



HOTEL INFORMATION

THE SANCTUARY AT KIAWAH ISLAND

Along the pristine shores of Kiawah Island, South Carolina, The Sanctuary at Kiawah Island captures the spirit and charm of southern hospitality. This exquisite luxury hotel, just 30 minutes from downtown Charleston, radiates with ultimate oceanfront living and leisure. You'll be presented with a superb complement of guestrooms, Club Level accommodations and suites that exude the essence of resort elegance. And the privilege of golfing five championship courses, basking in a unique nature-based spa, and playing at two world-class tennis clubs will be yours. Discover one of America's most beautiful natural environments starting with a walk along 10 miles of private beach aglitter with seashells, sand dollars and conches. Give canoeing, biking or kayaking a go. Greet the day with club in hand on the award-winning fairways of Pete Dye's Ocean Course and Jack Nicklaus' Turtle Point, then soothe and smooth with spa treatments inspired by the ocean, maritime forest and botanical gardens. Glide through the streets of charming Charleston in a horse-drawn carriage, or join a walking tour that reveals the history and mystery of this timeless town.

LOCATION

Sanctuary at Kiawah is 30 minutes from Charleston. Nearest airport, Charleston International, CHS, 33 miles. Directions from the airport: Upon exiting the airport, turn right onto I-526 West towards Savannah. I-526 will end in approximately six miles. Turn right onto US-17 South. Travel about 5 miles and turn left onto Main Road. Follow the signs to Kiawah Island, 45 minutes. Johns Island, SC, JZI-Charleston Executive, private/corporate jets, 15 minutes away.

HOTEL ROOM RATES, SERVICES AND RESERVATION

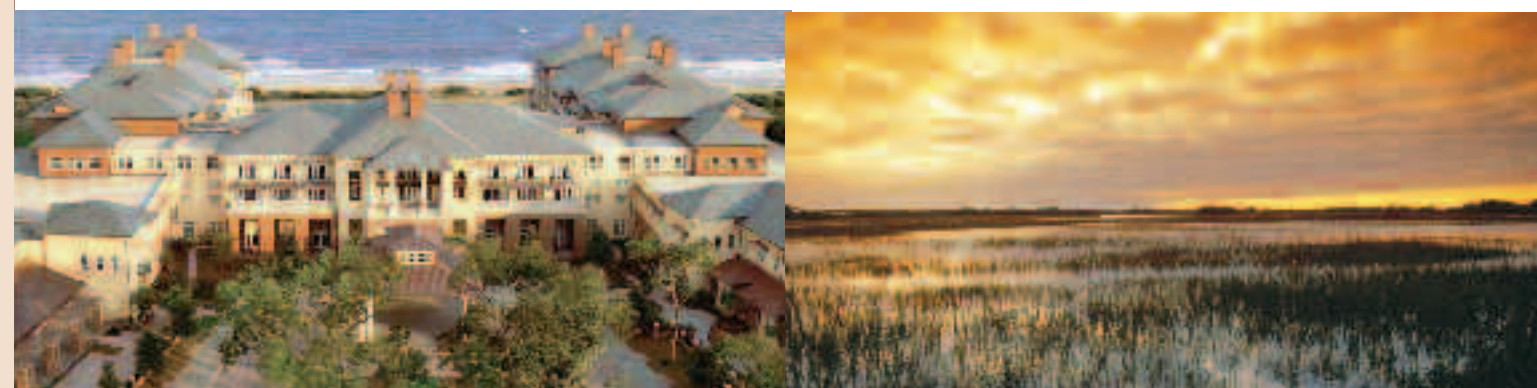
Charleston Course at the Sanctuary, Kiawah Island Golf Resort, SC • February 22-25, 2009.
ROOM RATES: SINGLE/DOUBLE \$239. All rates include on-island transportation to all resort venues via the existing fleet of resort vehicles and all local and 800 telephone access. Services guests receive at no charge are high speed internet access, golf club storage, access to fitness center, and coffee in the lobby from 6:30 to 7:30 a.m., self parking, beach services, and overnight shoe shine. Rates are presently subject to a 6.5% South Carolina state tax and a total of 5% local taxes. The maximum occupancy at Kiawah is two (2) adults per bedroom. Children under the age of 18, when accompanied by an adult staying in the same room are free of charge. To receive group rates you must reserve by **January 21, 2009** or until our room block has been filled. After that date, rack rates may apply and rooms will be reserved on a space available basis. We urge you to make your reservations early. - **THE HOTEL WILL SELL OUT!** - Phone 800-654-2924 to make your reservations. Make sure that you reference this conference when making your reservations.
www.thesanctuary.com

Medical University of South Carolina
 Department of Radiology

February 22-25, 2009

The Charleston Course at the Sanctuary
Cardiac Imaging 2009

Course Directors: Philip Costello, M.D., U. Joseph Schoepf, M.D.



