

# Multisession Courses (continued)

## MI42

10:30 AM – 12:00 PM

### Molecular Imaging in Oncology

*Richard L. Wahl, MD, Moderator*

- A. FDG PET for Tumor Response  
*Richard L. Wahl, MD*
- B. Other PET Tracers for Cancer Imaging  
*Michael M. Graham, MD, PhD*
- C. Contemporary MR Techniques for Cancer Imaging  
*Mark A. Rosen, MD, PhD*

## MI43

1:30 PM – 2:45 PM

### Molecular Imaging in Cardiovascular Disease

*Pamela K. Woodard, MD, Moderator*

- A. Clinical Needs and Opportunities  
*Albert Sinusas, MD*
- B. Recent Advances in Nuclear Cardiology  
*Daniel S. Berman, MD*
- C. Emerging Trends in Cardiac MR and CT Imaging  
*Pamela K. Woodard, MD*

## MI44

3:15 PM – 4:45 PM

### Molecular Imaging in Brain Disorders

*Jeffrey R. Petrella, MD, Moderator*

- A. Functional and Molecular Neuroimaging  
*Jeffrey R. Petrella, MD*
- B. PET Imaging in Brain Disorders  
*Daniel H. Silverman, MD, PhD*
- C. Emerging MR Techniques for Neuroimaging  
*A. Gregory Sorensen, MD*

## Quality Improvement Symposium

Tuesday, December 1

### QI31

8:30 AM – 10:00 AM

#### Quality Improvement: Professional Assessment and Challenges

*C. Daniel Johnson, MD, Moderator*

- A. Overview of Multidimensional Systems for Evaluating Radiologist Performance (360°)  
*Phillip M. Boiselle, MD*
- B. Assessing Physician Performance  
*James R. Duncan, MD, PhD*
- C. Managing the Underperforming or Disruptive Radiologist  
*James P. Borgstede, MD*

### QI32

10:30 AM – 12:00 PM

#### Quality Improvement: Safety and Risk Management in a Radiology Department

*Jonathan B. Kruskal, MD, PhD, Moderator*

- A. Anatomy and Pathophysiology of Errors in Radiology Practice  
*Jonathan B. Kruskal, MD, PhD*
- B. Strategies for Minimizing Errors in Diagnostic Imaging  
*Lucy W. Glenn, MD*
- C. Disclosure and Apology Laws: Risks and Benefits for Radiologists  
*Stephen R. Baker, MD*

### QI33

1:30 PM – 3:00 PM

#### Quality Improvement: The Business of Quality and Safety: Financial Aspects and Reimbursement

*G. Scott Gazelle, MD, MPH, PhD, Moderator*

- A. The Balanced Scorecard: A Tool for Linking Strategy to Vision  
*Jonathan G. Goldin, MBChB, PhD*
- B. Pay for Performance: Is It Worth the Effort?  
*Richard Duszak, Jr, MD*
- C. Resources and Strategies for Funding a Radiology Quality and Safety Program  
*Ramin Khorasani, MD*

### QI34

3:30 PM – 5:00 PM

#### Quality Improvement: Implementing Quality Programs in Private and Academic Practices ♦

*Lucy W. Glenn, MD, Moderator*

- A. Practical Issues for Implementing a Quality and Safety Program in an Academic Practice  
*Richard L. Baron, MD*
- B. Practical Issues for Implementing a Quality and Safety Program in a Private Practice  
*Joseph R. Steele, Jr, MD*
- C. Ethical Challenges Facing the Radiologist in the Era of Safety and Transparency  
*Richard B. Gunderman, MD, PhD*

♦ **Related Informatics Course**

**Wednesday, December 2**

### Course II41

10:15 AM – 12:15 PM

#### Next Generation IT Requirements for Improving Quality and Safety for Radiology

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## Radiologist Assistants Symposium

