

International Society for Computed Tomography

International Symposium on

Multidetector-Row CT

June 13-16, 2011

Hyatt Regency San Francisco

Announcing the International Society for Computed Tomography (ISCT)

A nonprofit association dedicated to enhancing the ability of Radiologists worldwide to provide the highest quality of patient care through global education in CT.

This activity is supported by educational grants from: Bracco Diagnostics, Carestream Health, GE Healthcare, MEDRAD, INC., Philips Medical Systems, Siemens Medical Solutions, TeraRecon, Toshiba Medical Systems, Vital Images, ZioSoft

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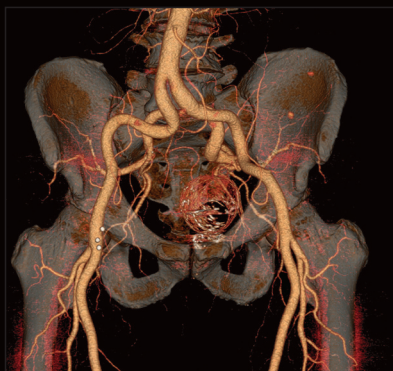
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**International Society for
Computed Tomography**



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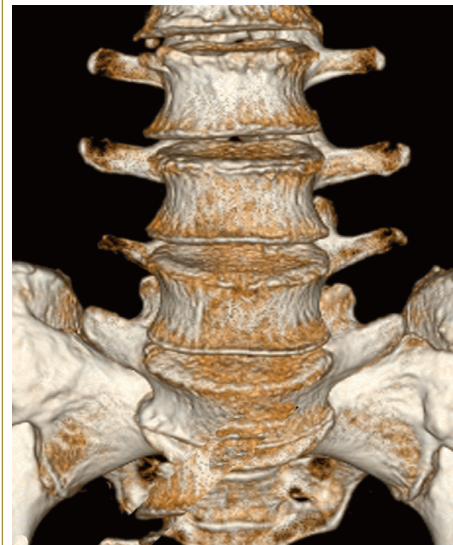
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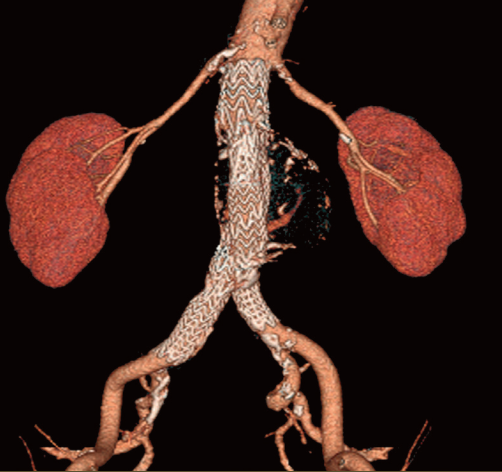
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Target Audience

This activity has been designed to meet the educational needs of Radiologists, Cardiologists, Medical Imaging Scientists, Radiologic Technologists, Nurses and non-radiologist physicians who utilize CT technology and its applications.

Statement of Need/ Program Overview

Learners need to understand the impact of new MDCT developments on clinical practice and how to implement acquisition protocols, dose reduction strategies and visualization techniques to take full advantage of these advances. Developments in MDCT technology have resulted in a broad spectrum of new and improved clinical applications. Learners need to recognize pitfalls and employ applications and techniques in abdominal, musculoskeletal, thoracic, neuro, cardiac and vascular CT imaging for improved image quality and diagnosis.

Educational Objectives

After completing this activity, the participant should be able to:

- List appropriate techniques to reduce radiation exposure while maintaining diagnostic image quality.
- Describe advanced image rendering techniques and post processing workstations to fully analyze scan data.
- Explain the current methods for performing cardiac CT in the clinical setting.
- Identify the methods and applications for improving CT imaging utilizing the latest generation of CT scanners.
- Enumerate current techniques and protocols to accurately diagnose disorders of the chest, brain, abdomen, vascular, and musculoskeletal systems in adults and children.
- Specify imaging and post-processing techniques to accurately measure brain perfusion for more detailed diagnosis and follow-up to treatment.

Accreditation Statement

This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medi-

cal Education (ACCME) through the joint sponsorship of Postgraduate Institute for Medicine (PIM) and The International Society for Computed Tomography. PIM is accredited by the ACCME to provide continuing medical education for physicians.

