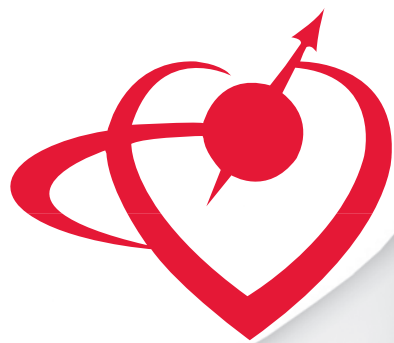
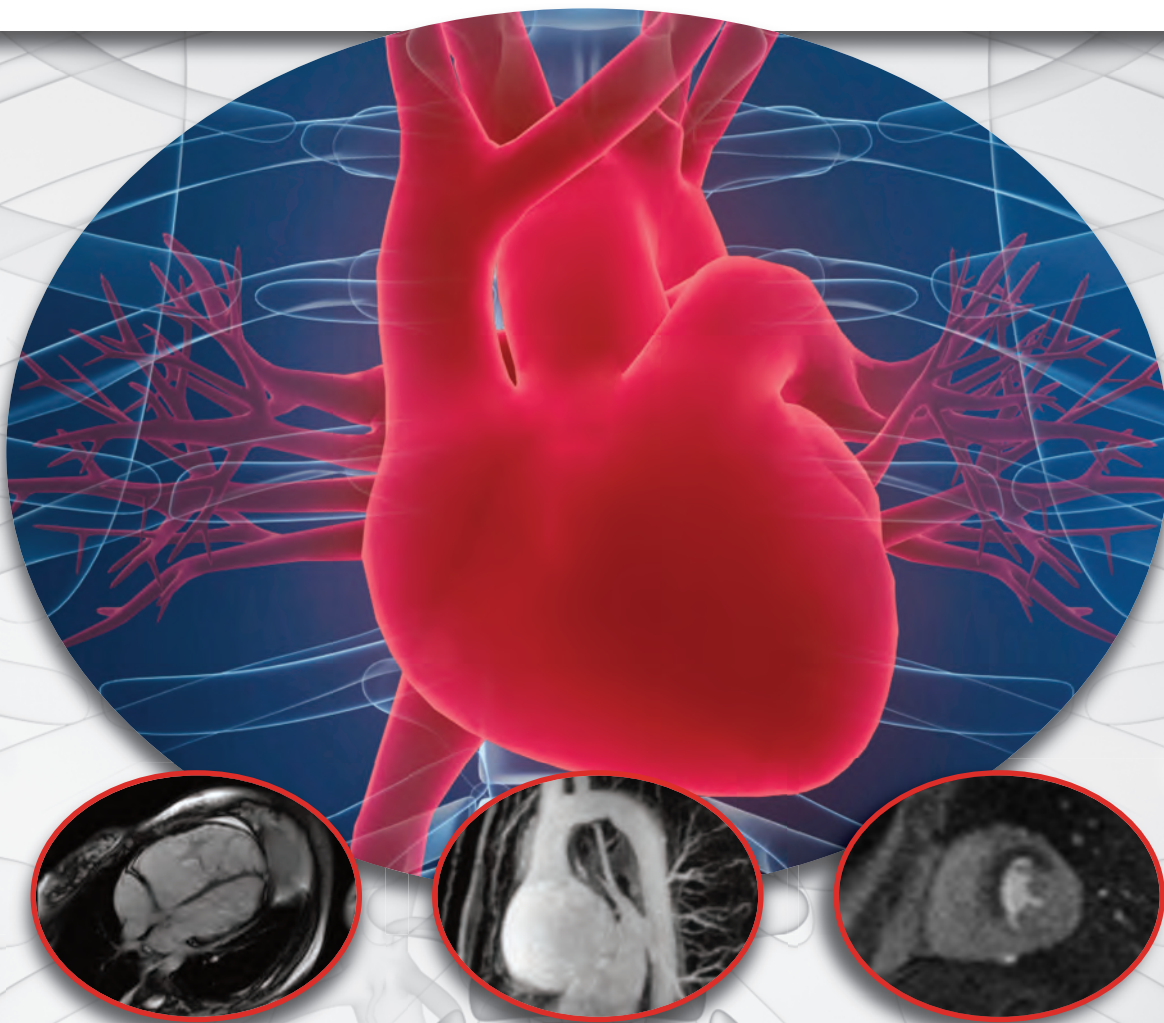