Sunday, November 29

### RA11

10:30 AM – 12:00 PM

#### Musculoskeletal Imaging and Procedures: Protocols and Problem Solving

*Christopher M. Young, RRA, RT (R)(ARRT)  
Maurice D. Linkous, MD*

### RA12

1:30 PM – 3:00 PM

#### Neuroimaging Clinical Pathways and Procedures and the Role of the Radiologist Assistant

*R. D. Mintz, MD*

### RA13

3:15 PM – 4:45 PM

#### Abdominal Pathology: Procedures and Interactive Case Review

*BethAnne Torsiello, RRA, MIS  
Russell N. Nusynowitz, MD*

### RA14

5:00 PM – 6:00 PM

#### Radiologist Assistant Practice: Continuing Evolution, Expansion, and Expectations

*Myke Kudlas, MEd, RT(R)(QM)  
Joy J. Renner, MA, RT(R)*

## Breast Series

(Scientific papers will be presented between lectures.)

Tuesday, December 1

### VB31

8:30 AM – 12:00 PM

#### Breast Series: High-Risk Screening

*Christopher E. Comstock, MD, Moderator*

#### Current Evidence of Benefit for Breast Cancer Screening

*Stephen A. Feig, MD*

#### Factors Influencing the Acceptance of New Breast Screening Technologies

*Bruce J. Hillman, MD*

#### Breast Cancer Risk Assessment and Tailored Screening

*Jennifer A. Harvey, MD*

## Breast/Nuclear Medicine/ Molecular Imaging Series

(Scientific papers will be presented  
between lectures.)

**Monday, November 30**

VM21

8:30 AM – 12:00 PM

### Breast/Nuclear Medicine/Molecular Imaging Series: Breast Imaging in the Era of Molecular Medicine

#### Session Introduction and Overview

#### Molecular Pathways That Define Breast Cancer Subtypes

*J. Dirk Iglehart, MD*

#### MR Spectroscopy of the Breast: A Role in Clinical Diagnosis and Development of New Imaging Technologies

*Carolyn Mountford, DPhil*

#### Overview of Molecular Imaging and Breast Imaging Applications

*Robyn L. Birdwell, MD*

## Chest Series

(Scientific papers will be presented between  
lectures.)

**Monday, November 30**

VC21

8:30 AM – 12:00 PM

### Chest Series: Pulmonary Embolism— Concepts and Controversies

*Joel E. Fishman, MD, PhD, Moderator*  
*Ella A. Kazerooni, MD, Moderator*

#### Guidelines for Pulmonary Embolism Evaluation: Fleischner, PLOPED II, and Other Proposals

*Lawrence R. Goodman, MD*

#### Dose Reduction Methods for CT Pulmonary Angiography

*John R. Mayo, MD*

#### Dual-Energy CT Angiography of Pulmonary Embolism

*Martine J. Remy-Jardin, MD, PhD*

#### Panel Discussion

#### Subsegmental Pulmonary Embolism

*Lacey Washington, MD*

#### Pulmonary Embolism in Pregnancy: Current Concepts and Controversies

*Diana Litmanovich, MD*

#### Panel Discussion

**Tuesday, December 1**

VC31

1:30 PM – 4:30 PM

### Chest Series: Lung Nodules/Lung Cancer

*Christian J. Herold, MD, Co-Moderator*  
*Heber MacMahon, MD, Co-Moderator*

#### Update on Lung Cancer Screening

*Caroline Chiles, MD*

#### Computer-aided Detection of Lung Nodules

*Geoffrey D. Rubin, MD*

#### Volumetric Analysis of Nodule Growth

*Ioannis Vlahos, MBBS*

#### Panel Discussion

#### Ground Glass and Part Solid Nodules: Radiologic-Pathologic Correlation

*Jeffrey R. Galvin, MD*

#### Update on Lung Cancer Staging

*Jeremy J. Erasmus, MD*

#### Panel Discussion

## Emergency Series

(Scientific papers will be presented  
between lectures.)