Credit Designation

Postgraduate Institute for Medicine designates this educational activity for a maximum of **33 AMA PRA Category 1 Credits™**. Physicians should only claim credit commensurate with the extent of their participation in this activity. Upon successfully completing the post-test and evaluation online, your certificate will be made available immediately.

Accommodations

The meeting will be held at the Hyatt Regency San Francisco. The Hyatt Regency San Francisco is located on the Embarcadero waterfront and centrally located in the financial district at 5 Embarcadero Center, at the corner of Market and Drumm Streets.

A discounted rate of **\$225.00** per room per night has been reserved for our conference participants and is subject to tax. To receive this special rate please make your reservation no later than **May 23, 2011**. After May 23rd, rooms at our discounted rate cannot be guaranteed. **Rooms are reserved on a first-come, first-served basis, and may sell out before the cut-off date.**

Make your reservations now by contacting the Hyatt Regency San Francisco at 1-800-720-0049 or (415) 788-1234 or online at www.sanfranciscoregency/hyatt.com (group code:G-ISCT).

For more information on the Hyatt Regency San Francisco, please visit their website at www.sanfranciscoregency/hyatt.com

Travel

Special meeting discounts on airfare and car rentals have been arranged for our attendees and their guests.

For American Airlines, call 1-800-433-1790 (booking fees apply for phoned-in reservations only) or log on to www.aa.com, reference meeting code **A1961AV**

For United Airlines log on to www.ual.com, reference Meeting ID Code **589CR**, or call the Dedicated Meeting reservation agents from 8:00 a.m. to 10:00 p.m. (ET) Monday through Friday at 1-800-521-4041.

For Hawaiian Airlines log on to www.HawaiianAir.com/Affiliate and enter the code **"CMESCIENCE"** for 5% off their published webfares.

For Hertz Rent-A-Car, call 1-800-654-2240, or log on to www.hertz.com and reference CV# **04K20002**.

For Dollar Rent A Car, call 1-800-800-3665, or log on to www.dollar.com, and reference corporate discount number **CM2340**.

Monday, June 13, 2011

6:30-7:00	Registration, Check-in, Continental Breakfast & Exhibits
7:00-7:10	Welcome Gary M. Glazer, MD
7:10-7:20	CT 2011 – Fertile Fields, Fugu, and the Economy Geoffrey D. Rubin, MD
SESSION I:	TECHNOLOGY: PRESENT AND FUTURE
<i>Moderator</i>	<i>Geoffrey D. Rubin, MD</i>
7:20-7:30	Image Quality: Do We Have all our Ducks in a Row? Patrik Rogalla, MD
7:30 -7:40	Options for CT Scanning at low kV Settings Willi A. Kalender, PhD
7:40-7:50	CT Imaging with Multiple Intrinsic Contrast Phase Sensitive Imaging Method Guang-Hong Chen, PhD
7:50-8:00	Beam Hardening Correction in Virtual Monochromatic Myocardial Imaging with Fast-Switching dual-kV Computed Tomography: Experimental Study Sachio Sachio Kuribayashi, MD
8:00-8:10	Iterative Techniques for Metal Artifact Reduction F. Edward Boas, MD
8:10-8:20	Dynamic Filtration: Impact on Workflow and New Perspectives Emmanuel Coche, MD
8:20-8:30	Prior Image Constrained Compressed Sensing (PCCS): A Novel Reconstruction Algorithm for Ultra-Low-Dose MDCT Perry J. Pickhardt, MD
8:30-8:40	Translation of Laboratory CT Algorithm Development to Clinical Reality Michael W. Vannier, MD
8:40-8:50	Inverse Geometry CT: Recent Results Norbert J. Pelc, ScD
8:50-9:05	Discussion
9:05-9:25	Coffee Break & Exhibits
SESSION II:	SPECTRAL CT
<i>Moderator</i>	<i>Geoffrey D. Rubin, MD</i>
9:25-9:35	Influence of the X-Ray Spectrum on Image Quality and Dose in Single-Energy CT Cynthia H. McCollough, PhD
9:35-9:45	Making Sense of Single-Source Dual-Energy MDCT's Unfamiliar Parameters and Images Lincoln Berland, MD
9:45-9:55	Influence of the X-Ray Spectrum on Image Quality and Dose in Dual-Energy CT Cynthia H. McCollough, PhD
9:55-10:15	Improved Dose Efficiency in Rapid Switching Dual kVp CT Using a Single X-ray Filter Norbert J. Pelc, ScD
10:15-10:35	Material Separation with Dual Energy CT- Comparison of Technologies Jacob Sosna, MD
10:35-10:45	Incorporation of Dual Energy MDCT into Routine Clinical Practice Rendon C. Nelson, MD
10:45-10:55	Measuring Tophus Volume Using Dual Energy CT in Monitoring Gout Therapy Savvas Nicolaou, MD
10:55-11:05	Impact of Organ Enhancement and Body Habitus on Estimation of Noncontrast Attenuation from Contrast-enhanced Dual-Energy MDCT: Concepts for Individualized and Organ-specific Spectral Iodine Subtraction Strategies Daniel Boll, MD
11:05-11:15	Potential Role of DE-CT in Therapy Monitoring Dushyant Sahani, MD
11:15-11:30	Quad-energy MDCT Evaluation of Ancient Egyptian Funerary Materials Michael W. Vannier, MD
11:30-11:40	Use of Photon Counting Detectors and Energy Domain Correlations to Reduce Image Noise and Radiation Dose in Spectral CT Cynthia H. McCollough, PhD
11:40-11:55	Discussion
11:55-1:15	Lunch Break

