

A photograph of a smiling man in a suit, overlaid with a semi-transparent green filter. He is holding a caduceus symbol, which consists of a staff with two snakes entwined around it and wings at the top. The symbol is positioned in front of his chest.

**RSNA** | **2006**  
Strengthening  
Professionalism

SUBSPECIALTY CONTENT BROCHURE

# Cardiac Radiology

Radiological Society of North America

92nd Scientific Assembly

and Annual Meeting

November 26 – December 1, 2006

McCormick Place, Chicago

Subspecialty content brochures organize the components of the annual meeting by subjects that correspond to radiologic subspecialties. We hope this brochure, along with the meeting program, helps to enrich and ease your experience at RSNA 2006.

### **RSNA Annual Meeting CME Information**

RSNA® is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

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Physicians should only claim credit commensurate with the extent of their participation in the activity.

### **Sunday, November 26, 2006**

- 10:45-12:15      **Scientific Paper Sessions**  
Cardiac (CT) (E353C)  
Cardiac (MR) (S503AB)
- 2:00-3:30        **Refresher Course**  
The Heart on Chest Radiographs and CT Scans: Practicalities of Daily Interpretation (Course RC103) (S406A)

### **Monday, November 27, 2006**

- 8:30-10:00      **Refresher Course**  
Cardiac MR Imaging: From Physics to Protocols (Course RC203) (E451B)
- 10:30-12:00     **Scientific Paper Sessions**  
Cardiac (Multimodality) (E353C)  
Chest (Computer-aided Diagnosis) (E351)  
ISP: Cardiac (CT) (S503AB)
- 3:00-4:00        **Scientific Paper Sessions**  
Cardiac (CT) (S503AB)  
Cardiac (MR) (E353C)
- 4:30-6:00        **Special Focus Session**  
Cardiac CT: The Essential Diagnosis (S406B)

### **Tuesday, November 28, 2006**

- 8:30-10:00      **Refresher Courses**  
Coronary Artery CT and CT Angiography (Course RC303) (E450B)

Multidetector CT of Pulmonary Arteries, Heart, and Thoracic Aorta (Course RC301) (S406B)

- 10:30-12:00**      **Scientific Paper Sessions**  
Cardiac (CT) (E353C)  
Cardiac (MR) (S503AB)  
Nuclear Medicine (Cardiovascular) (S502AB)
- 1:30-2:45**      **Plenary Session**  
Annual Oration in Diagnostic Radiology and Gold Medal Awards (Arie Crown Theater)
- 3:00-4:00**      **Scientific Paper Sessions**  
Cardiac (CT) (E353C)  
Cardiac (MR) (S503AB)
- 4:30-6:00**      **Refresher Course**  
How to Perform and Interpret Cardiac MR Imaging: A Primer (Course RC403) (E450B)

### **Wednesday, November 29, 2006**

- 8:30-10:00**      **Refresher Course**  
Adult Congenital Heart Disease: Pre- and Postoperative Evaluation with MR Imaging and CT (Course RC503) (N227)
- 10:30-12:00**      **Scientific Paper Sessions**  
Cardiac (CT) (S503AB)  
ISP: Cardiac (MR) (E353C)
- 3:00-4:00**      **Scientific Paper Sessions**  
Cardiac (CT) (S503AB)  
Cardiac (MR) (E353C)
- 3:30-5:00**      **Multisession Course**  
Essentials of Cardiac Imaging (S100AB)

### **Thursday, November 30, 2006**

- 8:30-10:00**      **Refresher Courses**  
Cardiac MR and CT: Read Cases with the Experts (An Interactive Session) (Course RC603) (S402AB)  
  
CT of Coronary Artery Disease (How-to Workshop) (Course RC651) (E261)  
  
Update Course in Diagnostic Radiology Physics: Multidimensional Image Processing, Analysis, and Display—Computer-aided Diagnosis in Cardiothoracic Imaging (Course RC632) (S403B)
- 10:30-12:00**      **Multisession Course**  
Case-based Review of Magnetic Resonance (Cardiac and Vascular MR Imaging) (S100)

**10:30-12:00 Scientific Paper Session**

Cardiac (CT) (E353C)

**4:30-6:00 Refresher Courses**

Advances in Cardiac Nuclear Imaging:  
SPECT, SPECT/CT, and PET/CT  
(Course RC711) (N227)

One-Stop Shopping with Cardiac Imaging: CT  
or MR? (Course RC703) (N229)

**Friday, December 1, 2006**

**8:30-10:00 Refresher Courses**

Cardiac Imaging for the Thoracic Radiologist  
(Course RC801) (E353B)

What Every Radiologist Needs to Know about  
the Coronary Arteries (Course RC803)  
(S406A)

**10:30-12:00 Scientific Paper Session**

Cardiac (CT) (E353C)

**Education Exhibits**

Space No.