SCMR

Society for Cardiovascular
Magnetic Resonance

17th Annual Scientific Sessions
January 16 - 19, 2014



Hilton New Orleans Riverside | New Orleans, Louisiana
www.scmr.org

Jointly Sponsored by SCMR and the University of Minnesota





Society for Cardiovascular Magnetic Resonance

17TH ANNUAL SCIENTIFIC SESSIONS

HILTON NEW ORLEANS RIVERSIDE - NEW ORLEANS, LA

JANUARY 16 - 19, 2014

Schedule at a Glance

TIME	THURSDAY, JANUARY 16, 2014					
	Versailles Ballroom	Grand Ballroom C	Grand Ballroom D			
8:00 AM - 6:00 PM	SCMR/ISMRM Jointly Sponsored Workshop	Physicians Pre-conference Course	Congenital/Pediatric Pre-conference Course			
TIME	FRIDAY, JANUARY 17, 2014					
	Grand Ballroom A	Grand Ballroom B	Grand Ballroom C	Grand Ballroom D	Oak Alley Room	Grand Salon A
7:00 AM - 8:00 AM			Cardiology for Non-clinicians 1	Physics for Physicians 1	Clinical Trials Workshop - 1	Case Review 1 - Fascinating Vascular Disease Cases
8:00 AM - 9:30 AM	Welcome and Opening Plenary					
9:30 AM - 10:00 AM	CMR Questionnaire					
10:00 AM - 10:30 AM	Refreshment Break/Exhibits/Posters					
10:30 AM - 12:00 PM	Invited Lecture Session 1 Small Animal Imaging	Case Review 2 - All Things Bright: Late Gadolinium Enhancement Patterns	Oral Abstract Session 1 ECA Clinical	Oral Abstract Session 2 Rapid, Efficient Imaging		
12:00 PM - 12:30 PM	The Global CMR Registry (GCMR)					
12:30 PM - 1:30 PM	Lunch (on own)/Exhibits/Posters					Technologist Workshop (10:15 am - 5:30 pm)
1:30 PM - 3:00 PM	Invited Lecture Session 2 - Systemic Inflammation and Sclerosis Involving the Heart	Case Review 3 Congenital/Pediatric Disease Debate	Oral Abstract Session 3 ECA Basic Science	Oral Abstract Session 4 Ischemic Heart Disease		
3:00 PM - 3:30 PM	Refreshment Break/Exhibits/Posters					
3:30 PM - 5:00 PM	Invited Lecture Session 3 Multi-modality and Hybrid Imaging	Case Review 4 - Perfusion Imaging by CMR: Both Usual and Unusual Cases	Oral Abstract Session 5 ECA Translational	Oral Abstract Session 6 Clinical Outcome and Prognosis		
5:00 PM - 6:30 PM	Invited Lecture Session 4 - Phenotyping and Risk Stratification in Hypertrophic Cardiomyopathy	Case Review 5 - Best Cases from the SCMR Website	Oral Abstract Session 7 - Basic Translational - Post-processing	Oral Abstract Session 8 - Congenital Heart Disease: Flow and Arterial Coupling		
6:30 PM - 7:30 PM	Moderated Poster Session 1/Poster Viewing/Wine and Cheese Reception					
TIME	SATURDAY, JANUARY 18, 2014					
7:00 AM - 8:00 AM		Case Review 6 - CMR in Valvular Heart-Disease Decision-making	Cardiology for Non-clinicians 2	Physics for Physicians 2	Clinical Trial Workshop - 2	Technologist Workshop (7:45 am - 5:30 pm)
8:00 AM - 9:30 AM	Invited Lecture Session 5 T1 Mapping	Case Review 7 - Congenital Heart Disease/Pediatric Cases	Oral Abstract Session 9 EP and Interventional	Oral Abstract Session 10 Coronary Artery Disease		
9:30 AM - 10:00 AM	Refreshment Break/Exhibits/Posters					