SESSION III: RADIATION EXPOSURE AND ITS IMPACT

- Moderator*
XXX, MD
- 1:15-1:25 **Cumulative Radiation Doses to Patients Undergoing Medical Imaging**
Andrew Einstein, MD
- 1:25-1:35 **Dose reduction by Hook or by Crook**
Patrik Rogalla, MD
- 1:35-1:45 **Put Away the Calculator: Radiation Risk Should not be a Consideration When Ordering CT Exams**
Cynthia H. McCollough, PhD
- 1:45-1:55 **Risks of Cancer from Radiation Doses Received in CT: Weighing the Evidence**
Andrew Einstein, MD
- 1:55-2:05 **A few Issues Associated with Using CTDI to Measure Dose with Advanced Instruments: What you Need to Know**
Srinii Mukundan, Jr., MD, PhD
- 2:05-2:15 **Organ Dose Measurements to Optimize CT Protocols**
Manuel Arreola, Ph.D., DABR
- 2:15-2:25 **The Effect of Radiation Reduction Strategies on Cardiac CT: A 5 Year Audit of Over 3000 Cases**
Carl Roobottom, MD
- 2:25-2:35 **Prospects of sub-mSv CT**
Willi A. Kalender, PhD
- 2:35-2:45 **How Much of a Problem is Radiation Exposure in Cardiac CT in the Era of Sub-mSv Scanning?**
Andrew Einstein, MD
- 2:45-2:55 **A Universal Strategy for the Optimization of Image Quality and Radiation Risk in CT Examination**
Ehsan Samei, PhD, FAAPM, FSPiE
- 2:55-3:05 **FAST CARE (Fully Assisting Scanner Technologies Support Process Optimization and Combined Applications to Reduce Exposure): Making CT Scans Efficient and Reducing Radiation Dose**
Savvas Nicolaou, MD
- 3:05-3:15 **A Simple DLP Monitoring Program for CT Sites**
Manuel Arreola, Ph.D., DABR
- 3:15-3:25 **Synthetic CT: A Tool for Optimizing Protocols for Minimum Dose**
Norbert J. Pelc, ScD
- 3:25-3:35 **Patient-based Dose Monitoring**
Ehsan Samei, PhD, FAAPM, FSPiE
- 3:35-3:45 **Use of Diagnostic Reference Levels to Determine the "Right" Dose Level**
Cynthia H. McCollough, PhD
- 3:45-4:00 **Discussion**
- 4:00-4:20 **Coffee Break & Exhibits**
- 4:20-4:30 **The Impact of Reduced Patient Life Expectancy on Estimated Cancer Risks from Radiological Imaging**
Andrew Einstein, MD
- 4:30-4:40 **Should You Use the Bismuth Breast Shield?**
Lincoln Berland, MD
- 4:40-4:50 **Radiation Dose Reduction in Dual Energy CT Imaging**
Guang-Hong Chen, MD
- 4:50-5:00 **How Low Can We Go? Dose Reduction with Iterative Reconstruction**
Dominik Fleischmann, MD
- 5:00-5:10 **Beyond Dose Reduction: Additional Clinical Applications for Iterative Reconstruction**
Jeffrey B. Mendel, MD
- 5:10-5:20 **The Use of Iterative Reconstruction (slice and model based): Clinical Experience from the UK**
Carl Roobottom, MD
- 5:20-5:30 **Optimized Implementation of Iterative Reconstructions**
Ehsan Samei, PhD, FAAPM, FSPiE
- 5:30-5:40 **Use of Iterative Reconstruction for Low Radiation Dose Imaging in Clinical Practice**
Rendon C. Nelson, MD
- 5:40-5:50 **Dose Management in CT Imaging: What Should Be Required from the Manufacturers**
Cynthia H. McCollough, PhD
- 5:50-6:00 **Discussion**
- 6:00 **End**