Exhibit Title

LL-CA4610

Hypertrophic Cardiomyopathy (HCM): The  
Role of Cardiac MR for Diagnosis,  
Classification, Differential Diagnosis, and  
Posttreatment Follow-up

LL-CA4611

Pass or Mass? A Location-based Approach to  
Cardiac Masses and Pseudomasses

LL-CA4612

What Interventional Cardiologists Want to  
Know before and after Arrhythmia Ablation:  
Physiological Background, Current Techniques  
of IVR, and MDCT Imaging

LL-CA4613

MR Imaging Morphologic and Functional  
Assessment of Valvular Heart Diseases

LL-CA4614

Clinical Impact of Cardiac MR Imaging in  
Collagen Diseases

LL-CA4615

Studies Comparing Coronary Multidetector  
Computed Tomography and Intravascular  
Ultrasound: Implications of Imaging Geometry

LL-CA4616

Typical and Atypical Presentations of  
Anomalous Coronary Arteries by CT Coronary  
Angiography with Conventional Coronary  
Angiography Correlation

LL-CA4617

A Pictorial Review of Coronary Artery  
Anatomy: Normal Variants and Anomalies as  
Demonstrated on State-of-the-Art 64 Slice  
MDCT Coronary Angiography

LL-CA4618-L11

The Role of Cardiac Magnetic Resonance  
Imaging in the Diagnosis and Classification of  
Anomalous Coronary Arteries

LL-CA4619

How to Describe Coronary Atherosclerotic  
Plaque Features by State-of-the-Art Multislice CT

- LL-CA4620 A Practical Guide to Perform Routine High Quality Coronary CT Angiography
- LL-CA4621 Postprocessing Workflow of Coronary CT Angiography
- LL-CA4622 Multislice Computed Tomography (MSCT) Angiography and Cardiac Magnetic Resonance (CMR) to Assess Coronary Chronic Total Occlusion (CTO): The Radiologist Point of View
- LL-CA4623 A Review of Normal Coronary Artery Anatomy and Common Variants Using Multimodality Imaging
- LL-CA4624 ECG-gated Reconstruction in Coronary CT Angiography Using 256-Slice Multislice CT: Half Reconstruction and Segmented Reconstruction
- LL-CA4625-D12 Brief Review and Self-Assessed Exam for Detection of the Coronary Artery Stenosis on the ECG-Gated Coronary CT: Correlation with Conventional Angiography
- LL-CA4626 Cardiac Anatomy on MDCT
- LL-CA4627 Coronary Stent Imaging with MDCT: Artifacts, Limitations, and Troubleshooting
- LL-CA4628-D11 Coronary Magnetic Resonance Angiography: Current Techniques and Tips
- LL-CA4629-H12 From Cell to Management: Primer of Coronary Artery Disease Atherogenesis, Epidemiology, and Management
- LL-CA4630 Value of Multislice Computed Tomography Coronary Angiography to Predict the Outcome of Percutaneous Recanalization of Chronic Total Occlusions.
- LL-CA4631 Automatic Selection of Optimal Cardiac Phase in Coronary CT Angiography (CTA): Velocity Map Method
- LL-CA4632 The Utility of Coronary CTA in the Early Triage of Patients Presenting with Acute Chest Pain: Case Studies
- LL-CA4633 Clinical Experience with Coronary CT Angiography (CTA) Using 256-slice Multislice CT (MSCT): Comparison with 64-slice MSCT
- LL-CA4634-R11 Whole Heart Coronary Magnetic Resonance Angiography: How to Perform It and Where Does It Fit In?
- LL-CA4635 Multidetector Row Computed Tomography of the Coronary Veins before Cardiac Resynchronization Therapy for Heart Failure
- LL-CA4636 A Decade of Coronary CT Imaging: Evolution from EBT to Dual Source CT—Impact on Workflow, Patient Preparation, Scan Protocols, and Image Quality
- LL-CA4637 Dose Reduction in Coronary CT Angiography with Dual Source CT: How Does It Work?

