Mayo Clinic Diagnostic Imaging Update and Self-Assessment

The Ritz-Carlton, Laguna Niguel
Dana Point, California

Monday – Friday
August 1-5, 2011

Highlights:
• Selected state-of-the-art imaging lectures covering multiple subspecialties of radiology
• Several Self-Assessment Modules for maintenance of board certification will be offered (pending approval by the American Board of Radiology)
• Advanced Radiology Life Support Workshop (optional)
• A large faculty representing all Mayo Clinic campuses

Advanced Radiology Life Support Workshop (optional)
includes two Self-Assessment Modules
Sunday, July 31, 2011
COURSE DESCRIPTION AND LEARNING OBJECTIVES

*Mayo Clinic Diagnostic Imaging Update and Self-Assessment* is designed to provide practicing radiologists, residents and fellows-in-training with a review of state-of-the-art imaging techniques. In addition, course participants will have the opportunity to complete Cardiothoracic, Dual Energy CT, and Neuroradiology Self-Assessment Modules (pending approval by the American Board of Radiology), now required for maintenance of board certification.

As demonstrated by our diverse faculty and the variety of lecture topics, *Diagnostic Imaging Update and Self-Assessment* is tailored to the radiologist whose practice encompasses multiple subspecialties of diagnostic radiology. The following learning objectives emphasize those topics that are specifically focused toward the purpose of practice gap analysis, as required for CME accreditation.

Upon completion of this course, participants should be able to:

- State basic physics principles and techniques that make dual-energy CT possible.
- Explain the use of material-specific imaging to create virtual unenhanced images.
- Assess advantages and disadvantages of dual versus single source dual-energy CT.
- Discuss potential clinical applications of dual-energy CT in cardiothoracic and abdominal imaging.
- Describe limitations of dual energy CT as it relates to identifying patients who may not benefit from this technology.

DISCLAIMER

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.

CREDIT

College of Medicine, Mayo Clinic, is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

College of Medicine, Mayo Clinic, designates this live educational activity for a maximum of 30 *AMA PRA Category 1 Credits™* (25.25 General Course and 4.75 optional ARLS workshop). Physicians should only claim credit commensurate with the extent of their participation in the activity.

The workshop content includes three (3) hours of Sedation and Airway Management Training.

Other Health Care Professionals: A record 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.

GRANTS AND EXHIBITS

This course is supported in part by educational grants, in accordance with ACCME standards.

As of this printing, a complete listing of commercial supporters was not available. Appropriate acknowledgment will be given to all supporters at the meeting. Exhibits will be available for viewing at all scheduled breaks.
MEETING LOCATION AND ACCOMMODATIONS
The Ritz-Carlton, Laguna Niguel
One Ritz-Carlton Drive
Dana Point, California 92629
Telephone: 800-241-3333 (toll-free) or 949-240-2000
Website: www.ritzcarlton.com

Consistently ranked among the world’s premier travel destinations, The Ritz-Carlton, Laguna Niguel, is the ideal setting for combining continuing medical education and a Southern California coast vacation. Located halfway between Los Angeles and San Diego, the Ritz-Carlton sits atop a 150-foot bluff and offers breathtaking ocean views from private patios or balconies from most rooms. Experience genuine renewal at The Ritz-Carlton, Laguna Niguel.

A special group rate of $275, plus taxes, run-of-house guestrooms, is extended to course participants and guests. Group rates apply three (3) days prior and three (3) days post-course dates, based upon availability. Resort fee is waived per room per day (regular rate is $25). Waived resort fee includes internet access in guestrooms, access to the ocean view fitness center, access to the sauna and steam rooms in The Spa (excludes services which are additional charge), transfers to/from Salt Creek Beach and to/from Monarch Beach Golf Links on an individual guest request/use basis. $25 overnight valet parking. All reservations must be accompanied by a two night room deposit. To ensure accommodations, make your reservation before Friday, July 8, 2011, by calling (800) 241-3333 (toll-free) or (949) 240-2000 and reference “Mayo Clinic – Guestroom Block”.

Attendees are responsible for their own reservations. The standard hotel reservation cancellation policy will apply to individual reservations unless otherwise specified.