Tuesday, June 14, 2011

- 6:30-7:00 am **Continental Breakfast & Exhibits**
- SESSION IV: ABDOMEN I**
Moderator
7:00-7:10 **Rendon C. Nelson, MD**
- 7:10-7:20 **Low mSv Diagnostic Imaging of the Abdomen and Pelvis**
Rendon C. Nelson, MD
- 7:20-7:30 **Dose Reduction by Iterative Reconstruction in Oncologic Patients Undergoing Repeated CT Examinations – Do New Algorithms Really Reduce Exposure while Maintaining Image Quality?**
Anno Graser, MD
- 7:30-7:40 **Applications of Low Kev Imaging in the Abdomen**
Dushyant Sahani, MD
- 7:40-7:50 **Potential for Virtual Unenhanced Imaging to Reduce the Need for Multiple-Phasic MDCT of the Abdomen and Pelvis**
Rendon C. Nelson, MD
- 7:50-8:00 **Acute Abdominal Pain: BMI-based Algorithm for Use of Oral Contrast**
Jorge A. Soto, MD
- 8:00-8:10 **Rapid Imaging Protocol in Trauma (RIPIT): Comparison of a Novel Continuous Scan vs Segmental Whole Body Scan in the Imaging of the Polytrauma Patient**
Savvas Nicolaou, MD
- 8:10-8:20 **Advantages of New CT-Based Blunt Splenic Injury Grading System**
Stuart Mirvis, MD
- 8:20-8:30 **Blunt Abdominal Trauma: Significance of Isolated Free Fluid in Males**
Jorge A. Soto, MD
- 8:30-8:40 **Model Based Iterative Reconstruction (MBIR), ASIR, and FBP of the Liver: Impact on Image Noise, Lesion Detection, and Image Quality**
William P. Shuman, MD, FACR
- 8:40-8:50 **Distinguishing FNH from Hepatic Adenoma**
Michael Federle, MD
- 8:50-9:00 **Dual Energy GSI Spectral CT of Focal Liver Lesions in Patients with Advanced Cirrhosis**
William P. Shuman, MD, FACR
- 9:00-9:15 **Incidental Findings at Abdominal MDCT: The Glass is Half-Full**
Perry J. Pickhardt, MD
- 9:15-9:30 **Discussion**
- SESSION V: ABDOMEN II:**
Moderator
9:30-9:40 **Michael Federle, MD**
- 9:40-9:50 **Autoimmune Pancreatitis + Related Disorders**
Michael Federle, MD
- 9:50-10:00 **Metastatic Disease to the Pancreas: Patterns of Involvement**
Elliot K. Fishman, MD
- 10:00-10:10 **Pancreatic Tumor Response to Phase II Anti-angiogenic Agents by MDCT Perfusion**
Michael W. Vannier, MD
- 10:10-10:20 **How to Use the ACR White Paper Recommendations on Incidental Findings on MDCT of the Pancreas**
Lincoln Berland, MD
- 10:20-10:30 **Advances in Tumor Perfusion Imaging: Comparison of Imaging Modalities in Animal Models**
Konstantin Nikolaou, MD
- 10:30-10:40 **Organ Perfusion: the Naked Truth**
Patrik Rogalla, MD
- 10:40-10:50 **Assessing Tumor Viability with CT as a Biomarker of Response and Clinical Outcome**
Dushyant Sahani, MD
- 10:50-11:00 **Implementation of Dual-Energy MDCT for Renal Lesion Enhancement Detection**
Daniel Boll, MD
- 11:00-11:10 **Small Renal Masses: There is More than One Way to Skin a Cat**
Patrik Rogalla, MD
- 11:10-11:20 **MDCT Imaging and Classification of Renal and Ureteral Trauma**
Uli Linsenmaier, MD
- 11:20-11:30 **In-vitro and In-vivo Determination of Urinary Stone Composition using Dual Energy Computerized Tomography with Advanced Post-acquisition Processing**
Daniel Boll, MD