- LL-CA4638 Imaging of Transposition of the Great Arteries Complex in Adults
- LL-CA4639 Coronary Artery Anomalies at 64-slice Coronary CT Angiography
- LL-CA4640 The Application of Magnetic Resonance Imaging in the Assessment and Follow-up of Grown-up Congenital Heart Disease
- LL-CA4641 MDCT Imaging of Coronary Anomalies
- LL-CA4642 The ABCs of VSDs: Understanding Ventricular Septal Defects
- LL-CA4643-L12 What Can We Do for Patients after Repair of Tetralogy of Fallot Using Cardiovascular Magnetic Resonance (CMR)?
- LL-CA4644 No-Reflow Phenomenon: Diagnosis and Clinical Implications
- LL-CA4645 Cardiac MR Imaging (CMRI) and 31-P Spectroscopy (MRS) in Surgical Ventricular Restoration (SVR) of Postischemic Cardiomyopathy: Technical Procedures and Clinical Interpretation
- LL-CA4646 Advantages of 3.0-T MR Imaging Cardiac Imaging in Clinical Cases: What's Improved in 3T Cardiac MRI?
- LL-CA4647 Cardiac Functional Analysis with "One-Beat Whole Heart Imaging" Using the 2nd Spec 256-Multislice CT
- LL-CA4648 Multidetector-row CT Presentation of Ischemic Heart Disease: Focused on Two-phase Myocardial Enhancement Pattern and Complications of Myocardial Infarction
- LL-CA4649 Delayed Enhancement Computed Tomography for Myocardial Viability: What Correlation with Provocative Tests?
- LL-CA4651-H11 The Ambiguous Pulmonary Venoatrial Junction: A New Perspective
- LL-CA4652 A Cardiac CT Interpretation Primer
- LL-CA4653 What You Need to Know about Cardiac MR Imaging at 3T: New Developments and Technical Considerations
- LL-CA4654 CT Scanning of Patients with Implantable Cardiac Rhythm Management Devices (ICRMDs): What We Should Know
- LL-CA4655 Imaging of Ventricular Assist Devices Used in Severe Heart Failure and Their Complications
- LL-CA4656 Cardiac MRI: Fundamentals and Physics for the Clinical Radiologist
- LL-CA4657 Cardiology for the Radiologist
- LL-CA4658 Nuclear Cardiac Imaging: An Interactive Case-based Tutorial
- LL-CA4659 Cardiac Resynchronization Therapy: What the Radiologist Needs to Know

- LL-CA4660 Cardiac and Pericardial Calcifications That Present on Chest Radiographs: A Review of Anatomical and Pathological Structures That Calcify, Their Importance, and a Guide to Recognizing Them
- LL-CA4661 Cardiac Thrombi and Pulmonary Thromboemboli on MDCT and MR Imaging
- LL-CA4662 The Spectrum of Aneurysms of the Heart and Their Appearance in ECG-gated 64-Detector Row Computed Tomography
- LL-CA4663 Highly Time-resolved, Contrast-enhanced 3D MRA in Cardiovascular Diseases: Radiological Illustrations with Relevant Correlation to Conventional 3D CE-MRA
- LL-CA4664 Efficacy of Cardiac MR Imaging in Kawasaki Disease: Past, Present, and Future
- LL-CA4665 Optimal Strategy of Stress/Rest Perfusion MRI and Late Enhancement for a Differential Diagnosis and Follow-up of Myocardial Diseases, Based on Our Own Cases as Well as Literary Consideration
- LL-CA4956-B11 Multislice Computed Tomography Coronary Angiography: Artifacts That Mimic Coronary Artery Disease
- LL-CA5070-R Cardiac and Coronary CTA: An Interactive Atlas
- LL-CA5071 Web-based System of Instruction and Self-Evaluation in the Basics of Cardiac MR Imaging
- LL-CA5072 64-slice Coronary CT Angiography: How, When, and Why
- LL-CA5073 Coronary CT Angiography: Short Overview of Technical Aspects, Current Concepts, and Perspective
- LL-CA5074 Salvage CT after Cath Lab, or Coronary CT Angiography after a Non-Diagnostic Catheter Angiogram
- LL-CA5075 Complex Lesion Stenting Techniques in Coronary Arteries: Noninvasive Imaging with 64-slice CT Coronary Angiography
- LL-CA5076 Exposure Dose Reduction in Coronary CT Angiography (CTCA) Using 64-Slice Multislice CT (MSCT): Understanding of the Characteristics of ECG Dose Modulation and Performing Clinical Examinations with Low Invasiveness
- LL-CA5077-B Interpretation and Editing of the ECG in Coronary CTA (CCTA): Skill of the Radiologist and the Ability to Edit the ECG Trace is a Major Determinant of Image Quality
- LL-CA5078-D Limitations and Pitfalls in Interpretation of Coronary CTA