**Includes 50 Cardiac CT Mentored Case Review
 Meets ACR / ACC Competency Requirements**

Registration

**The Charleston Course at the Sanctuary:
 Cardiac Imaging 2009
 February 22-25, 2009 at Kiawah Island Resort**

(Please print or type all information on this form)

 Last Name First Name MI

 Your Area of Specialty

 Personal ID Number (Please use the last four digits of your SSN)

 Mailing Address

 City State Zip

 Country

(_____) _____ (_____) _____
 Office Telephone Office Fax

 Email address

No pre-registrations will be accepted after February 18, 2009.
 After February 18, 2009 you must register on-site at the conference.

Please check your tuition category

	Early Fee Before 1/2/09	Regular Fee After 1/2/09
____ Physicians in practice	\$795	\$895
____ Physicians in training*, Nurses/ Technicians	\$595	\$695

*Must include letter from your immediate supervisor

Total enclosed \$ _____

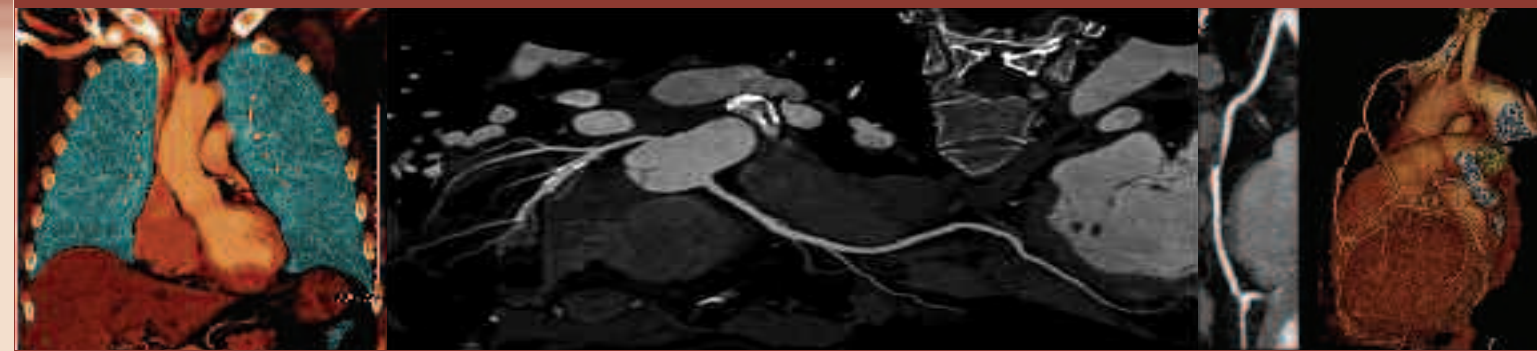
Payment must accompany registration:

____ Check Payable to MUSC - Office of CME (US Bank only)
 ____ MasterCard ____ Visa ____ AMEX ____ Discover

 Cardholder's Name

 Card Number Expiration Date

Please use ONE of these methods to register
 (do not mail if previously faxed or phoned):
 • Mail registration form with check or credit card information to:
 Odessa Ussery, Office of CME, MUSC, 19 Hagood Avenue, Suite 1004,
 MSC 754, Charleston, SC 29425-0754
 • Telephone: (843) 876-1925 – Registration by credit card only
 • Fax: (843) 876-1931 – Registration by credit card only
 • E-mail: usseryo@musc.edu – Registration by credit card only



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 of SOUTH CAROLINA
 Office of Continuing Medical Education
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 Charleston, SC 29425

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Cardiac Imaging 2009 - Program Schedule



WELCOME

Dear Colleagues: We invite you to participate in this MUSC sponsored Cardiac Imaging course at the Sanctuary Resort on beautiful Kiawah Island. This course is intended for practicing radiologists, cardiologists and other professionals with an interest in recent advances in cardiac imaging. Participants will have an opportunity to learn the basics of cardiac CT and MRI acquisition and interpretation with interactive workstation reviews of 50 cardiac CT exams. This review meets requirements for level 1 credentialing in cardiac CT according to the ACR / ACC guidelines. Current clinical applications of cardiac CT and MR examinations will be discussed and clinical cardiac MRI cases will be reviewed. Participants will receive a practical review of CT and MR imaging of the heart in the context of traditional methods for cardiac evaluation.