10:00 AM - 11:30 AM	Invited Lecture Session 6 - Vascular Imaging and Endothelial Function	Invited Lecture Session 7 CMR in Asia	Oral Abstract Session 11 - Myocarditis and Other Myocardial Pathologies	Invited Lecture Session 8 CMR in Electrophysiology		
11:30 AM - 12:30 PM	Moderated Poster Session 2/Lunch (on own)/Exhibits/Posters					
12:30 PM - 2:00 PM	Invited Lecture Session 9 - Congenital I - Unravelling the Complexity of CHD with MR	Case Review 8 - When CMR Complements Other Modalities	Oral Abstract Session 12 Basic Translational - Pre-clinical	Oral Abstract Session 13 Vascular		
2:00 PM - 2:30 PM	Refreshment Break/Exhibits/Posters					
2:30 PM - 4:00 PM	Invited Lecture Session 10 - Congenital II - Advanced CMR Ready for the Clinical Arena?	Case Review 9 - Novel Characterization of Cardiac Physiology by CMR	Oral Abstract Session 14 - Basic Translational - New Techniques for Clinical Application	Oral Abstract Session 15 Hypertrophic and Dilated CMP		
4:00 PM - 5:30 PM	Invited Lecture Session 11 - Interventional CMR: State-of-the-Art and Future Directions	Invited Lecture Session 12 - Future Directions in IHD: Perfusion, FFR, Tissue Characterization	Oral Abstract Session 16 Molecular/Contrast Agent Imaging	Oral Abstract Session 17 - Cost Effectiveness, Comparative Imaging		
5:30 PM - 6:00 PM	CMR Technology Updates					
6:00 PM - 8:00 PM	Awards Ceremony and Reception					
TIME	SUNDAY, JANUARY 19, 2014					
7:00 AM - 8:00 AM			Cardiology for Non-clinicians 3	Physics for Physicians 3	Clinical Trial Workshop - 3	Technologist Workshop (8:00 am - 11:30 am)
8:00 AM - 9:30 AM	Invited Lecture Session 13 - Update on Major Prospective Cohort Studies with CMR	Case Review 10 - Cardiac Masses: Correlating Imaging with Pathology	Invited Lecture Session 14 - Quantification in CMR: T1/T2/T2*/Flow/Perfusion	Oral Abstract Session 18 - Congenital Heart Disease - Structure and Function		
9:30 AM - 10:00 AM	Refreshment Break					
10:00 AM - 11:30 AM	Invited Lecture Session 15 Emerging CMR Technologies	Invited Lecture Session 16 - NIHD Heart Failure: CMR to Guide Therapy	Invited Lecture Session 17 Multiorgan Diseases	Oral Abstract Session 19 - Metabolism, Spectroscopy, Lipid Imaging		
11:30 AM - 1:00 PM	Closing Plenary Session					
1:00 PM - 1:30 PM	Closing Remarks/Highlights from 2014 Scientific Sessions					

Note: Speakers in oral abstract sessions are allocated 12 minutes to present and Q and A (8/4)

Legend: Clinical Sessions - Green; Translational Sessions - Yellow; Basic Science Sessions - Blue; Congenital/Pediatric Sessions - Pink

Welcome

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Dear Colleagues and Friends,

Welcome to New Orleans and the 17th Annual Scientific Sessions of the Society for Cardiovascular Magnetic Resonance! The Board of Trustees shares a strong commitment to advancing the science and practice of CMR and your attendance supports this goal and the vision and mission of SCMR.