GROUND TRANSPORTATION
Hertz is offering a reduced daily rate for participants attending the course. Call (800) 654-2240 (toll-free) and refer to CV Number #03NR0006 when making reservations.
**RECREATION ACTIVITIES**

Dana Point Harbor provides slips and mooring for over 2,500 boats along with over 50 specialty shops and restaurants. The Harbor attracts thousands of visitors annually for shopping, whalewatching, sportfishing, walking, bicycling, parasailing and a whole host of recreational activities.

Visit [http://www.danapoint.org](http://www.danapoint.org) for upcoming events, additional recreation and leisure activities.

Located along a premier coastal stretch halfway between Los Angeles and San Diego, the Laguna Beach Coast is one of the most popular areas in North America. Beautiful beaches and coastlines are the perfect backdrop for relaxing at restaurants and strolling along various shops.

Popular tourist venues include Catalina Island, the Laguna Playhouse, Laguna Art Museum, the Pacific Marine Mammal Center and Mission San Juan Capistrano. Activities include kayaking, surfing, skimboarding, golfing and hiking, as well as nearby whale and dolphin watching.

Other popular kid-friendly destinations include:

- Legoland (40 minutes)
- Knott’s Berry Farm (40 miles)
- San Diego Wild Animal Park (75 minutes)
- San Diego Zoo (40 minutes)
- Disneyland (32 miles/40 minutes)
- Queen Mary (45 miles)
- SeaWorld (1 hour)

**TRAVEL**

**Airports**

- John Wayne/Orange County Airport; SNA (25 minutes/23 miles) [http://www.ocair.com/](http://www.ocair.com/)
- Long Beach Airport; LGB (45 minutes/44 miles) [http://www.lgb.org/](http://www.lgb.org/)
- Los Angeles International Airport; LAX (60 minutes/63 miles) [http://www.lawa.org/](http://www.lawa.org/)
- San Diego International Airport; SAN (75 minutes/67 miles) [http://www.san.org/](http://www.san.org/)
Robert P. Hartman, M.D.
Assistant Professor of Radiology

Chad J. Fleming, M.D.
Instructor in Radiology

Patrick W. Eiken, M.D.
Instructor in Radiology

Eric E. Williamson, M.D.
Assistant Professor of Radiology

Sherrie L. Prescott, R.N.
Quality Improvement / Education Specialist – Radiology

Radiology Quality Office

FACULTY DISCLOSURE:
As a provider accredited by ACCME, College of Medicine, Mayo Clinic (Mayo School of CPD) must ensure balance, independence, objectivity and scientific rigor in its educational activities. Course Director(s), Planning Committee Members, 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 will also 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.
The Advanced Radiology Life Support™ (ARLS) Workshop will focus on the unique, life-threatening emergencies that occur within a radiology department. It is designed to teach prompt recognition and treatment of contrast reactions. The ARLS workshop will discuss management of the sedated patient and proper management of an airway in an emergency situation. The administration of contrast in patients with renal insufficiency including contrast induced nephropathy and nephrogenic systemic fibrosis will be discussed. Basic concepts of advanced life support also will be reviewed. This workshop is fashioned after the Advanced Cardiac Life Support (ACLS) course that has been successfully teaching physicians, nurses, and allied health personnel patient management during cardiac arrest.

The ARLS and sedation training materials included in this workshop were used to train physicians, nurses, and allied health personnel at Mayo Clinic prior to a Joint Commission site visit. This training program may help to prepare your department for a similar evaluation.

Attendees also will have the opportunity to participate in two general self-assessment modules (SAMs) presented during the workshop. The self-assessment modules have been designed to meet the standards of the American Board of Radiology (ABR) for self-assessment modules (SAMs).

ARLS WORKSHOP LEARNING OBJECTIVES

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

- Review types of contrast agents.
- Identify all serious contrast reactions.
- Describe appropriate treatment regimens for specific types of contrast reactions.
- Review risk factors for and potential impact of contrast induced nephropathy.
- Review risk factors for and potential impact of nephrogenic systemic fibrosis (NSF).
- Discuss most effective strategies for contrast administration in renal disease.
- Describe proper use and administration of moderate sedation and analgesic medications.
- Demonstrate the proper management of an airway in an emergency situation.

