SCMR/ISMRM Jointly Sponsored Workshop

New Horizons in High Field Cardiovascular MR: Promises and Progress

presented by SCMR and the ISMRM Cardiac and High Field MR Study Groups

January 30-31, 2013

The Hilton San Francisco Union Square, San Francisco, CA
Overview

The purpose of the workshop is to educate physicians and clinical scientists about high field MR techniques and methodology with respect to their capabilities for advancing cardiac MR and improving patient care and outcomes. It is expected that the gained knowledge will elevate the application of high field cardiac MR by improving the competence and performance of physicians, clinical scientists, and basic researchers. In addition, the workshop will provide a forum for disseminating information related to state-of-the-art high field and ultrahigh field MR techniques regarding cardiovascular function, myocardial perfusion, MR angiography, and flow in humans and small animals.

The interdisciplinary faculty and audience will ensure that technologies and methodologies are communicated and shared between physicists, bioengineers, cardiologists, radiologists, physiologists, technologists, and clinical scientists for the purpose of advancing science and improving patient care while balancing technology developments with clinical applications and future directions.

Target Audience

This workshop is designed for:

- Cardiologists, Radiologists, MR Engineers or Physicists, Bioengineers, Physiologists and all fields related to these disciplines
- Medical, Biological and Industrial Researchers with an interest in novel high field MR imaging technology and its implications for clinical cardiac MR
- Cardiac and other MR Applications Specialists who strive to gain a deeper insight into the basics of high field MR and its benefits for cardiac MR
- Experienced researchers seeking to learn about the current state of high field CMR, and actively engaged in research in this or related fields
- Less experienced researchers seeking to understand the capabilities and limitations of high field cardiac MR methods, and those considering getting involved, such as clinicians considering use of these techniques in their practices
- Undergraduate, graduate students, and technologists are highly encouraged to participate
Educational Objectives

Upon completing this workshop, participants should be able to:

- Explain the basics of high field cardiac MR; and identify, discuss, and compare novel developments of high field cardiac MR
- Examine and select methods used for assessment of myocardial perfusion and viability, for functional and microstructural imaging of the heart, for myocardial tissue characterization and for MR angiography and vessel wall imaging together with new dimensions in imaging flow at high fields
- Describe and explain challenges and differences of methods used for CMR at higher fields versus the counterparts using lower magnetic field strengths
- Identify and summarize progress and promises of high field CMR in small animals
- Recognize, describe, and select opportunities of emerging high field CMR technologies including early explorations into ultrahigh field CMR and real time imaging of the heart
- Discuss, practice, and disseminate clinical applications of high field CMR

Continuing Medical Education Credits

This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the International Society for Magnetic Resonance in Medicine (ISMRM) and the Society for Cardiovascular Magnetic resonance (SCMR). The International Society for Magnetic Resonance in Medicine is accredited by the ACCME to provide continuing medical education for physicians.

Determination of credits is pending.

Hotel Accommodations

The Hilton San Francisco Union Square in San Francisco, CA, has been selected to host the SCMR/ISMRM Workshop and the SCMR 16th Annual Scientific Sessions. The negotiated room rate at the Hilton San Francisco is $210.00/night for single or double occupancy plus taxes (currently 15.58%). Room reservations and rates will be confirmed on a first come, first served basis until December 29, 2012; after that date, reservation requests will be based on 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.

Reservations at the group rate can be made through the SCMR website at www.scmr.org/meetings by clicking the hotel reservation link; or by calling the toll-free reservation line (800-445-8667). When making your reservation, be sure to reference SCMR Scientific Sessions to obtain the negotiated group rate.

Hilton San Francisco Union Square
333 O'Farrell Street
San Francisco, CA
T: 415-771-1500
W: www.hiltonsanfranciscohotel.com
Wednesday, January 30, 2013

8:20 AM – 8:30 AM Welcome

8:30 AM – 9:00 AM KEYNOTE LECTURE: Unmet Needs of Clinical Cardiovascular Imaging: How Can High Field CMR Help to Solve the Conundrum

9:00 AM – 10:30 AM SCIENTIFIC SESSION I: Technical Developments for CMR at High Fields

9:00 AM MR Physics, Opportunities and Benefits of High Field CMR: Is Higher Always Better?

9:20 AM Enabling Technologies for High Field CMR: Pulse Sequences and Hardware

9:40 AM Challenges of High Field CMR: Practical and Safety Considerations

10:00 AM Oral Abstract Presentations

10:30 AM – 11:15 AM Refreshments/Poster Session

11:15 AM – 12:45 PM SCIENTIFIC SESSION II: Assessment of Viability and Myocardial Perfusion

11:15 AM How Does Assessment of Myocardial Viability Benefit from Higher Fields

11:35 AM Clinical Value of High Resolution Rest/Stress Perfusion Imaging

11:55 AM Towards Myocardial Perfusion Imaging Using Arterial Spin Labeling at High Fields

12:15 PM Oral Abstract Presentations

12:45 PM – 1:45 PM Lunch (on own)/Poster Session

1:45 PM – 3:15 PM SCIENTIFIC SESSION III: Functional and Microstructural Imaging

1:45 PM Advances in Cardiac Function and Myocardial Motion Assessment Using High Field MR

2:05 PM Imaging the Sometimes Forgotten Right Ventricle

2:25 PM Quantitative Diffusion Imaging of the Heart: From Basic Research to Clinical Applications