I would like to thank the 2014 Program Committee, chaired by Dr. Jens Bremerich and Dr. Michael McConnell, for their time and expertise given to designing a program that offers state of the art updates in CMR, from the bench to the bedside and beyond.

The scientific program has been developed to emphasize categories along five targeted tracks: General CMR, Congenital/Pediatric, Basic Science, Translational, and Case Studies. These tracks continue to build on prior years with the outstanding group of experts assembled to discuss the wide range of topics and provide both an overview of CMR for those new to the field, along with sessions designed for those acquiring a deeper knowledge of CMR technology, techniques, and applications, as well as potential for the future. In parallel, the Technologist's Track will offer technologists sessions focused on both their clinical and research educational needs. The early morning sessions, Cardiology for Non-clinicians and Physics for Physicians, have always been popular among attendees and in 2014, a Clinical Trials Workshop has been added to the agenda.

I am honored to announce the Dr. Warren Manning is the recipient of the 2014 Gold Medal Award. Dr. Manning has dedicated his career to CMR in both clinical and educational settings as well as mentoring countless of trainees and residents. We are all grateful for his many contributions to the field and to SCMR. Please join me in honoring Dr. Manning at the Awards Ceremony on Saturday evening.

In addition to the science and the networking opportunities available at the Scientific Sessions, I hope you are able to enjoy this wonderful city where centuries old architecture is the backdrop for great music, fine dining, and a community of citizens who live and believe in "laissez les bon temps rouler".

Sincerely,

Albert de Roos, MD, PhD
President, SCMR

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SCMR Vision Statement

The Society for Cardiovascular Magnetic Resonance (SCMR) will be the leading international representative and advocate for all physicians, scientists, and technologists working in CMR to improve patient outcomes through excellence in education, training, standards, research and development.

The Mission of SCMR is to:

- Be the premier international model and provider of CMR education, training, standards development, and accreditation.
- Maximize clinical effectiveness of CMR through coordinated comparative effectiveness research efforts resulting in evidence-based guidelines to enhance patient care and outcomes.
- Continually enhance the accuracy, efficiency, and effectiveness of CMR in cardiovascular healthcare through technological advances.
- Promote scientific exchange through organization of an annual international scientific conference, publication of the *Journal of Cardiovascular Magnetic Resonance*, and interactive internet-enabled tools including the SCMR website.
- Build an expanding global membership of physicians, scientists, technologists, and interested healthcare partners focused on clinical applications and research in CMR.
- Develop and advance close working alliances with related societies, industry partners, and governmental and regulatory agencies to more effectively integrate and elevate the use of CMR within cardiovascular healthcare.

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THE GOALS OF THE CONFERENCE ARE TO:

- Deliver state of the art information on the science of CMR imaging and spectroscopy
- Provide a forum for the presentation of new information on CMR
- Compare and contrast CMR methods with other cardiovascular imaging approaches

AT THE CONCLUSION OF THE SCIENTIFIC SESSIONS, PARTICIPANTS SHOULD BE BETTER ABLE TO:

- Plan, perform and analyze CMR examinations
- Plan and conduct appropriately designed clinical trials
- Apply the principles of MR physics relevant to image quality, data reliability and patient safety

2014 Gold Medal Award



The Board of Trustees of the Society for Cardiovascular Magnetic Resonance (SCMR) is pleased to announce that Warren J. Manning, MD, Section Chief of Non-invasive Cardiac Imaging and Professor of Medicine and Radiology, Harvard Medical School, is the 2014 recipient of the SCMR Gold Medal Award. The award is presented annually by the SCMR for outstanding achievement in the field of CMR as well as exemplary service to the Society. Dr. Manning's accomplishments in the field and his contributions to SCMR embody the attributes that this award was designed to recognize.

