



**SCMR**

**Society for Cardiovascular  
Magnetic Resonance**



**International Society for Magnetic  
Resonance in Medicine**

**SCMR/ISMRM Jointly Sponsored Workshop**  
***Accelerated CMR: Towards Comprehensive  
Clinical Cardiovascular Imaging***

**Presented by the SCMR and the ISMRM Cardiac MR and Flow & Motion  
Quantitation Study Groups**

***Thursday, January 16, 2014***



***Hilton New Orleans Riverside, New Orleans, LA***

[www.SCMR.org](http://www.SCMR.org)

[www.ISMRM.org](http://www.ISMRM.org)

# Accelerated CMR: Towards Comprehensive Clinical Cardiovascular Imaging

Thursday, January 16, 2014

The Hilton New Orleans Riverside, New Orleans, Louisiana

## Organizing and Scientific Program Committee:

### Co-chair:

Daniel Ennis, PhD  
University of California-Los Angeles  
Los Angeles, California, USA

### Co-chair:

Nicole Seiberlich, PhD  
Case Western Reserve University  
Cleveland, Ohio, USA

### Committee:

Michael Markl, PhD  
Northwestern University  
Chicago, Illinois, USA

Reza Nezafat, PhD  
Harvard Medical School  
Boston, MA

Jeanette Schulz-Menger, MD  
Charite Universitätsmedizin Berlin  
Berlin, Germany

Orlando Simonetti, PhD  
The Ohio State University  
Columbus, Ohio, USA

Shreyas Vasanawala, MD, PhD  
Stanford University  
Stanford, California, USA

## Overview

The purpose of the workshop is to inform academic researchers and clinical scientists about state-of-the-art and emerging accelerated MRI techniques for cardiovascular imaging. Participants are expected to gain knowledge which will allow them to work with existing fast imaging methods to reduce imaging time, improve spatial and temporal resolution, and enable the development of new applications. Novel image reconstruction techniques including parallel imaging and compressed sensing methods will be examined. Efficient pulse sequence techniques and methods to increase patient throughput will be explored. In addition, the workshop will provide a forum for disseminating information related to cutting-edge rapid imaging techniques for the evaluation of cardiovascular structure, function, myocardial viability and perfusion, tissue characterization, MR angiography, and flow. Emerging applications and outstanding areas of clinical need in cardiovascular MRI will be discussed in order to link technical developments with clinical practice. The interdisciplinary faculty and broad audience will ensure that technologies and methodologies are communicated and shared between cardiologists, radiologists, physicists, engineers, physiologists, trainees, and technologists.

## Target Audience

*This workshop is designed for:*

- Academic scientists including cardiologists, radiologists, engineers and physicists, physiologists, and those who work in fields related to these disciplines.
- Clinicians interested in learning about the most recent advances in rapid imaging and those interested in incorporating rapid imaging techniques in their clinical practice to increase patient throughput or take advantage of novel ways of diagnosing cardiovascular disease.
- Medical, biological, and industrial researchers with an interest in emerging technology for rapid cardiovascular MRI and its implications for clinical cardiovascular MRI.
- Cardiac and other MRI applications specialists and technologists who strive to gain a deeper insight into the basics of rapid MRI sequences and reconstruction techniques and their benefits for cardiovascular MRI.
- Trainees seeking to understand the capabilities and limitations of rapid cardiovascular imaging technology in order to develop improved imaging methods. This may include undergraduate and graduate students, post-doctoral trainees, residents, and fellows.

## Educational Objectives

*Upon completing this workshop, participants should be able to:*

- Describe current clinical challenges in cardiovascular MRI and explain how rapid imaging techniques can alleviate these problems.
- Explain the basics of rapid MRI techniques for cardiovascular applications, including parallel imaging and compressed sensing.
- Understand different state-of-the-art image reconstruction techniques for rapid cardiovascular MRI and articulate the advantages and disadvantages for each technique.
- Examine and select efficient pulse sequences for different cardiovascular applications.
- Design faster cardiovascular MRI protocols for higher patient throughput.
- Describe remaining challenges for the adoption and clinical implementation of state-of-the-art rapid imaging techniques and techniques to improve clinical image quality.
- Explain why rapid MRI techniques have not led to breakthroughs in certain aspects of cardiovascular imaging, and develop strategies to avoid similar failures in the future.
- Articulate several areas where rapid imaging could be transformative for clinical imaging in the near future.

