

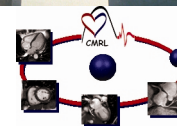
# Washington University in St. Louis School of Medicine

## 8<sup>th</sup> Annual CMR Training Course: The Summit at the Arch

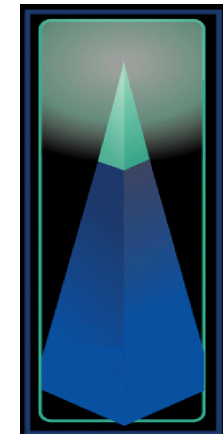
March 28-31, 2006

*Presented by*

Washington University and Oklahoma Heart Foundation



**Three Vendor  
Options  
Available for  
Hands-On  
Training,  
See Web  
Address  
Below**



OKLAHOMA HEART  
Research & Education  
FOUNDATION



### **“Principles and Practice of Cardiovascular MR”**

*Course Chairs*

Samuel A. Wickline, MD FACC,

Edward T. Martin, MD FACC,

Mary P. Watkins, RT (MR)

The Charles F. Knight Executive Education Center

Washington University, St. Louis

*Sponsored By*

Washington University School of Medicine Continuing Medical Education

*Supported in Part By*

Corporate Sponsors

CMR Course web address <http://cmrl.wustl.edu/education/cmrttraining>

## **TUESDAY, March 28**

### **Lecture Series I**

7:30	<i>Course Registration and Continental Breakfast</i>
7:50	Welcome/Introduction
8:00	Basic Physics of CMR (I)
8:45	Cardiovascular Anatomy and Pathology
9:15	CMR Patient Safety & MRI ECG Applications
10:00	<i>Break</i>
10:15	CMR Basic Function Protocol & Image Analysis
10:45	Valves & Flow
11:30	CMR Technology- Software & Hardware
12:00	<i>Luncheon</i>
13:00	Stress Testing
13:30	Interventional MRI
14:15	Personalized Medicine and MRI
15:00	<i>Break</i>
15:15	Setting Up a Clinical CMR Practice
16:00	Diastolic Function
16:45	Case Studies
17:45	<i>Welcome Reception &amp; Marketplace Exhibition*</i>

## **WEDNESDAY, March 29**

### **Lecture Series II**

7:30	<i>Continental Breakfast</i>
8:00	Basic Physics of CMR II
8:45	Cardiomyopathies and RVD
9:15	Pediatric/Congenital CMR
10:00	<i>Break</i>
10:15	3T CMR Applications: Pitfalls and Solutions
10:45	Cardiac Masses
11:15	MRA of the Peripheral Vasculature, Aorta, and Pulmonary
12:00	<i>Luncheon &amp; Marketplace Exhibition*</i>
1:30	Myocardial Perfusion and Viability
2:15	Case Studies
3:15	<i>Break</i>
3:30	Application of CMR in Acute Chest Pain
4:15	MR/CT Coronary Imaging & Plaque Characterization
5:00	Closing Comments

## **AGENDA**

## **THURSDAY, March 30\*\***

### **Hands-on Portion Section I**

7:30	<i>Continental Breakfast</i>	
8:00	Group I	ECG/VCG Setup & CMR Function Video
	Group II	Basic Functional Study
10:00	<i>Break</i>	
10:15	Group II	ECG/VCG Setup & CMR Function Video
	Group I	Basic Functional Study
12:15	<i>Luncheon</i>	
13:30	Group I	Scanning Exercises
	Group II	Image Analysis
15:30	<i>Break</i>	
15:45	Group II	Scanning Exercises
	Group I	Image Analysis

## **FRIDAY, March 31\*\***

### **Hands-on Section Part II**

8:00	<i>Continental Breakfast</i>
8:30	Scanning Exercises/Case Studies
10:00	<i>Break</i>
10:15	Scanning Exercises/Case Studies
11:45	<i>Luncheon</i>
12:45	Scanning Exercises/Practice Image Analysis/Case Studies
14:15	<i>Break</i>
14:30	Scanning Exercises/Practice Image Analysis/Case Studies
16:00	Closing Comments

### **Location/Vendor Options**

- ♥ *Cardiovascular MR Laboratories at Washington University/Philips*
- ♥ *Oklahoma Heart Foundation in Tulsa, OK/General Electric (NEW)*
- ♥ *Mallinckrodt Institute at Washington University/Siemens (NEW)*

## **\*CMR Market Place Exhibition 2006**

**Come visit the Market Place!**

\*\*Sample Hands-On Agenda – This portion will vary dependent upon hands-on location selected.