LL-CA5079	Delayed Contrast Enhancement in MR Evaluation of Patients with Congenital Heart Disease
LL-CA5080	Variation of Coronary Artery Anatomy in Patients with Transposition of the Great Arteries Demonstrated by 64-MDCT
LL-CA5081	Anomalous Coronary Arteries in Adults: Depiction at Multidetector-row Computed Tomography
LL-CA5082-H	Review of Mechanical Heart Valves
LL-CA5083	The Use of ECG Modulated mA in CT Cardiac Scans: How to Optimize Dose Reduction Effect
LL-CA5084	Congenital and Acquired Abnormalities of Cardiac Valves
LL-CA5085	History of Cardiac CT: Single to 256-Detector Row Multislice CT
LL-CA5086-L	Cardiac Conduction System: Anatomical Landmarks Relevant to Interventional Electrophysiology Techniques Demonstrated by 64 MDCT
LL-CA5087	Coronary CT Angiography 2006: Principles, Techniques, and Case Studies
LL-CA5088	Optimization of Coronary CTA Techniques and Proposal of Standard Image Reconstruction for Image Interpretation and PACS Transmission
LL-ED3404	Cardiac Case of the Day
LL-MS2641	A Step-by-Step Practical Guide to Starting a 3D Imaging Laboratory
LL-NM3144-H	SPECT/CT Imaging: Clinical Utility of an Emerging Technology

## Scientific Posters

Space No.	Poster Title
LL-CA4075-B01	Coronary CT Angiography with 64-slice MSCT: Effect of the Heart Rate on the Image Quality and the Reconstruction Phase
LL-CA4076-B02	Diagnostic Performance of 64-slice CT in Symptomatic Patients with Previous Coronary Bypass Surgery: Evaluation of Grafts and Coronary Arteries
LL-CA4077-B03	Noninvasive Assessment of 105 Coronary Stents by 64-slice Computed Tomography: In Stent Lumen Visibility and Patency
LL-CA4078-B04	Risk Stratification for 30 Day Mortality Using CTA for Acute Pulmonary Embolism (PE): Retrospective Comparison between Standardized 4 Chamber and Axial Views in 634 Consecutive Patients

- LL-CA4079-B05 Cardiac Contrast-enhanced MRI for Noninvasive Detection of Myocardial Fibrosis in Patients with Aortic Valve Stenosis
- LL-CA4080-B06 Patient-absorbed Dose during Coronary Angiography and Percutaneous Transluminal Coronary Angioplasty
- LL-CA4081-B07 Evaluation of Acute Myocardial Infarction with MRI Enhancement Pattern in Comparison with 201Tl and 99mTc-HMDP Dual SPECT
- LL-CA4082-B08 A Physician Survey to Determine the Tradeoff between Sensitivity and Specificity in the Diagnosis of Acute Coronary Syndrome in the Emergency Department
- LL-CA4083-B09 Coronary and Thoracic Aorta CT Angiography: Frequency and Spectrum of Collateral Findings in 194 Patients
- LL-CA4084-B10 A Comparison of the Diagnostic Accuracy of Multidetector Computed Tomographic Angiography in Coronary Artery Bypass Grafts: A Meta-analysis
- LL-CA4085-D01 A Robust "Beat by Beat" Cardiac Imaging in Patients with Atrial Fibrillation Using 256 Multi-slice Row CT
- LL-CA4086-D02 Efficacy of an Intravenous Premedication Regimen in Reducing Heart Rate prior to Coronary CT Angiography
- LL-CA4087-D03 Cine Viability Cardiac MR Imaging Using Contrast-enhanced 3D Steady-state Free Precession Imaging
- LL-CA4088-D04 Delayed Enhancement in Patients with Arterial Hypertension: Initial Results on Cardiac MRI
- LL-CA4089-D05 Late Myocardial Enhancement Assessed by 64-MSCT in Reperfused Porcine Myocardial Infarction: Diagnostic Accuracy of Low-Dose CT Protocols in Comparison to Magnetic Resonance Imaging
- LL-CA4090-D06 Assessment of Coronary Stents Using 40-detector CT: Comparison with 16-detector CT in Vitro
- LL-CA4091-D07 The Contrast-Fluid Level in Inferior Vena Cava (IVC Contrast Level Sign): A New CT Finding in a Patient with Acute Cardiac Tamponade
- LL-CA4092-D08 ECG-gated 16 Row Multidetector Cardiac CT for the Pre- and Postoperative Evaluation of Patients Undergoing Totally Endoscopic Coronary Artery Bypass Grafting (TECAB)
- LL-CA4093-D09 Anomalous Right Coronary Artery Originated from Left Coronary Sinus with Interarterial Course: Evaluation of the Proximal Segment on Multidetector Row CT with Clinical Correlation
- LL-CA4094-D10 Clinical Importance of Residual Defect at 15 Min. on Contrast-enhanced MRI in Reperfused Acute Myocardial Infarction