- 11:30-11:40 **Carcinoid Tumors of the Small Bowel: Optimization of Lesion Detection**
Elliot K. Fishman, MD
- 11:40-11:50 **CT Colonography: 2011 Update**
Perry J. Pickhardt, MD
- 11:50-12:05 **Dual Energy CT Colonography in Colorectal Cancer Patients: A New Way of Predicting Tumor Stage and Lesion Histology?**
Anno Graser, MD
- 12:05-1:30 **Discussion**
- SESSION VI: WORKFLOW/IMAGE PROCESSING**
Moderator
1:30-1:40 **Geoffrey D. Rubin, MD**
- 1:40-1:50 **Modification of CT Protocols for High Pitch Mode of Scanning: Opportunities and Challenges**
Lynn Hurwitz, MD
- 1:50-2:00 **Optimizing MDCT Scanning Suite Through Put and Quality: Next Generation Modality IT Integration and Workflow Models**
Paul Chang, MD
- 2:00-2:10 **Remote Desktop Communication with your Scanner and Technologist**
Lior Molvin, RT (CT)
- 2:10-2:20 **Leveraging Modality and Injector IT Integration in MDCT Protocol Management**
Paul Chang, MD
- 2:20-2:30 **What a Trained 3D Technologist Should Know**
Laura Pierce, MPA, RT (CT)
- 2:30-2:40 **How to Manage 10,000 Slices: an Update**
Paul Chang, MD
- 2:40-2:50 **PACS 2.0: The Next-Generation Workstation**
Daniel L. Rubin, MD, MS
- 2:50-3:00 **The Incremental 3D Report – Why the Delay?**
Laura Pierce, MPA, RT (CT)
- 3:00-3:10 **“Getting in Touch with Your 3D Data”: Rapid Prototyping Applications**
Jacob Sosna, MD
- 3:10-3:20 **Quantitative Tumour Analysis: Is the Technology and Integration Ready for Routine Clinical Use?**
Jeffrey B. Mendel, MD
- 3:20-3:30 **Automating the Assessment of Cancer Treatment Response**
Daniel L. Rubin, MD, MS
- 3:30-3:40 **Can MDCT Image Features Predict Tumor Molecular Profiles? Examples in Non-small Cell Lung Cancer**
Sandy Napel, PhD
- 3:40-3:55 **Emerging Standards in CT Nomenclature and Implications for Radiologists**
Daniel L. Rubin, MD, MS
- 3:55-4:10 **Discussion**
- 4:10-6:10 **Coffee Break & Exhibits**
- 6:10 **9th Annual Workstation Face-off**
Geoffrey D. Rubin, MD
- End**

Wednesday, June 15, 2011

- 6:30-7:00 am **Continental Breakfast & Exhibits**
- SESSION VII: PEDIATRICS & CONTRAST MEDIA**
Moderator
7:00-7:10 **Francis Chan, MD, PhD**
- 7:10-7:20 **CTA versus MRI: Rebalancing Perceptions of Risk in Children**
S. Bruce Greenberg, MD
- 7:20-7:30 **Dose Values in Pediatric CT and Options for Their Reduction**
Willi A. Kalender, PhD
- 7:30-7:40 **Optimization of Dose and Image Quality in Pediatric CT Examinations**
Ehsan Samei, PhD, FAAPM, FSPiE
- 7:40-7:50 **The Use of De-noising Software to Regain Image Quality in Pediatric Cardiovascular CTA**
S. Bruce Greenberg, MD
- 7:50-8:00 **Coronary CT Angiography in Neonates and Children: Diagnostic Usefulness and Radiation Dose Considerations**
U. Joseph Schoepf, MD, FAHA
- 8:00-8:10 **CTA for Pediatric Cardio-Pulmonary Disease**
S. Bruce Greenberg, MD

8:00-8:10 **Imaging Congenital Bronchovascular Anomalies with CTA**
Frاندics Chan, MD, PhD

8:10-8:20 **Pediatric Thoracic CT – What to Consider**
Fredrik Stålhammar, MD

8:20-8:30 **Risk of Kidney Injury in ICU Patients Exposed to CT**
Richard Solomon, MD, FASN, FACP

8:30-8:40 **Long Term Adverse Outcome Following Contrast Induced Kidney Injury – Does it Apply to CT?**
Richard Solomon, MD, FASN, FACP

8:40-8:50 **Is Contrast Induced Kidney Injury Preventable?**
Richard Solomon, MD, FASN, FACP

8:50-9:00 **Novel Contrast Agent Development in the Nano-Particle Era**
Jacob Sosna, MD