## **OBJECTIVES**

This course is designed for cardiologists, radiologists, technologists, nurses, and sonographers interested in obtaining knowledge of the principles of cardiovascular MR and its implementation in a clinical environment. After completion of the two-day lecture course, the attendee should be able to:

- ♥ **Acquire** a generalized knowledge of Cardiovascular MR imaging techniques.
- ♥ **Utilize** the techniques of CMR to evaluate congenital heart disease, coronary disease, and myocardium viability.
- ♥ **Demonstrate** familiarity with the implementation of a basic cardiac MR function exam.
- ♥ **Assess** basic imaging protocols for most common referrals.

With completion of the four-day lecture course including hands-on training, all of the above previous objectives plus:

- ♥ **Demonstrate** familiarity with and ability to perform a basic cardiac MR function exam.
- ♥ **Employ** the techniques of CMR for flow assessment in the aortic and mitral valves

## **ACCREDITATION**

Washington University is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians.

## **CREDIT**

Washington University designates this educational activity for a maximum of **27.5** hours (hands-on and lectures) and **15** hours (lectures only) in Category 1 credit towards the Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

The American Society of Radiologic Technologist designates this educational activity for a maximum of **30** hours (hands-on and lectures) and **19** hours (lectures only) in Category A CE credits (approval pending).

## **DISCLOSURE POLICY**

It is the policy of Washington University School of Medicine, Continuing Medical Education, to ensure balance, independence, objectivity and scientific rigor in all its educational activities. All faculties participating in this activity are expected to disclose to the audience any significant financial interest or other relationship he/she has with the manufacturer(s) of any commercial product(s) discussed in an educational presentation.

## **GUEST FACULTY**

### **Andrew Arai, MD**

*Investigator, Laboratory of Cardiac Energetics; National Heart, Lung, and Blood Institute; National Institutes of Health - Bethesda, Maryland*

### **David Bluemke, MD, PhD**

*Associate Professor of Radiology  
Clinical Director of MRI, Department of Radiology  
Johns Hopkins University Medical School- Baltimore, Maryland*

### **Zahi Fayad, PhD**

*Associate Professor, Radiology  
Assistant Professor, Medicine / Cardiology  
Mount Sinai School of Medicine – New York, New York*

### **Scott D. Flamm, MD**

*Director, MRI and Cardiovascular MRI Research  
St. Luke's Episcopal Hospital home of the Texas Heart Institute – Houston, Texas*

### **Mark Fogel, MD**

*Attending Cardiologist / Assistant Radiologist  
University of Pennsylvania Medical Center and the Children's Hospital of Philadelphia  
– Philadelphia, PA*

### **Edward T. Martin, MD**

*Clinical Associate Professor of Medicine  
University of Oklahoma College of Medicine, Tulsa, Oklahoma  
Director of the MRI Center at Oklahoma Heart Institute*

### **Matthias Stuber, PhD**

*Associate Professor, Radiology  
Johns Hopkins University Medical School - Baltimore, Maryland*

## **WASHINGTON UNIVERSITY SCHOOL OF MEDICINE**

### **ACTIVITY FACULTY**

**Shelton Caruthers, PhD, MR** *Clinical Scientist, Philips Medical Systems, Associate Director of Cardiovascular Magnetic Resonance Laboratories*

**Lynn Coulter, RN,** *Project Manager, Cardiovascular Magnetic Resonance Laboratories*

**Tamara Donahue, RN, BSN,** *Clinical Research Coordinator, Cardiovascular Magnetic Resonance Laboratories*

**Bruce Lindsay, MD,** *Associate Professor of Medicine, Director of Clinical Electrophysiology*

**Sandor Kovacs, PhD, MD,** *Associate Professor of Medicine, Physics, & Biomedical Engineering, Adjunct Associate Professor of Physics*

**Gregory Lanza, PhD, MD,** *Assistant Professor of Medicine, Assistant Professor Biomedical Engineering, Cardiovascular Magnetic Resonance Laboratories*

**Kamilla McGhee, BS,** *Research Assistant, Cardiovascular Magnetic Resonance Laboratories*

**Mary P. Watkins, RT (MR) (R),** *Cardiovascular MR Technologist, Cardiovascular Magnetic Resonance Laboratories*

**Samuel A. Wickline, MD, FACC,** *Professor of Medicine, Physics, & Biomedical Engineering, Co-director of the Cardiovascular Division; Co-director Cardiovascular Engineering*

**Todd Williams, RT (MR) (R),** *Cardiovascular MR Technologist, Cardiovascular Magnetic Resonance Laboratories*

**Patrick Winter, PhD,** *Research Instructor of Medicine, Cardiovascular Magnetic Resonance Laboratories*

## GENERAL INFORMATION

**Location:** The Charles F. Knight Executive Education Center, Hilltop Campus of Washington University, St. Louis, MO 63110. A map can be downloaded from <http://www.olin.wustl.edu/KnightCenter>. Since meeting room temperatures are difficult to regulate to everyone's appeal, bringing a jacket or sweater is recommended.