## Hotel Accommodations

The Hilton New Orleans Riverside in New Orleans, Louisiana, has been selected to host the SCMR / ISMRM Workshop and the SCMR 17th Annual Scientific Sessions. The negotiated room rate at the Hilton New Orleans Riverside is \$192.00/night for single or double occupancy plus taxes (currently 13%) and fees (\$3.00 hotel occupancy tax), subject to change. Room reservations and rates will be confirmed on a first come, first served basis until December 17, 2013; after that date, reservation requests will be based on availability at the hotel's prevailing rates. All sleeping room reservations must be guaranteed with a credit card. It is recommended that you make your hotel reservations as early as possible to ensure availability.

Experience the best the Crescent City has to offer from the beautiful Hilton New Orleans Riverside. Located on the banks of the Mississippi, this full-service New Orleans French Quarter hotel is adjacent to countless attractions and restaurants. Settle into comfortable accommodations, enjoy the expansive healthclub and dine within legendary restaurants.

Reservations at the group rate can be made through the SCMR website at [www.scmr.org/meetings](http://www.scmr.org/meetings) by clicking the hotel reservation link; or by calling the toll-free reservation line (800-HILTONS). When making your reservation, please be sure to reference SCMR to obtain the negotiated group rate.



### **Hilton New Orleans Riverside**

Two Poydras Street

New Orleans, Louisiana 70140

Telephone: 504-561-0500

Reservations: 800-HILTONS

Fax: 504-556-3788

Web: [www.NewOrleans.Hilton.com](http://www.NewOrleans.Hilton.com)

# PRELIMINARY AGENDA

**Thursday, January 16, 2014**

- 8:00 am - 9:00 am     **Opening Session: Rapid CMR: Technology Driving Innovation**  
Welcome Address  
Plenary Lecture  
*Historical Developments in Fast Imaging*  
Plenary Lecture  
*Remaining Clinical Challenges and Problems to Solve*
- 9:00 am - 11:00 am     **Scientific Session I: Advances in Reconstruction Strategies**  
Foundations of Reconstruction Techniques for Rapid Imaging  
State-of-the-Art and Up-and-Coming Reconstruction Techniques for CV Imaging  
Oral Abstracts
- 11:00 am - 11:20 am     **Refreshment Break & Posters**
- 11:20 am - 12:50 pm     **Scientific Session II: Advances in Rapid Sequences and Protocols**  
Faster Imaging with Faster Sequences  
Faster Protocols for Patient Throughput  
Oral Abstracts
- 12:50 pm - 2:00 pm     **Lunch (on own) & Poster Viewing**
- 2:00 pm – 4:00 pm     **Scientific Session III: Fast Imaging - Putting It Into Practice**  
Multi-dimensional Acceleration for Comprehensive Cardiovascular MRI: Implementation & Application in the Clinic  
Implementation and Clinical Application for Hardware-Accelerated CMR Reconstruction  
Oral Abstracts
- 4:00 pm - 4:30 pm     **Refreshment Break & Posters**
- 4:30 pm - 6:00 pm     **Session IV: Clinical State-of-the-Art and What Lies Ahead**  
Fast Imaging - Promises and Pitfalls  
Envisioning the CMR Exam of the Future  
Oral Abstracts
- 6:00 pm - 7:30 pm     **Poster Session & Reception**



**REGISTRATION FORM**

For additional information or assistance with this form, telephone: 856-423-8955 option 2. FAX completed form to SCMR Registration: 856-423-3420.