9:00-9:15 **Discussion**

9:15-9:35 **Coffee Break & Exhibits**

SESSION VIII: NEURO

Moderator

9:35-9:45 **Optimizing Dose and Image Quality for Neuro CT**
David S. Enterline, MD

9:45-9:55 **Low Dose MDCT Imaging of Adult Cervical Spine Trauma: A Dose Neutral Replacement of Conventional Radiographs (CR) is Possible**
Uli Linsenmaier, MD

9:55-10:05 **Spiral vs Sequential Imaging for Acquiring Non-contrast Head CT**
Sriini Mukundan, Jr., MD, PhD

10:05-10:15 **X-CARE: A New Technique in Reducing Radiation Exposure to the Lens in CT Brain Imaging**
Savvas Nicolaou, MD

10:15-10:25 **Pediatric Head CT – What to Consider**
Fredrik Stålhammar, MD

10:25-10:35 **CT Fluoroscopy Guided Pain Management Procedures**
David S. Enterline, MD

10:35-10:45 **The Role of Advanced CT Scanning in Stroke Management**
Michael H Lev, MD, FAHA

10:45-10:55 **Whole Brain CT Perfusion with 64 and 320 Detector Row Scanners: Imaging Strategy and Dose Profile**
Sriini Mukundan, Jr., MD, PhD

10:55-11:05 **Defining Infarct Core with CT Perfusion**
Michael H Lev, MD, FAHA

11:05-11:15 **CT Brain Perfusion Imaging at Routine Head Exam Doses**
Cynthia H. McCollough, PhD

11:15-11:25 **Dynamic CT Angiography with a 320 Detector Row Scanner for Pre-operative Planning for Skull-base Tumor Surgery**
Sriini Mukundan, Jr., MD, PhD

11:25-11:40 **Atlas Based Functional Modeling in Neuro CT**
Michael H Lev, MD, FAHA

11:40-11:55 **Discussion**

11:55-1:15 **Lunch Break**

SESSION IX: VASCULAR

Moderator

1:15-1:25 **Advances in CT Angiography: Time-Resolved CTA or Dual-Energy CTA or Both?**
Konstantin Nikolaou, MD

1:25-1:35 **Whole Body CT Angiography in Trauma: When and How?**
Jorge A. Soto, MD

1:35-1:45 **MDCT Diagnosis of the Rare Major Venous Injury of the Torso**
Stuart Mirvis, MD

1:45-1:55 **CTA Run Off Studies: Dual Energy vs Classic Vascular Acquisitions**
Elliot K. Fishman, MD

1:55-2:05 **Optimizing Indirect Lower Extremity CT Venography**
Richard Courtney, MD

2:05-2:15 **CTA Acquisition Strategies in Athletes**
Deirdre Sheahan, MD

2:15-2:25 **SMA Syndrome and Median Arcuate Ligament Syndrome: True Syndromes or Fantasy**
Elliot K. Fishman, MD

2:25-2:35 **Use of CT Angiography in Acute Lower Gastrointestinal Bleeding**
Jorge A. Soto, MD

2:35-2:45 **Improvement of In-stent Lumen Measurement Accuracy with High-definition CT in a Phantom Model: Comparison with Conventional 64-detector Row CT.**
Sachio Kuribayashi, MD

2:45-2:55 **Assessment of Aortic Disease with CT**
Paul Schoenhagen, MD

2:55-3:05 **Nuances of ECG Gating for Aortic Root CTA**
Dominik Fleischmann, MD

3:05-3:20 **Discussion**

3:20-3:35 **Coffee Break & Exhibits**

3:35-3:45 **Further Improvement of Cardiac CT Temporal Resolution**
Guang-Hong Chen, PhD

3:45-3:55 **The Impact of High Definition CT Scanning on CT Coronary Angiography**
Carl Roobottom, MD

3:55-4:05 **Effect of Detector Rows on Image Quality and Effective Dose of Cardiac CT**
Marc Dewey, MD

4:05-4:15 **Cardiac Specific Conversion Factors and their Implication for Dose Issues?**
Carl Roobottom, MD

4:15-4:25 **Low Tube Voltage CCTA- Image Quality and Diagnostic Accuracy**
Jonathon Leipsic, MD FRPC

4:25-4:35 **Single-beat Cardiac CT**
Marc Dewey, MD

4:35-4:45 **Iterative Reconstruction and Cardiovascular CT**
Paul Schoenhagen, MD