**Tuesday, December 1**

VE31

8:30 AM – 12:00 PM

### Emergency Series: Managing Your Emergency

*Diego B. Nunez, Jr, MD, MPH, Co-Moderator*  
*O. Clark West, MD, Co-Moderator*

#### Imaging Utilization in the Emergency Center

*Stephen R. Baker, MD*

#### Emergency Radiology Practice Models and Teleradiology

*Aaron D. Sodickson, MD, PhD*

#### Radiation Reduction Strategies in Children and Young Adults

*Carlos J. Sivit, MD*

## Genitourinary Series

(Scientific papers will be presented  
between lectures.)

**Monday, November 30**

VU21

8:30 AM – 12:00 PM

### Genitourinary Series: CT Urography— State of the Art 2009

#### Session Introduction and Overview

*Richard H. Cohan, MD*

#### Three-Phase CT Urography: Technical and Radiation Considerations

*Ulrich G. Mueller-Lisse*

#### Split-Bolus Two- and One-Phase CT Urography: CT Urography for Stones

*Francois Cornud, MD*

#### Discussion and Consensus on Techniques

#### CT Urography for Detection of Upper Tract Pathology

*Nigel Christopher Cowan, MD*

#### Is There a Role for CT Urography in Evaluation of the Bladder?

*Elaine Marie Caoili, MD*

#### Discussion

#### When Should CT Urography Be Done and When Not?

*Stuart George Silverman, MD*

#### Concluding Comments and Discussion

*Richard H. Cohan, MD*

**Tuesday, December 1**

VU31

8:30 AM – 12:00 PM

### Genitourinary Series: Contrast Material and the Kidneys—Issues and Controversies concerning Contrast-induced Nephropathy and Nephrogenic Systemic Fibrosis