**Save time -- register on line at [www.scmr.org](http://www.scmr.org)**

First (Given) Name	M.I.	Last (Family Name)	Name on Badge	
Affiliation (Employer)		Position/Title	Degree	
Business Address	City	State/Province	Country	Zip Code
Business Telephone	Fax Number	Email Address		

**SCMR/ISMIRM Jointly Sponsored Workshop Registration Fees**

	On or before December 16, 2013	After December 16, 2013 and On-Site	
<input type="checkbox"/> SCMR/ISMIRM Member (MD/PhD)*	\$300.00	\$350.00	\$ _____
<input type="checkbox"/> SCMR/ISMIRM Member (Trainee)*	\$150.00	\$200.00	\$ _____
<input type="checkbox"/> SCMR/ISMIRM Member (Technologist/Allied Health)*	\$150.00	\$200.00	
<input type="checkbox"/> Non-member (MD/PhD)	\$375.00	\$425.00	\$ _____
<input type="checkbox"/> Non-member (Trainee/Technologist)	\$200.00	\$250.00	\$ _____

**Combined Registration Fees for SCMR/ISMIRM Workshop plus Scientific Sessions**

Attending the SCMR Scientific Sessions on January 17-19, 2014? Members of both SCMR and ISMIRM receive a discount off the registration fees for the 2014 SCMR Scientific Sessions.

<input type="checkbox"/> SCMR/ISMIRM Member (MD/PhD)*	\$825.00	\$950.00	\$ _____
<input type="checkbox"/> SCMR Courtesy Membership (MD/PhD)	\$1095.00	\$1220.00	\$ _____
<input type="checkbox"/> SCMR/ISMIRM Member (Trainee)*	\$325.00	\$425.00	\$ _____
<input type="checkbox"/> SCMR/ISMIRM Member (Technologist/Allied Health)*	\$325.00	\$425.00	\$ _____
<input type="checkbox"/> Non-member (MD/PhD)	\$1300.00	\$1425.00	\$ _____
<input type="checkbox"/> Non-member (Trainee)	\$625.00	\$725.00	\$ _____
<input type="checkbox"/> Non-member (Technologist/Allied Health)	\$600.00	\$700.00	\$ _____
		<b>Total**</b>	\$ _____

Special Institutional Group Discount: For every five paid regular registrations from the same institution, one complimentary member trainee or technologist registration will be offered. Online registration for the special institutional group discount is not available. All forms from the group must be submitted together via fax: +856-423-3420 or email: SCMRmtg@talley.com.

**Note:**  
 \*SCMR membership renewal dues for 2014 must be paid by December 31, 2013 to receive the Member Rate for registration to the 17th Annual SCMR Scientific Sessions. Your credit card will be charged the Member/Non-Member difference if your renewal has not been processed by December 31, 2013.

**METHODS OF PAYMENT**

Registration will not be processed without payment.

Enclosed is a check payable to SCMR. Checks must be payable in U.S. Dollars and issued by a U.S. correspondent bank. Please check with your local bank before sending payment. Each registrant is responsible for any and all bank charges. A \$50.00 processing fee will be charged for checks returned unpaid.

Note: Registrations paid by credit card may be faxed to 856-423-3420. Keep a copy of your fax transmittal confirmation for your record. If faxing, do not mail the original form. Doing so may result in duplicate charges to your credit card.

\*\*Note: SCMR reserves the right to charge the correct amount if different from total.

- I wish to pay my fees by **credit card**. Please note: this charge will appear on your statement as "SCMR Reg".  
 American Express (15 digits)     MasterCard (16 digits)     Visa (13-16 digits)

Please check here to authorize SCMR to make your email address available to exhibitors at the 2014 SCMR Scientific Sessions.

Please check if assistance is needed.

**CANCELLATION POLICY**

All registration cancellation requests must be received via fax (856-423-3420), email (SCMRmtg@talley.com) or in writing to SCMR Registration, 19 Mantua Road, Mt. Royal, NJ 08061 and postmarked no later than **December 16, 2013**. Fees paid will be refunded minus a \$50.00 processing fee. **There will be no refunds after the December 16, 2013 deadline.**

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Expiration Date \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

Name on Card (please print): \_\_\_\_\_ Authorizing Signature: \_\_\_\_\_

**RETURN THIS COMPLETED FORM WITH PAYMENT TO: SCMR REGISTRATION**  
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