4:45-4:55 **Iterative Reconstruction in Image Space and Sinogram Affirmed Iterative Reconstruction – What Can They Do for Cardiac CT**
U. Joseph Schoepf, MD, FAHA

4:55-5:05 **HLiterative Reconstruction for CCTA – Lessons from over 2000 Cases**
Jonathon Leipsic, MD FRPC

5:05-5:15 **Influence of Contrast Media for CTA on Heart Rate**
Prof. Dr. Hans-Christoph Becker

5:15-5:25 **Effects of Iodine Concentration on Coronary Contrast, Branch Depiction and Heart Rate Variability in Dual-Source Coronary MDCT Angiography: Iopamidol-370 vs. Iodixanol-320**
Daniel Boll, MD

5:25-5:35 **One Stop Shop: 4D CTA and CT Perfusion Imaging**
Guang-Hong Chen, PhD

5:35-5:45 **Myths, Facts, and Curiosities about Dual-Energy CT of the Heart**
U. Joseph Schoepf, MD, FAHA

5:45-5:55 **Evaluation of Severely Calcified Coronary Artery Using Fast-switching Dual-kV 64-slice Computed Tomography: Study Using Ex Vivo Human Heart Specimen.**
Sachio Kuribayashi, MD

5:55-6:10 **Discussion**

6:10 **End**

Thursday, June 16, 2011

6:30-7:00 am **Continental Breakfast & Exhibits**

SESSION X: PULMONARY
Moderator

7:00-7:10 **Organ Based Dose Modulation for the Thorax. Are We There Yet?**
Lynn Hurwitz, MD

7:10-7:20 **Radiation Dose Reduction in Thoracic and Abdominal CT Angiography Using Automatic kV Selection**
Cynthia H. McCollough, PhD

7:20-7:30 **Iterative reconstructions in Chest MDCT**
Emmanuel Coche, MD

7:30-7:40 **Next Generation Iterative Reconstruction for Lung Imaging**
Johnny Vlahos, BSc, MBBS, MRCP, FRCR

7:40-7:50 **Side-by-side Comparison Between MDCT and Chest X-ray: How I Do It.**
Emmanuel Coche, MD

7:50-8:00 **Challenges of PE CTA Examinations: Optimizing Image Quality.**
Lynn Hurwitz, MD

8:00-8:10 **Reducing Contrast Volume for CT Pulmonary Angiography with Dual Energy CT**
Jonathon Leipsic, MD FRPC

8:10-8:20 **Clinical Utility of Low Dose Ultra High Pitch CT Imaging vs Standard Pitch in the Assessment of Acute Pulmonary Embolism**
Saavas Nicolaou, MD

8:20-8:30 **How Severe is that Pulmonary Embolism? Novel CT Approaches**
U. Joseph Schoepf, MD, FAHA

8:30-8:40 **Assessment of Ventricular Ejection Fraction in Acute Pulmonary Embolism Utilizing Dual Source Ultra High Pitch CT**
Saavas Nicolaou, MD

8:40-8:50 **CT Pulmonary Perfusion in Follow Up of PE**
Edwin Van Beek, MD

8:50-9:00 **Evidence-based Guidelines for Imaging of PE in Pregnancy**
Ann N. Leung, MD

9:00-9:10 **CT in Differential Diagnosis of Pulmonary Hypertension**
Edwin Van Beek, MD

9:10-9:20 **New MDCT Criteria for Pulmonary Hypertension**
Johnny Vlahos, BSc, MBBS, MRCP, FRCR

9:20-9:35 **Coffee Break & Exhibits**

9:35-9:45 **MDCT of Micronodular Lung Disease: an Approach**
Page McAdams, MD

9:45-9:55 **Management of Non-solid Pulmonary Nodules**
Ann N. Leung, MD

9:55-10:05 **MDCT of the Central Airways**
Page McAdams, MD

10:05-10:15 **Lung Cancer Screening: Where are We Now?**
Johnny Vlahos, BSc, MBBS, MRCP, FRCR

10:15-10:25 **MDCT of Hypersensitivity Pneumonitis: an Oft-forgotten Lung Disease**
Page McAdams, MD

10:25-10:35 **Concepts for Dedicated CT of the Breast**
Willi A. Kalender, PhD

10:35-10:50 **Discussion**

SESSION XI: CARDIO I: RIGHT HEART, TRAUMA, & INTRO TO CAD:
Moderator

10:50-11:00 **Assessment of the Right Ventricle Morphology and Function**
Emmanuel Coche, MD, MD