- LL-CA4095-H01 Open Heart Re-operations after Coronary Artery Bypass Grafting: The Role of Preoperative Imaging with Cardiac Gated Multidetector Computed Tomography
- LL-CA4096-H02 Sixty-four Slice Multidetector Computed Tomography in the Evaluation of Arrhythmogenic Right Ventricular Cardiomyopathy: Clinical Utility and Radiographic Findings
- LL-CA4097-H03 Transcatheter Ablation of Atrial Fibrillation (AF): Image Fusion of MR Angiography (MRA) Model and Electroanatomical Maps
- LL-CA4098-H04 Optimal EKG Phases for Coronary Artery Assessment with Cardiac CT Angiography
- LL-CA4099-H05 Late Acquisition for the Evaluation of Myocardial Viability by MSCT
- LL-CA4100-H06 Early and Delayed Myocardial Enhancement in Myocardial Infarction Using Two-Phase Contrast-enhanced Multidetector Row CT
- LL-CA4101-H07 Coronary Angiography by 64-Detector Row CT Using Low Dose of Contrast Media with Saline Chaser: Influence of Total Injection Volume on Vessel Attenuation
- LL-CA4102-H08 Feasibility and Safety of Coronary Multidetector Computed Tomography (MDCT) in Patients with Acute Chest Pain
- LL-CA4103-H09 Cardiac CT Angiography: Extracardiac Findings
- LL-CA4104-H10 Reliability of MR Flow Measurements in the Ascending Aorta and the Main Pulmonary Artery
- LL-CA4105-L01 Visualization of Coronary In-Stent Neointimal Proliferation by 64-slice Computed Tomography: Comparison with Invasive Coronary Angiography
- LL-CA4106-L02 Myocardial Bridging in Heart Transplant Patients: Evaluation with MSCT
- LL-CA4107-L03 MRI-detected Unrecognized Myocardial Infarction Not Associated to Atherosclerosis?
- LL-CA4108-L04 MR-based Blood Velocity Measurements in the Coronary Arteries in Patients before and after Aortic Valve Replacement
- LL-CA4109-L05 Influence of Heart Rate in the Selection of the Optimal Reconstruction Phase in Clinical Routine Multi-slice Coronary Angiography
- LL-CA4110-L06 Unsuspected Coronary Artery Anomalies Found during 64-Detector Multi-slice CT Evaluations of Congenital Heart Disease
- LL-CA4111-L07 Clinical Application of ECG Edit Software in 64-slice MDCT for Coronary CT Angiography: Initial Experience

- LL-CA4112-L08 Assessment of the Presence and Extent of Coronary Collateralization by Coronary Computed Tomographic Angiography in Patients with Total Occlusions
- LL-CA4113-L09 Differences in Coronary Plaque Burden as Detected by Coronary MDCT between Patients with and without Metabolic Syndrome (MetSyn)
- LL-CA4114-L10 The Influence of Technique Factors on Image Quality in Multidetector CT Coronary Angiography
- LL-CA4115-R01 Cardiac Arrhythmias during Coronary CT Angiography: Early Experience with Dedicated Software for ECG Editing
- LL-CA4116-R02 Comparison of Heart Rate Variation on the ECG-gated 16-row and 64-row Multidetector Helical CT (MDCT)
- LL-CA4117-R03 Heart Rate Fluctuation and Its Influence on Image Quality in Coronary Artery Imaging with 64-detector Helical CT and the Image Quality of RCA2 Will Decrease When Heart Rate Fluctuation Over 9 bpm
- LL-CA4118-R04 Variant Anatomy of the Left Atrial Appendage: Potential Impact on Planning for Electrophysiologic Ablation Procedures
- LL-CA4119-R05 Optimizing Coronary CT Angiography
- LL-CA4120-R06 3T MRI in Acute Myocardial Infarction: Myocardial Damage Assessed by Contrast Injection
- LL-CA4121-R07 Cardiac MR: Progression of Myocardial Edema and Fibrosis after Acute Infarction
- LL-CA4122-R08 Multislice Spiral Computed Tomography for the Evaluation of Stent Patency after Left Main Coronary Artery Stenting: A Comparison with Conventional Coronary Angiography and Intravascular Ultrasound
- LL-CA4123-R09 Is Coronary Imaging with MSCT Still Impossible in Patients with Atrial Fibrillation? Comparison of a New Frequency Adapted MSCT Reconstruction Algorithm and Standard Invasive Angiography
- LL-CA4124-R10 Coronary CT Angiography Using 2nd-spec 256-Detector-row CT