Philip Costello MD FACR
Professor and Chair Radiology,
MUSC, 169 Ashley Avenue, PO Box 250322
Charleston SC 29425

INTENDED AUDIENCE

Radiologists and Cardiologists

LEARNING OBJECTIVES

After this activity, you should be able to:

1. Fulfill ACR / ACC Level I cardiac CT credentialing requirements. If Level I has already been attained, the mentored review of 50 cases can be used towards ACC Level II credentialing
2. Describe the technical principles of ECG-synchronized cardiac CT using 64-slice CT and Dual-Source CT technology
3. Describe the principles and applications of cardiac MRI
4. Utilize techniques and protocols for coronary calcium scoring, coronary CT angiography and general cardiac applications
5. Discuss the role of cutting edge CT and MR for current and future cardiac applications
6. Understand the principles of cardiac CT and MR image interpretation
7. Discuss billing and reimbursement strategies for cardiac CT

PURPOSE

Advances in CT and MR technology enable non-invasive imaging of the heart with unparalleled speed and resolution. At the same time more sophisticated imaging technology makes CT and MR scan acquisition more complex and challenging to the user. This 3-day course is devoted to cutting edge cardiac imaging. The faculty is comprised of cardiovascular radiologists and cardiologists from the Medical University of South Carolina, one of the very first sites where cardiac 64-slice and Dual-Source CT became available. The course

CANCELLATION POLICY

A refund for Cardiac Imaging 2009 will be made upon written request prior to January 22, 2009 however \$75 will be retained for administrative costs. No refunds will be made after January 22, 2009. We reserve the right to cancel the program if necessary. Full registration fees will be refunded for canceled programs. The Medical University of South Carolina cannot be responsible for reimbursement of airline or other transportation fares, hotel or rental car charges, including penalties.

format is a combination of didactic lectures, introducing the technical principles and clinical applications of cardiac imaging, and practical tutorials for image interpretation, 3D post-processing and dedicated cardiac applications. The course also includes 50 mentored cardiac CT case interpretations towards ACR/ACC Level I/II credentialing. Cardiac MRI cases will also be reviewed and can be used towards competence credentialing.

ACCREDITATION

The Medical University of South Carolina is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

CME CREDITS

The Medical University of South Carolina designates this educational activity for maximum of 20.75 AMA PRA Category 1 Credit(s)™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

DISCLOSURE POLICY

In accordance with the ACCME Essentials and Standards, anyone involved in planning or presenting this educational activity will be required to disclose any relevant financial relationships with commercial interests in the healthcare industry. This information will be made available to participants at the beginning of the activity. Speakers who incorporate information about off-label or investigational use of drugs or devices will be asked to disclose that information at the beginning of their presentation.

COURSE DIRECTORS:

Philip Costello, MD
Professor and Chair
Department of Radiology
Medical University of South Carolina

U. Joseph Schoepf, MD
Professor of Radiology and Medicine
Medical University of South Carolina

FACULTY:

Gorka Bastarrrika, MD
Cardiovascular Imaging Research Associate
Department of Radiology
Medical University of South Carolina

Pamela B. Morris, MD
Assistant Professor of Medicine
Division of Cardiology
Medical University of South Carolina

Salvatore A. Chiaramida, MD, FACC
Professor of Medicine
Director, Coronary Care Unit
Medical University of South Carolina

Eric R. Powers, MD, FACC
Professor of Medicine
Division of Cardiology
Medical Director Heart and Vascular Center
Medical University of South Carolina

Walter Huda, PhD
Professor of Radiology
Medical University of South Carolina

Luis Ramos Duran, MD
Cardiovascular Imaging Fellow
Department of Radiology
Medical University of South Carolina

Balazs Ruzsics, MD, PhD
Researcher, Department of Radiology
Medical University of South Carolina

Pal Suranyi, MD, PhD
Department of Radiology
Medical University of South Carolina

Peter L. Zwerner, MD, FACC
Assistant Professor of Medicine and Radiology
Medical University of South Carolina

SUNDAY, FEBRUARY 22

3:00 – 6:00 pm Early Registration

MONDAY, FEBRUARY 23 - CARDIAC IMAGING BOOT CAMP

FOR RADIOLOGISTS

- 7:00 Registration and continental breakfast
- 7:30 Coronary Artery Disease: Clinical Questions - *Zwerner*
- 8:10 Discussion
- 8:15 Introduction to Catheter Angiography with CT Correlation - *Powers*
- 8:55 Discussion
- 9:00 Cardiac Computed Tomography: Acquisition Techniques - *Schoepf*
- 9:40 Discussion
- 9:45 Cardiac Function and Perfusion: Clinical Questions - *Chiaramida*
- 10:15 Discussion
- 10:20 Break
- 10:50 Cardiac MR: Techniques and Protocols - *Ruzsics*
- 11:30 Discussion
- 11:35 Interventional Techniques in the Context of Cardiac Imaging - *Powers*
- 12:05 Discussion
- 12:10 Safety Aspects in Cardiac Imaging: Beta-Blockers, Adenosine, etc. - *Morris*
- 12:50 Discussion
- 1:00 Lunch - On your own