**Hotel:** A block of rooms is available onsite at the Charles F. Knight Center. To assure lodging at the special discounted rates, reservations must be made by March 7<sup>th</sup>, 2006, after which time reservations are accepted on an availability basis at the current rate. Please visit their website at <http://www.olin.wustl.edu/KnightCenter>

**Parking:** Parking is available on-site

### Additional Hotel Accommodations:

#### Chase Park Plaza

232 N. Kingshighway  
St. Louis MO 63108 (314) 633-1000  
(Transportation Available)

#### The Daniele Hotel

216 N. Meramec Ave.  
St. Louis MO 63105 (314) 721-0101  
(Transportation Available)

#### The Parkway Hotel

4550 Forest Parkway Blvd.  
St. Louis MO 63110 (314) 256-7777  
(Next to Washington University Medical Center and 1 block from MetroLink)

**Metro Link:** The Central West End MetroLink Station is conveniently located at the WU Medical Center on Euclid Avenue between Scott Avenue and Children's Place, one block south of the Center for Advanced Medicine (CAM building). Metro Link is accessible as far north as the Airport to downtown St. Louis with stations located at Forest Park; Union Station; Savvis Center; Busch Stadium; 8th & Pine; Convention Center; Laclede's Landing and ending in Shiloh-Scott, Illinois.

**Please Note:** Washington University is not responsible for airline or hotel reservations. Please confirm registration acceptance prior to purchase of non-refundable or penalty airline tickets. If you have not received an acknowledgment within two weeks of your registration submission, please call the Cardiovascular MR Laboratories.

**Cancellations:** Registration fee less \$100 administration charge is refundable only if cancellation is received **in writing by March 7, 2006**. Substitutions allowed with written notice.

### For Further Seminar Information:

Cardiovascular MR Laboratories, Washington University School of Medicine  
Phones: (314) 454-7459 FAX (314) 454-7490  
Website at <http://cmrl.wustl.edu/education>

Minimum and maximum enrollments have been established.

## ADVANCE REGISTRATION

8<sup>th</sup> Annual CMR Training Course:

### The Summit at the Arch

*March 28-31, 2006*

Please register at <http://cmrl.wustl.edu> with our secure online forms, otherwise complete this convenient form. To ensure proper spelling of your name, please print clearly. The information provided will be printed on the attendance roster and when requesting your CME credits exactly as it appears below.

\_\_\_\_\_  
First Name Initial Last Name Degree

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City / State / Zip Code

\_\_\_\_\_  
Office Telephone Number FAX

\_\_\_\_\_  
Specialty/Title:

\_\_\_\_\_  
E-Mail:

\_\_\_\_\_  
Medical School Graduate of:

Washington University \_\_\_\_\_ Other School (indicate) \_\_\_\_\_ Year \_\_\_\_\_

### REGISTRATION FEES

		<b>before 3/8</b>	<b>after 3/7</b>
All Attendees	Lectures and Hands-On	\$1,750.00	\$1925.00
Physicians	Lectures Only	\$475.00	\$525.00
Allied Health	Lectures Only	\$250.00	\$275.00
Fellows	Lectures Only	\$250.00	\$275.00

\* For groups of three or more a 20% discount of lecture portion of fees until March 7<sup>th</sup>  
Fees include enrollment, continuing education credits, educational materials, continental breakfasts, refreshment breaks, luncheons, and admission to the **Market Place Exhibition**.

### **Hands-On Locations/Vendor Options-(select one)**

- Cardiovascular MR Laboratories at Washington University/Philips*
- Oklahoma Heart Foundation in Tulsa, OK/General Electric (NEW)*
- Mallinckrodt Institute at Washington University/Siemens (NEW)*

**Cancellations:** Registration fee less \$100 administration charge is refundable only if cancellation is received **in writing by March 7, 2006**. Substitutions allowed with written notice.

### THREE CONVENIENT WAYS TO REGISTER!

Make check or money order payable to: Washington University, Attn: Marie Duncan, Campus Box 8086, 660 South Euclid Ave., St. Louis, MO 63110

- ON-LINE** at <http://cmrl.wustl.edu/education> (preferred)
- FAX** this completed form to (314) 454-7490
- PHONE** your registration to: (314) 454-7459

For further information refer to our website at <http://cmrl.wustl.edu/education>