11:00-11:10 **MDCT Diagnosis of Cardio-Pericardial Injury**
Stuart Mirvis, MD

11:10-11:20 **MDCT Imaging of Blunt Cardiac Trauma**
Uli Linsenmaier, MD

11:20-11:30 **“The CAD Global Problem – The Potential Impact of MDCT”**
João A. C. Lima, MD

11:30-11:40 **Current Cardiac CT Practice: Worldwide Survey Results**
Marc Dewey, MD

11:40-11:50 **Mortality Risk of Obstructive CAD in a Propensity Score-Matched Cohort of Non-Diabetic and Diabetic Individuals: A Prospective Multicenter Study of 10,110 Matched Patients Without Known Coronary Artery Disease from the CONFIRM (Coronary CT Angiography Evaluation For Clinical Outcomes: An International Multicenter) Registry**
James Min, MD

11:50-12:05 **Discussion**

12:05-1:20 **Lunch Break**

SESSION XII: CARDIAC II: CORONARY ARTERIES & LEFT HEART
Moderator

1:20-1:30 **Calcium Score by CT – When and How I Use it**
João A. C. Lima, MD

1:30-1:40 **Something for Nothing: Free Calcium Scoring**
Andrew Einstein, MD

1:40-1:50 **CT Coronary Artery Calcium in Patients with COPD**
Edwin Van Beek, MD

1:50-2:00 **Chronic Myocardial Infarction Detection and Catheterization During CAC Scoring Acquisitions**
Gaston A. Rodriguez-Granillo MD, PhD

2:00-2:10 **Prognostic Value of Atherosclerotic Disease Burden Assessed with CT**
Paul Schoenhagen, MD

- 2:10-2:20 **“From Plaque Burden to Ischemic Burden – Assessment by MDCT”**
João A. C. Lima, MD
- 2:20-2:30 **CCTA for Obstructive Disease- Where We are**
Jonathon Leipsic, MD FRCPC
- 2:30-2:40 **Prognostic Value of Coronary CT Angiography for Prediction of Mortality: Results from 24,775 Consecutive Patients Without Known Coronary Artery Disease from the CONFIRM Registry (Coronary CT Angiography Evaluation for Clinical Outcomes: An International Multicenter) Registry**
James K. Min, MD
- 2:40-2:50 **Predictive Value of CAD as Detected by CTA**
Prof. Dr. Hans-Christoph Becker
- 2:50-3:00 **Non-invasive Assessment of Vulnerable Plaque by MDCT**
Gaston A. Rodriguez-Granillo MD, PhD
- 3:00-3:10 **Prediction of Post-PCI Ischemia Resolution by Non-invasive Fractional Flow Reserve Derived From Computational Fluid Dynamics Derived from Coronary CT Angiography**
James K. Min, MD
- 3:10-3:20 **CTA Determination of Intramural Aberrant Coronary Arteries-reality or Illusion**
Francies Chan, MD, PhD
- 3:20-3:30 **Relative Therapeutic Benefit of Revascularization versus Medical Therapy for Patients Undergoing CCTA**
James K. Min, MD
- 3:30-3:45 **Discussion**
- 3:45-3:55 **Coffee Break & Exhibits**
- 3:55-4:05 **CT Myocardial Perfusion Imaging: Protocol Considerations**
Richard T. George, MD
- 4:05-4:15 **Stress Perfusion CT and CT Viability Imaging of the heart: A Comprehensive CT Approach to Coronary Heart Disease**
Konstantin Nikolaou, MD
- 4:15-4:25 **Qualitative and Quantitative Analysis of CT Myocardial Perfusion Imaging**
Richard T. George, MD
- 4:25-4:35 **CTA & CTP in Patients with Coronary Revascularization**
Prof. Dr. Hans-Christoph Becker
- 4:35-4:45 **The Clinical Evidence for CT Myocardial Perfusion**
Richard T. George, MD
- 4:45-4:55 **Early Assessment of Myocardial Viability by Delayed Enhancement CT**
Gaston A. Rodriguez-Granillo MD, PhD
- 4:55-5:05 **Non-contrast CTA for TAVI Planning**
Catherine Dao, MD
- 5:05-5:15 **CT-PET in Assessment of Aortic Stenosis – Initial Results**
Edwin Van Beek, MD
- 5:15-5:25 **The Impact of Incidental Findings at Cardiac CT**
Geoffrey D. Rubin, MD
- 5:25-5:40 **Discussion**
- 5:40 Fine

Please note that program may slightly change. Please refer back to website for final schedule.

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