#### Session Introduction and Overview

*James H. Ellis, MD*

#### Panel Perspectives on Abstracts 1-4

#### Renal Function and Contrast Media

*Henrik S. Thomsen, MD*

#### Intraarterial Contrast Media and Contrast-induced Nephropathy: Significance and Prevention

*Michael A. Bettmann, MD*

# Multisession Courses (continued)

**Intravenous Contrast Media and Contrast-induced Nephropathy: What Is the Risk?**

*Jeffrey H. Newhouse, MD*

**Panel Discussion on Contrast-induced Nephropathy**

**Panel Perspective on Abstracts 5 – 8**

**Nephrogenic Systemic Fibrosis: Epidemiology and Clinical Consequences**

*Henrik S. Thomsen, MD*

**Contrast Media in Patients with Renal Impairment: CT or MR Imaging?**

*Sameh Kamel Morcos, MD*

**Panel Discussion on Nephrogenic Systemic Fibrosis**

## Interventional Radiology Series

*(Scientific papers will be presented between lectures.)*

### Monday, November 30

VI21

8:30 AM – 12:00 PM

**Interventional Radiology Series: Venous Thromboembolic Disease Diagnosis and Treatment**

**Introduction to the Problem**

*Suresh Vedantham, MD*

**Treatment of Venous Thrombosis**

*Alan H. Matsumoto, MD*

**Pulmonary Embolus: Endovascular Treatment**

*William T. Kuo, MD*

**ATTRACT Trial**

*Suresh Vedantham, MD*

**Future Directions and Discussion**

*Suresh Vedantham, MD*

*Alan H. Matsumoto, MD*

*William T. Kuo, MD*

### Tuesday, December 1

VI31

8:30 AM – 12:00 PM

**Interventional Radiology Series: Peripheral Vascular Disease Imaging and Interventions**

**CT Angiography and MR Angiography for Peripheral Vascular Disease: Which Modality to Use When?**

*Barry Stein, MD*

**Peripheral Vascular Disease: Epidemiology and Work-up**

*Albert A. Nemcek, Jr, MD*

**Procedures for Peripheral Vascular Disease**

*Johannes Lammer, MD*

**Future Directions and Discussion**

*Lindsay S. Machan, MD*

### Wednesday, December 2

VI41

8:30 AM – 12:00 PM

**Interventional Radiology Series: Neurointerventional Procedures—Stenting and Thrombolysis**

**Carotid Disease: Epidemiology and Work-up**

*Barry T. Katzen, MD*

**Stenting for Carotid Artery Disease**

*Christopher M. Zylak, MD*

**Stroke: Epidemiology and Scope of the Problem**

*Kieran J. Murphy, MD*

**Acute Stroke Intervention**

*Christopher M. Zylak, MD*

**Future Directions in Stroke Treatment**

*Kieran J. Murphy, MD*

### Thursday, December 3

VI51

8:30 AM – 12:00 PM

**Interventional Radiology Series: Aortic and Peripheral Aneurysms Imaging and Interventions**

**Imaging for Aneurysms: Preprocedure Evaluation**

*Bart L. Dolmatch, MD*

**Percutaneous Treatment of Abdominal Aortic Aneurysms**

*Alex Powell, MD*

**Percutaneous Treatment of Thoracic Aortic Aneurysms**

*Mahmood K. Razavi, MD*

**Posttreatment Imaging**

*Bart L. Dolmatch, MD*

**Treatment of Endoleaks and Other Complications**

*John A. Kaufman, MD*

### Friday, December 4

VI61

8:30 AM – 12:00 PM

**Interventional Radiology Series: Musculoskeletal Interventions**

**The Radiologist's Role in Back and Neck Pain**

*Blake A. Johnson, MD*

**Vertebroplasty**

*Alexios Kelekis*

**Musculoskeletal Oncologic Procedures**

*Sean M. Tutton, MD*

**Other Procedures for Back Pain: Facet Injections and Epidural Stents**

*Susan V. Kattapuram, MD*

**Future Directions and Discussion**

*Alexios Kelekis*

## Interventional Oncology Series

*(Scientific papers will be presented between lectures.)*

### Sunday, November 29

VO11

1:30 PM – 6:00 PM

**Interventional Oncology Series: Hepatocellular Carcinoma**

*Jean-Francois H. Geschwind, MD, Moderator*

**Hepatocellular Carcinoma: Setting the Stage**

*Jean N. Vauthey, MD*

**Medical Management and the Effect of Tumor Biology on Therapy**

*Mary F. Mulcahy, MD*

**Surgical Management and the Effect of Tumor Biology on Clinical Decision Making**

*Timothy Pawlik, MD*

**Tumor Board**

*Jean-Francois H. Geschwind, MD*

**Transcatheter Treatments and Factors Affecting Clinical Decision Making**

*Jean-Francois H. Geschwind, MD*

**Expected Outcomes of Percutaneous Treatments and Factors Affecting Clinical Decision Making**

*Riccardo A. Lencioni, MD*

**Tumor Board**

*Jean-Francois H. Geschwind, MD*

## Monday, November 30

### VO21

1:30 PM – 6:00 PM

#### Interventional Oncology Series:

##### Non–Small Cell Lung Cancer

*Damian E. Dupuy, MD, Moderator*