One of the first advocates of CMR, early in his career Dr. Manning took a leading role in propelling a relatively immature technology into a major clinical role in studying heart structure and function. He helped to pioneer the first clinically useful MR angiograms of the coronary arteries. This groundbreaking work was published in the *New England Journal of Medicine* as well as other leading journals. Following his early pioneering efforts, Dr. Manning has continued to extend the clinical application of cardiac MR into new territory. His MR research has had great breadth, ranging from epidemiologic studies of contrast agents to detect coronary thrombosis or enhancement.

Dr. Manning has authored more than 280 original papers and over 100 review articles including book chapters and editorials, and edited one of the first textbooks on cardiovascular MRI.

Dr. Manning's dedication to CMR is manifest in his service to the SCMR and the cardiovascular imaging community. He has served the SCMR since being a founding member and inaugural membership chairman, holding positions of Trustee through President, and currently serves as Deputy Editor in Chief of the *Society's Journal of Cardiovascular Magnetic Resonance (JCMR)*. He also serves on other editorial boards, writing groups, and national/international committees focused on cardiovascular imaging.

His contributions have been multiplied through accomplishments of the numerous residents, clinical fellows and basic scientists he has trained over the years. Many of these individuals have become notable in their own right. Dr. Manning is a unique person whose kindness, integrity and exceptional talent to mentor and encourage young clinicians and scientists have impacted many. His willingness to collaborate across disciplines has helped to advance the field.

Dr. Matthias Stuber, chair of the selection committee, noted: "Dr. Manning's many contributions to research, teaching, mentoring, and advancing clinical implementation of cardiovascular MRI, especially through his very active involvement in SCMR, make him an outstanding choice to receive this year's Gold Medal Award." SCMR is proud to recognize Dr. Manning with its most prestigious award.

Past SCMR Gold Medal Awardees:

2013 Stefan Neubauer, MD

2012 Dudley Pennell, MD

2011 Charles Higgins, MD and Gerald Pohost, MD

CONTINUING MEDICAL EDUCATION CREDIT INFORMATION

Scientific Sessions

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

The University of Minnesota designates this live activity for a maximum of 30.25 AMA PRA Category 1 Credit(s)TM.

- ⇒ Physician Pre-conference Course - 8.25 AMA PRA Category 1 CreditsTM
- ⇒ Congenital/Pediatric Pre-conference Course – 8.25 AMA PRA Category 1 CreditsTM
- ⇒ 2014 Scientific Sessions - 22 AMA PRA Category 1 CreditsTM

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

Other healthcare professionals who participate in this CME activity may submit their Statements of Attendance to their appropriate accrediting organizations or state boards for consideration of credit. The participant is responsible for determining whether this activity meets the requirements for acceptable continuing education.

Technologist Workshop

This activity has been approved for credit by the American Society of Radiologic Technologists (ASRT) for the following credits:

Friday Session - 6.0 credits

Saturday Session - 7.75 credits

Sunday Session - 3.75 credits

Each technologist should claim only those hours of credit actually spent in this activity.



General Information

Admission

Conference name badges are required for admission to all activities related to the 17th Annual Scientific Sessions, including the exhibit hall and social events.

Registration Hours

The 2014 SCMR Registration Desk is located in the Chemin Royale Foyer. The Registration Desk will be open and staffed during the following hours:

Wednesday, January 15	3:00 pm – 6:30 pm
Thursday, January 16	7:00 am – 6:00 pm
Friday, January 17	6:30 am – 6:30 pm
Saturday, January 18	6:30 am – 6:30 pm
Sunday, January 19	6:30 am – 2:00 pm

Disclosure Statement

It is the policy of the University of Minnesota - Office of Continuing Medical Education to insure balance, independence, objectivity and scientific rigor in all of its sponsored educational activities. All participating speakers and moderators, course directors, and planning committee members are required to disclose to the program audience any financial relationships related to the subject matter of this program. Relationships of spouse/partner with proprietary entities producing healthcare goods or services should be disclosed if they are of a nature that may influence the objectivity of the individual in a position to control the content of the CME activity. Disclosure information is reviewed in advance in order to manage and resolve any possible conflicts of interest. Specific faculty disclosure information for each speaker, course director, and planning committee member will be shared with the audience prior to the speaker's presentation.

