology**

*September 5-12, 2008*
Mediterranean Cruise – Rome to Venice
Crystal Cruise Line – Crystal Serenity

**Tutorials in Diagnostic Radiology and Advanced Radiology Life Support Course™**

*January 25-30, 2009*
Big Island, Hawaii
Mauna Lani Resort

**Neuroradiology: Practice to Innovation**

*November 2-6, 2009*
Scottsdale, Arizona
Four Seasons Resort - Scottsdale at Troon North

For registration information, call toll free 866-246-1581.
Course Schedule

Please note – breakfast is available on meeting days for course participants only starting at 6:30 a.m. in the Ballroom Foyer.

Sunday, November 9, 2008

7:25 – 7:30 a.m. Welcome and Announcements
7:30 – 8:05 a.m. Vertebroplasty / Kyphoplasty / Sacroplasty
    Kent R. Thielen, M.D.
8:05 – 8:10 a.m. Q & A
8:10 – 8:45 a.m. Spine Case-based Review
    Kelly K. Koeller, M.D.
8:45 – 8:50 a.m. Q & A
8:50 – 9:25 a.m. Facet Arthropathy: Anatomy, Injections, Synovitis
    Leo F. Czervionke, M.D.
9:25 – 9:30 a.m. Q & A
9:30 – 10:05 a.m. Neuroradiology Interventions: Spine and Skull Base
    John T. Wald, M.D.
10:05 – 10:10 a.m. Q & A
10:10 – 10:30 a.m. Break
10:30 – 11:05 a.m. Discography: Technique, Manometry, and Disc Morphology
    Leo F. Czervionke, M.D.
11:05 – 11:10 a.m. Q & A
11:10 – 11:45 a.m. Case-based Review of Neuro-oncologic Disease with pathologic correlation
    John T. Wald, M.D.
11:45 – 11:50 a.m. Q & A
11:50 – 12:25 p.m. Nephrogenic Systemic Fibrosis
    Eric E. Williamson, M.D.
12:25 – 12:35 p.m. Q & A

Monday, November 10, 2008

7:25 – 7:30 a.m. Welcome and Announcements
7:30 – 8:05 a.m. Skull base
    Christopher P. Wood, M.D.
8:05 – 8:10 a.m. Q & A
8:10 – 8:45 a.m. Orbit
    Robert J. Witte, M.D.
8:45 – 8:50 a.m. Q & A
Course Schedule

8:50 – 9:25 a.m. Imaging Evaluation of Cerebral Palsy
Karl N. Krecke, M.D.

9:25 – 9:30 a.m. Q & A

9:30 – 10:05 a.m. Facial and Temporal Bone Trauma
Robert J. Witte, M.D.

10:05 – 10:10 a.m. Q & A

10:10 – 10:30 a.m. Break

10:30 – 11:05 a.m. Intracranial Hypotension
Kent D. Nelson, M.D.

11:05 – 11:10 a.m. Q & A

11:10 – 11:45 a.m. Pediatric Demyelinating Disease
Karl N. Krecke, M.D.

11:45 – 11:50 a.m. Q & A

11:50 – 12:25 p.m. Neuro Applications of 3T
John Huston, III M.D.

12:25 – 12:35 p.m. Q & A

Tuesday, November 11, 2008

7:25 – 7:30 a.m. Welcome and Announcements

7:30 – 8:05 a.m. Evaluation of Pulsatile Tinnitus
Steven M. Weindling, M.D.

8:05 – 8:10 a.m. Q & A

8:10 – 8:45 a.m. Carotid and Vertebral Artery Imaging
John Huston, III M.D.

8:45 – 8:50 a.m. Q & A

8:50 – 9:25 a.m. Aneurysms: Imaging and Intervention
David F. Kallmes, M.D.

9:25 – 9:30 a.m. Q & A

9:30 – 10:05 a.m. Carotid Stenting
Harry Cloft, M.D., Ph.D.

10:05 – 10:10 a.m. Q & A

10:10 – 10:30 a.m. Break

10:30 – 11:05 a.m. Spinal Vascular Malformations
Kent D. Nelson, M.D.