Attendance at this workshop does not indicate nor guarantee competence or proficiency in the performance of any procedures which may be discussed or taught in this workshop.
ADVANCED RADIOLOGY LIFE SUPPORT WORKSHOP (Optional)
Sunday, July 31, 2011 • 12:15 – 5:45 p.m.
Fee: $295 • Pre-registration required

PROGRAM

12:15 p.m.  Registration
12:45   Introduction and Workshop Overview
        Chad J. Fleming, M.D. and Robert P. Hartman, M.D.
12:50   Contrast Media
        Robert P. Hartman, M.D.
1:20    Recognition and Treatment of Contrast Reactions
        Patrick W. Eiken, M.D.
1:50    Sedation and Analgesia
        Robert P. Hartman, M.D.
2:20    Refreshment Break
2:30    Contrast Induced Nephropathy: Risk Factor Screening
        Chad J. Fleming, M.D.
3:15    Nephrogenic Systemic Fibrosis: An Update
        Eric E. Williamson, M.D.
4:00    SAM Exam and Course Review and Reflection
4:15    STATION PRACTICALS
(A) Airway Management
(B) Treatment Scenarios
        Patrick W. Eiken, M.D.
        Chad J. Fleming, M.D.
        Robert P. Hartman, M.D.
        Sherrie L. Prescott, R.N.
        Eric E. Williamson, M.D.
5:45    Adjourn

Mark Your Calendar for these Upcoming CPD Opportunities:

July 22, 2011  
Radioactive Seed Localized Breast Surgery Workshop  
Kahler Grand Hotel  
Rochester, Minnesota

September 10-11, 2011  
Minnesota Breast Imaging Review Course  
Hilton  
Minneapolis, Minnesota

September 24, 2011  
Advanced Radiology Life Support (ARLS)  
Mayo Clinic  
Rochester, Minnesota

November 7-11, 2011  
Neuroradiology: Practice to Innovation  
Four Seasons Resort Scottsdale at Troon North  
Scottsdale, Arizona

November 16-19, 2011  
2011 State-of-the-Art Multidisciplinary Care of Breast Disease  
Marriott Sawgrass  
Ponte Vedra, Florida

February 26 – March 2, 2012  
Tutorials in Diagnostic Radiology with Advanced Radiology Life Support  
The Grand Hyatt Kauai  
Kauai, Hawaii

See all opportunities at www.mayo.edu/cme
Monday  August 1, 2011

* Faculty will include a five minute Question-and-Answer period during each presentation

6:30 a.m.  Registration and Continental Breakfast
7:25  Welcome and Introductions
Joseph M. Hoxworth, M.D.
7:30  The Stomach in Review
Joseph G. Cernigliaro, M.D.
8:10  Introduction to MR Elastography
Alvin C. Silva, M.D.
8:50  Interesting Genitourinary Cases
Joseph G. Cernigliaro, M.D.
9:30  Hepatocellular Carcinoma in Cirrhosis: Diagnosis and Management
Alvin C. Silva, M.D.
10:10  Refreshment Break
10:30  Petrous Apex Disease
Steven M. Weindling, M.D.
11:10  Brain Vascular Malformations: A Review
Brian W. Chong, M.D.
11:50  Intracranial Meningeal Diseases
Steven M. Weindling, M.D.
12:30 p.m.  Daily Summary
Joseph M. Hoxworth, M.D.
12:35  Adjourn
5:30-7:00  Welcome Reception

Tuesday  August 2, 2011

* Faculty will include a five minute Question and Answer period during each presentation

6:45 a.m.  Continental Breakfast
7:25  Announcements
Joseph M. Hoxworth, M.D.
7:30  Dual-Energy CT of the Abdomen: Technique and Clinical Utility
Amy K. Hara, M.D.
8:10  Single Source Dual Energy CT: Thoracic Applications
Prasad M. Panse, M.D.
8:50  CT Imaging of the Small Bowel: Inflammatory and Malignant Disease
Amy K. Hara, M.D.
9:30  Go With The Flow: Vascular Considerations in Scrotal Imaging
Maitray D. Patel, M.D.
10:10  Refreshment Break
10:30  “Rule Out Ectopic”: Asking the Right Questions, Getting the Right Answers
Maitray D. Patel, M.D.
11:10  Thyroid Ultrasound & Nodule Management: Part I
Scott W. Young, M.D.
11:50  Thyroid Ultrasound & Nodule Management: Part II
Scott W. Young, M.D.
12:30 p.m.  Dual Energy CT Self-Assessment Module (SAM)
Clinton V. Wellnitz, M.D.
1:00  Daily Summary
Joseph M. Hoxworth, M.D.
1:05  Adjourn
### Wednesday  August 3, 2011