2:45 PM Oral Abstract Presentations

3:15 PM – 3:45 PM Refreshments/Poster Session

3:45 PM – 5:15 PM SCIENTIFIC SESSION IV: Explorations into Tissue Characterization and Myocardial Mapping

3:45 PM Opportunities and Challenges of T1 Mapping and Fat-Water Separation at High Fields

4:05 PM How Bold is T2*/T2 Mapping at High and Ultrahigh Fields

4:25 PM Do We Need New Reference Values or Can We Use Those Obtained at Lower Fields

4:45 PM Oral Abstract Presentations

5:15 PM – 6:45 PM SCIENTIFIC SESSION V: Flow, MR Angiography, and Vessel Wall Imaging

5:15 PM New Dimensions of Cardiovascular Flow Imaging

5:35 PM Contrast and Relaxivity at Higher Fields: Potential of Contrast-enhanced MRA

5:55 PM Atherosclerosis MRI and Coronary Artery Imaging at Higher Fields

6:15 PM Oral Abstract Presentations

6:45 PM – 8:00 PM POSTER SESSION/WINE & CHEESE RECEPTION

Thursday, January 31, 2013

8:30 AM – 9:00 AM KEYNOTE LECTURE: Road to High Field and Ultrahigh Field MR

9:00 AM – 10:30 AM SCIENTIFIC SESSION VI: Metabolic and Nanomolecular Probing

9:00 AM Research Promises of 31P and 13C MR at High Fields

9:20 AM Opportunities for Discoveries: 19F and 23Na MR at High Fields

9:40 AM Progress in Chemical Exchange Saturation Transfer Imaging

10:00 AM Oral Abstract Presentations

10:30 AM – 11:15 AM Refreshments/Poster Session

11:15 AM – 12:45 PM SCIENTIFIC SESSION VII: Advances in Animal CMR

11:15 AM High Field Cardiac MRI in Small Rodent Models of Cardiovascular Diseases

11:35 AM High Field Cardiac MRI in Large Animal Models of Cardiovascular Diseases

11:55 AM Imaging of Regional Ventricular Function and Myocardial Velocities in Mice

12:15 PM Oral Abstract Presentations

12:45 PM – 1:45 PM Lunch (on own)/Poster Session

1:45 PM – 3:15 PM SCIENTIFIC SESSION VIII: Towards Solving the Cardiac Gating/Triggering Conundrum at Higher Fields

1:45 PM Alternative Cardiac Gating/Triggering Techniques for High Field CMR

2:05 PM Update on Self-gating Techniques

2:25 PM Speed Saves: Imaging in Real Time

2:45 PM Oral Abstract Presentations

3:15 PM – 3:45 PM Refreshments/Poster Session

3:45 PM – 5:15 PM SCIENTIFIC SESSION IX: Emerging Technologies

3:45 PM Can MR Elastography Benefit from High Fields

4:05 PM Cardiac Interventions at High Fields

4:25 PM High Field MR/PET: The Perfect Marriage for Explorations into Cardiovascular Diseases?

4:45 PM Oral Abstract Presentations

5:15 PM – 6:45 PM SCIENTIFIC SESSION X: Looming on the Horizon: 7T and Higher

5:15 PM Explorations into Cardiovascular Diseases at 7T

5:35 PM Towards Human CMR at 10.5T and Higher Fields

5:55 PM Towards Small Animal CMR at 15 T and Higher Fields

6:15 PM Oral Abstract Presentations

6:45 PM – 7:00 PM SUMMARY
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 online at 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/ISMRM Jointly Sponsored Workshop Registration Fees

<table>
<thead>
<tr>
<th>Early Registration Fees</th>
<th>Regular Registration Fees</th>
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<tbody>
<tr>
<td>SCMR/ISMRM Member (MD/PhD)</td>
<td>$350.00</td>
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<tr>
<td>SCMR/ISMRM Member (Trainee/Technologist)</td>
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<td>Non-member (MD/PhD)</td>
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Attending the SCMR Scientific Sessions? Workshop attendees will receive a $50.00 discount off the registration fees for the 2013 SCMR Scientific Sessions.

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<tr>
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<tr>
<td>SCMR/ISMRM Member (MD/PhD)</td>
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<td>SCMR Courtesy Membership (MD/PhD)</td>
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<td>Non-member (Trainee)</td>
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Total $__________

Special Institutional Group Discount: For every five paid regular registrations from the same institution, a complimentary trainee registration will be offered. All forms from the group must be submitted together via fax: +856-423-3420 or email: SCMRmtg@talley.com.

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:

(1) SCMR membership renewal dues for 2013 must be paid by January 3, 2013 to receive the Member Rate for registration to the 16th Annual SCMR Scientific Sessions. Your credit card will be charged the Member/Non-Member difference if your renewal has not been processed by January 3, 2013.

(2) Note: SCMR reserves the right to charge the correct amount if different from total.

METHODS OF PAYMENT

Please check here to authorize SCMR to make your email address available to exhibitors at the 2013 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 January 3, 2013. Fees paid will be refunded minus a $50.00 processing fee. There will be no refunds after the January 3, 2013 deadline.

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)

Expiration Date _________/________

Name on Card (please print): _________________________________________Authorizing Signature: ____________________________________________

RETURN THIS COMPLETED FORM WITH PAYMENT TO: SCMR REGISTRATION
19 Mantua Road, Mt. Royal, NJ 08061 – Fax: 856-423-3420