11:05 – 11:10 a.m. Q & A

11:10 – 11:45 a.m. Acute Stroke: Imaging and Intervention
David F. Kallmes, M.D.
Course Schedule

11:45 – 11:50 a.m.  Q & A
11:50 – 12:25 p.m.  Meningioma Imaging and Embolization
  Harry Cloft, M.D., Ph.D.
12:25 – 12:35 p.m.  Q & A

Wednesday, November 12, 2008

No meeting – Enjoy Hawaii

Thursday, November 13, 2008

7:25 – 7:30 a.m.  Welcome and Announcements
7:30 – 8:05 a.m.  Brain Tumor WHO update
  Kelly K. Koeller, M.D.
8:05 – 8:10 a.m.  Q & A
8:10 – 8:45 a.m.  Demyelinating Disease: Unusual Appearances and
  Correlation with Pathology
  Bradley J. Erickson, M.D., Ph.D.
8:45 – 8:50 a.m.  Q & A
8:50 – 9:25 a.m.  Cortical Dysplasia and Migration Anomalies
  Kirk M. Welker, M.D.
9:25 – 9:30 a.m.  Q & A
9:30 – 10:05 a.m.  MR Safety: Pacemakers, Stimulators, and Stents
  Robert E. Watson, Jr. M.D., Ph.D.
10:05 – 10:10 a.m.  Q & A
10:10 – 10:30 a.m.  Break
10:30 – 11:05 a.m.  Brain Infections
  Kirk M. Welker, M.D.
11:05 – 11:10 a.m.  Q & A
11:10 – 11:45 a.m.  MR in Seizures
  Robert E. Watson, Jr. M.D., Ph.D.
11:45 – 11:50 a.m.  Q & A
11:50 – 12:25 p.m.  Change Detection: A New Form of Computer-Aided
  Diagnosis for Brain Tumors and Chronic Diseases
  Bradley J. Erickson, M.D., Ph.D.
12:25 – 12:35 p.m.  Q & A
### Course Schedule

**Friday, November 14, 2008**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:20 – 7:30 a.m.</td>
<td>Welcome and Announcements</td>
</tr>
</tbody>
</table>
| 7:30 – 8:05 a.m. | Temporal Anatomy and Imaging Techniques  
*John (Jack) I. Lane, M.D.* |
| 8:05 – 8:10 a.m. | Q & A                                                                  |
| 8:10 – 8:45 a.m. | Sinusitis  
*Joseph M. Hoxworth, M.D.* |
| 8:45 – 8:50 a.m. | Q & A                                                                  |
| 8:50 – 9:25 a.m. | Non-inflammatory Sinus Disease  
*Steven M. Weindling, M.D.* |
| 9:25 – 9:30 a.m. | Q & A                                                                  |
| 9:30 – 10:05 a.m.| Salivary Gland Neoplasms  
*David R. DeLone, M.D.* |
| 10:05 – 10:10 a.m.| Q & A                                                                |
| 10:10 – 10:30 a.m.| Break                                                               |
| 10:30 – 11:05 a.m.| Cystic Neck Lesions  
*Joseph M. Hoxworth, M.D.* |
| 11:05 – 11:10 a.m.| Q & A                                                                |
| 11:10 – 11:45 a.m.| Head and Neck Sarcoma  
*David R. DeLone, M.D.* |
| 11:45 – 11:50 a.m.| Q & A                                                                |
| 11:50 – 12:25 p.m.| Temporal Bone Case-based Review  
*John (Jack) I. Lane, M.D.* |
| 12:25 – 12:30 p.m.| Q & A                                                                |
Neuroradiology: Practice to Innovation

November 9-14, 2008
Fairmont Kea Lani
Maui, Hawaii

Mail form and payment to:
Department of Radiology CME Office
Mayo, West-2
200 First Street SW
Rochester, MN  55905

Telephone:  866-246-1581
or  507-284-3317
FAX:  507-266-3061
E-mail: radiologycme@mayo.edu

(Please print or type all information. You may duplicate this form for multiple registrations.)

Name__________________________________________________________________________

Degree  □ MD  □ DO  □ RN  □ PA  □ Other__________________________

Institution____________________________________________________________________

Medical Specialty________________________________________________________________

E-mail Address__________________________________________________________________

Which is your preferred mailing address:  □ Work/Business  □ Home

Address________________________________________________________________________

City__________________________________________State/PV________________________

ZIP/Postal Code_______________________________Country_________________________

Home Telephone (______)__________________Business Telephone (______)________________

☐ Please check if you have special accommodation or dietary needs and indicate specific need(s): ________________________________________________________________

Complimentary Welcome Reception – Sunday, November 9, 2008

☐ Yes, I will attend: number attending #_______
☐ No, I will not attend

REGISTRATION FEE
Physicians/Scientists  $950 $________________
Residents, Physician Assistants and Nurse Practitioners  $850 $______________

Total Payment Enclosed:  $________________

PAYMENT METHOD
☐ Check (payable to Mayo Clinic)
☐ Credit Card:  ☐ Visa  ☐ MasterCard  ☐ Discover

Card Number__________________________Expires Mo/Yr

Signature______________________________Date________________________

(26x192)REGISTRATION FEE
Physicians/Scientists	 $950
Residents,	Physician	Assistants	and	Nurse	Practitioners	 $850
Total Payment Enclosed:  $________________
NEURORADIOLOGY: Practice to Innovation

November 9-14, 2008

Fairmont Kea Lani • Maui, Hawaii

REGISTER NOW!