* Faculty will include a five minute Question and Answer period during each presentation

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>6:45 a.m.</td>
<td>Continental Breakfast</td>
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<tr>
<td>7:25</td>
<td>Announcements</td>
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<tr>
<td></td>
<td>Joseph M. Hoxworth, M.D.</td>
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<tr>
<td>7:30</td>
<td>Adrenal Imaging</td>
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<td>Robert P. Hartman, M.D.</td>
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<td>8:10</td>
<td>The Interesting and Unusual:</td>
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<td>Abdominal Imaging Cases That Make You Think</td>
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<td></td>
<td>Joseph M. Collins, M.D.</td>
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<td>8:50</td>
<td>Prostate MRI</td>
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<td></td>
<td>Robert P. Hartman, M.D.</td>
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<td>9:30</td>
<td>Pancreatic Adenocarcinoma:</td>
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<td>Mechanisms of Tumor Spread</td>
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<td></td>
<td>Joseph M. Collins, M.D.</td>
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<td>10:10</td>
<td>Refreshment Break</td>
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<td>10:30</td>
<td>High Risk Lesions of the Breast: Imaging</td>
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<td>and Guidelines</td>
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<td>Marina E. Giurescu, M.D.</td>
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<td>11:10</td>
<td>Diagnostic Considerations in Breast Cancer</td>
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<td>Imaging of Young Women, Pregnancy and</td>
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<td>Males</td>
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<td>Roxanne Lorans, M.D.</td>
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<td>11:50</td>
<td>Imaging of the Treated Breast (Conservation</td>
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<td>and Mastectomy)</td>
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<td></td>
<td>Marina E. Giurescu, M.D.</td>
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<tr>
<td>12:30 p.m.</td>
<td>Abdominal Imaging Self-Assessment Module</td>
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<td>(SAM)</td>
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<td></td>
<td>Frederick Chen, M.D.</td>
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<td>1:00</td>
<td>Daily Summary</td>
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<td>Joseph M. Hoxworth, M.D.</td>
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<td>1:05</td>
<td>Adjourn</td>
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### Thursday  August 4, 2011

* Faculty will include a five minute Question and Answer period during each presentation

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>6:45 a.m.</td>
<td>Continental Breakfast</td>
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<tr>
<td>7:25</td>
<td>Announcements</td>
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<tr>
<td></td>
<td>Joseph M. Hoxworth, M.D.</td>
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<tr>
<td>7:30</td>
<td>Advancements in Cardiac Imaging: MRI and</td>
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<td></td>
<td>CT</td>
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<td></td>
<td>Patricia J. Mergo, M.D.</td>
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<td>8:10</td>
<td>Idiopathic Interstitial Lung Disease</td>
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<td>James F. Gruden, M.D.</td>
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<td>8:50</td>
<td>Advancements in Coronary CT Angiography</td>
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<td></td>
<td>Patricia J. Mergo, M.D.</td>
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<tr>
<td>9:30</td>
<td>Interesting Cardiothoracic Case Conference</td>
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<td></td>
<td>James F. Gruden, M.D.</td>
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<td>10:10</td>
<td>Refreshment Break</td>
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<tr>
<td>10:30</td>
<td>Spine Imaging in Inflammatory and Infectious Conditions</td>
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<td></td>
<td>Ameet C. Patel, M.D.</td>
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<tr>
<td>11:10</td>
<td>Head and Neck Squamous Cell Carcinoma:</td>
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<td>Patterns of Spread</td>
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<td></td>
<td>Joseph M. Hoxworth, M.D.</td>
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<td>11:50</td>
<td>Update on CT Perfusion in Acute Stroke</td>
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<td>Ameet C. Patel, M.D.</td>
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<tr>
<td>12:30 p.m.</td>
<td>Neuroradiology Self-Assessment Module (SAM)</td>
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<td></td>
<td>Joseph M. Hoxworth, M.D.</td>
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<td>1:00</td>
<td>Daily Summary</td>
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<td>Joseph M. Hoxworth, M.D.</td>
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<td>1:05</td>
<td>Adjourn</td>
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<td>Event</td>
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<tr>
<td>6:45</td>
<td>Continental Breakfast</td>
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<td>7:25</td>
<td>Announcements</td>
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<td>7:30</td>
<td>Advanced Imaging of the Foot and Ankle</td>
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<td>8:10</td>
<td>Soft Tissue Tumor Imaging</td>
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<td>8:50</td>
<td>Sports Imaging of the Wrist</td>
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<td>9:30</td>
<td>Hands, Shoulders, Knees, and Toes: Upper and Lower Extremity CTA</td>
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<td>10:10</td>
<td>Refreshment Break</td>
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<td>10:30</td>
<td>CT Imaging Following Endovascular Aneurysm Repair</td>
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<td>11:10</td>
<td>CT Diagnoses of Vascular Causes of Abdominal Pain</td>
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<tr>
<td>11:50</td>
<td>Controversies and Current Recommendations for Intervention in Vertebral Compression Fractures</td>
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<tr>
<td>12:30 p.m.</td>
<td>Daily Summary, Closing Comments and Evaluation</td>
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<tr>
<td>12:35</td>
<td>Adjourn</td>
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REGISTRATION FORM