##### Non–Small Cell Lung Cancer: Setting the Stage

*Gerald F. Abbott, MD*

##### Tumor Board

*Damian E. Dupuy, MD*

##### Medical Management and the Effect of Tumor Biology on Therapy

*William Pao, MD, PhD*

##### Tumor Board

*Damian E. Dupuy, MD*

##### Radiation and Combination Therapy

*Thomas A. DiPetrillo, MD*

##### Surgical Management and the Effect of Tumor Biology on Clinical Decision Making

*David Harpole, MD*

##### Tumor Board

*Damian E. Dupuy, MD*

##### Percutaneous Treatments and Factors Affecting Clinical Decision Making

*Damian E. Dupuy, MD*

##### Tumor Board

*Damian E. Dupuy, MD*

## Tuesday, December 1

### VO31

1:30 PM – 6:00 PM

#### Interventional Oncology Series: Renal Cell Carcinoma

*Stephen B. Solomon, MD, Moderator*

##### Renal Cell Carcinoma: Setting the Stage

*Peter L. Choyke, MD*

##### Tumor Board

*Stephen B. Solomon, MD*

##### Medical Management and the Effect of Tumor Biology on Therapy

*Nicholas J. Vogelzang, MD*

##### Tumor Board

*Stephen B. Solomon, MD*

##### Surgical Management and the Effect of Tumor Biology on Clinical Decision Making

*Robert Uzzo, MD*

#### Is There a Role for Active Surveillance?

*Robert Uzzo, MD*

##### Tumor Board

*Stephen B. Solomon, MD*

##### Percutaneous Treatments and Factors Affecting Clinical Decision Making

*Debra A. Gervais, MD*

##### Tumor Board

*Stephen B. Solomon, MD*

## Wednesday, December 2

### VO41

1:30 PM – 4:15 PM

#### Interventional Oncology Series: Cutting-edge Technology for Guidance, Monitoring, and Treatment

*Gary S. Dorfman, MD, Moderator*

##### Advances in Cryotechnology

*Peter J. Littrup, MD*

##### Ultrasound Tomography for Therapy Monitoring

*Peter J. Littrup, MD*

##### MR-guided Laser Ablation with Real-time MR Thermal Mapping

*Kamran Ahrar, MD*

##### Advanced Imaging Techniques for Monitoring and Controlling the Ablation Zone

*Christopher L. Brace, PhD*

##### Irreversible Electroporation and Microwave Ablation

*Damian E. Dupuy, MD*

##### Advanced Intraoperative Imaging Systems

*Stephen B. Solomon, MD*

##### Guidance Systems (Including Veran, Traxtel, Pathfinder, ActiView, and Easote)

*Stephen B. Solomon, MD*

##### MR-guided Focused Ultrasound: Present and Future Applications

*David C. Gianfelice, MD*

##### Image-guided Drug Dose Painting: Drugs and Devices

*Bradford J. Wood, MD*

##### Panel Discussion

*Gary S. Dorfman, MD*

## Thursday, December 3

### VO51

1:30 PM – 6:00 PM

#### Interventional Oncology Series:

##### Management of Hepatic Metastases from Colorectal Cancer and Neuroendocrine Tumors

*Michael C. Soulen, MD, Moderator*

##### Medical Management and the Effect of Tumor Biology on Therapy for Colorectal Cancer Hepatic Metastases

*Ursina Titelbaum, MD*

##### Surgical Management including Neoadjuvant and Adjuvant Therapy for Colorectal Cancer Hepatic Metastases

*Douglas L. Fraker, MD*

##### Percutaneous Management of Hepatic Colorectal Cancer Hepatic Metastases

*Thierry J. De Baere, MD*

##### Transcatheter Treatments and Factors Affecting Clinical Decision Making for Colorectal Cancer Hepatic Metastases

*Michael C. Soulen, MD*

##### Tumor Board

*Michael C. Soulen, MD*

##### Medical Management and the Effect of Tumor Biology on Therapy for Hepatic Neuroendocrine Tumor Metastases

*Ursina Titelbaum, MD*

##### Surgical Management for Hepatic Neuroendocrine Tumor Metastases

*Douglas L. Fraker, MD*

##### Molecularly Targeted Therapy for Neuroendocrine Tumor Metastases

*Chaitanya Divgi, MD*

##### Image-guided Therapy and Factors Affecting Clinical Decision Making for Hepatic Neuroendocrine Tumor Metastases

*William S. Rilling, MD*

##### Tumor Board

*Michael C. Soulen, MD*

# Multisession Courses (continued)

## Musculoskeletal Radiology Series

(Scientific papers will be presented between lectures.)

### Wednesday, December 2

VS41

8:30 AM – 12:00 PM

#### Musculoskeletal Radiology Series: Sports-related Musculoskeletal Injuries

##### Shoulder

Lynne S. Steinbach, MD

##### Elbow

Jon A. Jacobson, MD

##### Wrist

Jeffrey J. Peterson, MD

##### Pelvis/Hip

Adam C. Zoga, MD

##### Knee

Kenneth A. Buckwalter, MD

##### Foot/Ankle

William B. Morrison, MD

## Neuroradiology Series

(Scientific papers will be presented between lectures.)