A complete list of disclosures is available on pages 53-55.

Exhibits

Educational and informational exhibits will be available in the Grand Salon during the Scientific Sessions. Exhibiting company representatives will be available to answer your questions about their products and services. Please visit the exhibits and thank the representatives for their support. The complete list of exhibits can be found on pages 56-58.

Photography

Any photography, filming, taping, recording or reproduction in any medium including via the use of tripod-based equipment of any of the programs and/or posters presented at the 17th Annual Scientific Sessions without the express written consent of the Society for Cardiovascular Magnetic Resonance is strictly prohibited.

Speaker Ready Rooms

The 2014 Program Committee is committed to providing attendees cutting edge technology and coordinated presentations at the Scientific Sessions. To be fully prepared for your session, each presenter is requested to visit the Speaker Ready Room at least 24 hours prior to your presentation. The Speaker Ready Room is located in the Melrose Room and will be open the following days and times:

Wednesday, January 15	5:00 pm – 8:00 pm
Thursday, January 16	7:00 am – 6:00 pm
Friday, January 17	7:00 am – 6:00 pm
Saturday, January 18	7:00 am – 6:00 pm
Sunday, January 19	7:00 am – 12:00 pm

Evaluations and CME Tracking Forms

At the conclusion of the SCMR Scientific Sessions, you will receive an invitation to complete the meeting survey. Please take the time to complete this survey as it provides very important feedback for future programming. Thank you, in advance, for completing the evaluation...your opinion and feedback matter!

You must complete the University of Minnesota CME Tracking Form in order to receive your CME certificate. After completing the Tracking Form, please return it to the SCMR Registration Desk or email it to SCMRMTG@talley.com. The information on the forms will be compiled and sent to the University of Minnesota for processing. The University of Minnesota will issue the CME certificate to you.

Acknowledgements

The Society for Cardiovascular Magnetic Resonance gratefully acknowledges the 2014 support of the following industry partners:

Platinum Level:

Siemens Healthcare
GE Healthcare

Silver Level:

Philips Healthcare

Bronze Level:

Medis Medical Imaging Systems, Inc.

Physician Pre-conference Course

Thursday, January 16, 2014

8:00 AM – 6:00 PM

Grand Ballroom C

Physician's Pre-conference Course Learning Objectives:

Upon completion of this educational activity, the participant should be better able to:

- Describe technology and techniques for standard CMR procedures
- Design patient-centered protocols to address common clinical questions addressed for CMR to answer
- Identify instances where CMR is and is not an appropriate modality in clinical practice

8:00 am – 8:10 am Introductory Remarks

Co-chairs: Nadine Kawel-Boehm, MD, University Hospital Basel

Subha Raman, MD, The Ohio State University

8:10 am – 8:30 am Basics: Spins and Hardware

Michael Salerno, MD, PhD, University of Virginia

8:30 am – 8:50 am Black-blood Sequences

Rebecca Thornhill, MSc, University of Ottawa

8:50 am – 9:10 am Bright-blood Sequences

Anthony Aletras, PhD, University of Central Greece

9:10 am – 9:30 am Let's Go Faster: Parallel Acquisition Techniques

Daniel Ennis, PhD, University of California – Los Angeles

9:30 am – 9:50 am Dealing with Breathing Artifacts and Arrhythmia

Dipan Shah, MD, Methodist DeBakey Heart & Vascular Center

9:50 am – 10:10 am Knowing When to Choose CMR in a Multi-modality Imaging Climate