Mayo Clinic Diagnostic Imaging and Self-Assessment
August 1-5, 2011

Registration at the standard fee may be completed using this form and faxing it to (480) 301-8323. Or you may mail it to: Mayo Clinic, Mayo School of CPD, 13400 East Shea Boulevard, Scottsdale, Arizona 85259. An e-mail confirmation will be sent upon receipt of payment and completed registration. If you do not receive your confirmation, or if you have any questions, please e-mail us at mca.cme@mayo.edu or call (480) 301-4580.

No refund will be granted unless a written notice of cancellation is received. If registration must be canceled, tuition less a $75 administrative fee will be refunded when notification is received on or before July 19, 2011. No refunds will be made after this date.

Although it is not Mayo Clinic’s policy to limit the number of registrants for a course, conference room facilities may necessitate closure of enrollment. Early registration is strongly recommended. Walk-in registrations cannot be guaranteed. Mayo Clinic will not be responsible for expenses incurred by individuals who are not confirmed for courses with a closed registration status. Costs incurred by the registrant such as airline/hotel fees or penalties are the responsibility of the registrant.

ON-LINE SYLLABUS: Your registration fee includes access to an detailed on-line syllabus, e-mailed one week prior to the course. This allows you to view, save, or print the syllabus before attending the course. If you want to order a paper copy ($75), check the box at the bottom of this registration form.

Your type of practice: □ Solo □ Group □ University □ Resident/Fellow □ Retired □ Other: ___________
Years in practice: □ 0-4 □ 5-10 □ 11-15 □ 16-25 □ > 25

Course Registrant List (Check only if you want your name removed)
□ I do not want information (ie, name, degree, city, and state) to appear on the course registrants’ list.

Registration Please print. Use duplicate form for multiple registrations.

| Name of Registrant – first, middle, and last name | Institution |
| Degree/Certification | Medical Specialty |

Preferred mailing address is: (select one) □ Work/Business □ Home

Address

City State/Province ZIP/Postal Code

Country Email

Daytime Telephone Fax

$75 DISCOUNT FROM STANDARD FEE FOR ON-LINE REGISTRATION!

Go to www.mayo.edu/cme (offer expires 06/30/2011)

□ Physicians Active in Practice $1,100

□ Other (resident, retired and allied health) $900

Note: Please refer to course agenda for included meals and refreshment breaks.

□ Paper copy of the syllabus $75

(Note: Due to printing deadlines, this option will not be available after July 15, 2011)

OPTIONAL WORKSHOP:
Advanced Radiology Life Support Workshop (Sunday, July 31) $295
(includes syllabus on USB flash drive)

WELCOME RECEPTION: Monday, August 1 (2 tickets included in registration fee)

□ Yes, I will attend (included in registration fee)

□ Yes, I will bring one guest (included in registration fee)

□ # of additional adult tickets – $60 each $ ___________

□ # of additional child (5-12 yrs) tickets – $30 each $ ___________

□ # of additional child (0-4 yrs) tickets – No charge N/C

□ No, I will not attend

Payment Information (US Funds Only)

□ Check is enclosed in the amount shown at right – make checks payable to Mayo Clinic CPD

| Payment Total |
| Credit Card (select one) | Account Number | Exp. Date (mm/yy) |
| □ Discover □ MC □ Visa | | |

Signature Date