### Monday, November 30

VN21

8:30 AM – 12:00 PM

#### Neuroradiology Series: Brain Tumors—Advanced Imaging Techniques

##### Perfusion and Permeability: New Treatments and New Challenges

Daniel P. Barboriak, MD

##### Diffusion MR Imaging Applications

Aaron S. Field, MD, PhD

##### Functional MR Imaging in Practice

John L. Ulmer, MD

##### Expert Panel Q&A

Daniel P. Barboriak, MD

Aaron S. Field, MD, PhD

John L. Ulmer, MD

### Wednesday, December 2

VN41

8:30 AM – 12:00 PM

#### Neuroradiology Series: Stroke Imaging

##### Advanced MR Imaging Protocols in Stroke

Ramon G. Gonzalez, MD, PhD

##### Arterial Spin Labeling

Jonathan H. Burdette, MD

##### Emergency CT Protocols in Stroke

Michael N. Brant-Zawadzki, MD

##### Expert Panel Q&A

Ramon G. Gonzalez, MD, PhD

Jonathan H. Burdette, MD

Michael N. Brant-Zawadzki, MD

## Pediatric Radiology Series

(Scientific papers will be presented between lectures.)

### Sunday, November 29

VP11

10:30 AM – 12:00 PM

#### Pediatric Radiology Series: Neuroimaging I

##### Imaging of Pediatric Spine Trauma

Avrum N. Pollock, MD

##### Imaging of Head and Neck Emergencies in Children

Diana P. Rodriguez, MD

VP12

2:00 PM – 3:30 PM

#### Pediatric Radiology Series: Neuroimaging II

##### Imaging Evaluation of Central Nervous System Infections

Eric N. Faerber, MD

##### Update on Neonatal Brain Imaging

Richard L. Robertson, MD

### Monday, November 30

VP21

8:30 AM – 12:00 PM

#### Pediatric Radiology Series: Fetal Imaging

##### MR Imaging of the Central Nervous System

Deborah Levine, MD

##### MR Imaging of the Fetal Chest

Richard A. Barth, MD

##### MR Imaging of the Fetal Abdomen

Dorothy I. Bulas, MD

### Tuesday, December 1

VP31

8:30 AM – 12:00 PM

#### Pediatric Radiology Series: Chest/Cardiovascular Imaging I

##### CT of Congenital Lung Lesions

Edward Y. Lee, MD

##### Imaging of Pediatric Chest Trauma

Sjirk J. Westra, MD

##### Pediatric Pulmonary Embolism

David E. Manson, MD

##### Pediatric CT: Just What Are the Doses?

Karen E. Thomas, MBChB

VP32

3:00 PM – 6:00 PM

#### Pediatric Radiology Series: Chest/Cardiovascular Imaging II

##### Pediatric Cardiac MR Imaging Techniques

Cynthia K. Rigsby, MD

##### Pediatric CT Angiography

Marilyn J. Siegel, MD

##### Pediatric Cardiac-gated CT Imaging

Frandics P. Chan, MD, PhD

## Ultrasound/Gastrointestinal Series

(Scientific papers will be presented between lectures.)

### Monday, November 30

VG21

8:30 AM – 12:00 PM

#### Ultrasound/Gastrointestinal Series: Contrast Agents in US

Stephanie R. Wilson, MD, Moderator

##### Microbubble Contrast Agents: What Are They, and How Do They Work?

Peter N. Burns, BSc, PhD

##### Contrast-enhanced US of Benign Liver Tumors

Tae Kyoung Kim, MD

##### Contrast-enhanced US of Malignant Liver Tumors

Hyun-Jung Jang, MD

##### Contrast-enhanced US for Radiofrequency Ablation: Guidance and Monitoring of Therapy

Luigi Solbiati, MD