FOR CARDIOLOGISTS

- 7:00 Registration and continental breakfast
- 7:30 Technical Principles of Computed Tomography - *Huda*
- 8:10 Discussion
- 8:15 Cardiac Computed Tomography: Acquisition Techniques - *Schoepf*
- 8:55 Discussion
- 9:00 Cross-Sectional Cardiothoracic Anatomy - *Costello*
- 9:40 Discussion
- 9:45 Introduction to CT Coronary Angiography with Catheter Correlation - *Bastarrrika*
- 10:15 Discussion
- 10:20 Break
- 10:50 Extracardiac Findings at Cardiac Imaging - *Costello*
- 11:30 Discussion
- 11:35 Technical Principles of Cardiac MRI - *Suranyi*
- 12:05 Discussion
- 12:10 Cardiac MR: Techniques and Protocols - *Ruzsics*
- 12:50 Discussion
- 1:00 Lunch - On your own

Afternoon Schedule for Radiologists and Cardiologists

- 2.00 Cardiac CT and MR: Imaging Planes, Anatomy, Anomalies - *Costello*
- 2.20 Cardiac CT Scanner Technology in 2009 - *Huda*
- 2.40 Cardiac CT: Common Indications and Findings - *Schoepf*
- 3.10 Discussion
- 3.20 Break
- 3.40 Calcium Scoring in the Era of Coronary CTA - *Morris*
- 4.10 Coronary CT Angiography: Evidence Base in 2009 - *Schoepf*
- 4.30 Radiation Dose at Cardiac CT - *Huda*
- 5.00 Atherosclerotic Plaque Imaging with CTA and MR - *Bastarrrika*
- 5.20 Discussion
- 5.30 Adjourn

TUESDAY, FEBRUARY 24

- 7:00 Registration and continental breakfast
- 7.30 Cardiac CT Case Review: Normal Coronary Anatomy, Variants, Anomalies - *Costello*
- 8.15 Cardiac CT Case Review: Coronary Artery Disease I - *Schoepf*
- 9.00 CT of Bypass Grafts and Pulmonary Veins - *Ramos*
- 9.20 The "Triple-Rule-Out" CT for Acute Chest Pain – Where Do We Stand? - *Schoepf*
- 9.50 Challenging Scenarios in Cardiac CT: Misregistration, Motion, Calcium, Stents, etc. - *Bastarrrika*
- 10.10 Discussion
- 10.20 Break
- 10.40 Cardiac CT Case Review: Bypass Grafts and Pulmonary Veins - *Costello*
- 11.25 Cardiac CT Case Review: Coronary Artery Disease II - *Zwerner*
- 12.10 Clinical Vignettes – Why Did We Perform Cardiac CT, What Did We Find and What Were the Clinical Consequences? - *Morris, Powers, Zwerner, Chiaramida*
- 12.50 Discussion
- 1.00 Industry Luncheon For Participants - No CME Credit will not be awarded for this session
- 2.00 CT Versus MR of the Heart: Competitive or Complementary? - *Ramos*
- 2.20 MR of Valves and Myocardial Function - *Ruzsics*
- 2.50 CT of Valves and Myocardial Function - *Schoepf*
- 3.10 Cardiac Perfusion Imaging with MR - *Ruzsics*
- 3.30 Cardiac Perfusion Imaging with CT - *Schoepf*
- 3.50 Discussion
- 4.00 Break
- 4.20 Cardiac CT Case Review: Myocardium, Valves and Function - *Schoepf*
- 5.05 Cardiac CT Case Review: How To Deal With Poor Quality Studies? - *Bastarrrika*
- 5.50 Discussion
- 6.00 Adjourn

WEDNESDAY, FEBRUARY 25

- 7:00 Registration and continental breakfast
- 7.30 Clinical Vignettes – Why Did We Perform That Cardiac Imaging Study, What Did We Find and What Were the Clinical Consequences? - *All Faculty*
- 8.30 Nuclear Cardiology in the Context of Cardiac CT and MR - *Morris*
- 9.00 Discussion
- 9.10 Cardiac MR Case Review: Morphology - *Suranyi*
- 10.00 Break
- 10.20 Cardiac MR Case Review: Function and Perfusion - *Ruzsics*
- 11.10 How To Set Up a Successful Cardiac Imaging Service - *Costello*
- 11.40 Panel Discussion with Audience Participation: Collaborative Approaches to Patient Centered Cardiac Imaging- *Morris, Chiaramida, Costello, Zwerner, Powers, Schoepf*
- 12.15 Cardiac Imaging Olympics: Unknown Cases for the Audience - *Costello, Schoepf*
- 1.00 Adjourn