Robert Manka, MD, University Hospital of Zürich

10:10 am – 10:30 am How to Measure Regional and Global Ventricular Function

Phillip Beerbaum, MD, PhD, Children's Hospital, Hanover Medical University

10:30 am – 10:50 am How to Quantify Blood Flow

Krishna Nayak, PhD, University of Southern California

10:50 am – 11:10 am How to Perform High-quality Delayed Enhancement Imaging

Patricia Bandettini, MD, National Institutes of Health

11:10 am – 11:30 am Refreshment Break

11:30 am – 11:50 am How to Optimize MR Angiography

Robert Edelman, MD, Evanston Hospital

11:50 am – 12:10 pm Tissue Characterization and Mapping Techniques

Peter Kellman, PhD, National Institutes of Health

12:10 pm – 12:30 pm How to Assess Myocardial Iron Overload

Mark Westwood, MD, The London Chest Hospital

12:30 pm – 12:50 pm Optimizing Efficiency of Protocols

J. Ronald Mikolich, MD, Northeast Ohio Medical University

12:50 pm – 2:00 pm Lunch (on own)

2:00 pm – 2:20 pm CMR to Assess the Etiology of Cardiomyopathy

Steffen Petersen, MD, DPhil, Barts and The London NHS Trust

2:20 pm – 2:40 pm CMR in the Assessment of Arrhythmic Substrate

Carlos Rochitte, MD, Heart Institute - InCor

2:40 pm – 3:00 pm CMR in Suspected Acute Myocarditis

Paaladinesh Thavendiranathan, MD, University of Toronto

3:00 pm – 3:20 pm CMR in Acute Coronary Syndromes

Matthias Friedrich, MD, Montreal Heart Institute

3:20 pm – 3:40 pm CMR in Stable Coronary and Ischemic Heart Disease

Jean Paul Vallee, MD, Hospitiaux Universitaires de Geneve

3:40 pm – 4:00 pm CMR in Congenital Heart Disease

Anne Marie Valente, MD, Boston Children's Hospital

4:00 pm – 4:15 pm Refreshment Break

4:15 pm – 4:35 pm CMR in Valvular Disease

Gerald McCann, BSc, MB ChB, University Hospitals Leicester

4:35 pm – 4:55 pm CMR in Pericardial Disease

Frederick Ruberg, MD, Boston University School of Medicine

4:55 pm – 5:15 pm CMR in the Assessment of Intracardiac Mass

Jonathan Weinsaft, MD, Weill Medical College of Cornell University

5:15 pm – 6:15 pm Panel Discussion on Submitted Questions

Martin Ugander, MD, Karolinska Institute

Chiara Bucciarelli-Ducci, MD, Bristol Heart Institute

6:15 pm – 6:30 pm Closing Remarks

Congenital / Pediatric Pre-Conference Course

Thursday, January 16, 2014

8:00 AM – 6:00 PM

Grand Ballroom D

Physician's Pre-conference Course Learning Objectives:

Upon completion of this educational activity, the participant should be better able to:

- Detect the special needs of CMR in neonates and children and in patients with (complex) congenital cardiac defects and to adjust the CMR examination accordingly to optimize patient care
- Compose and execute a dedicated CMR examination in patients with a (corrected) congenital cardiac defect and in pediatric patients with acquired heart disease
- Apply new CMR techniques and discuss the pathophysiological findings from these CMR techniques

8:00 am – 2:00 pm Morning Session

Moderators:

Philipp Beerbaum, MD, PhD, Children's Hospital, Hanover Medical University

Arno Roest, MD, PhD, University of Leiden Medical Center

8:00 am – 8:05 am Introduction to the Congenital / Pediatric Pre-Conference Course

Philipp Beerbaum, MD, PhD, Children's Hospital, Hanover Medical University

8:05 am – 8:35 am Speaking the Same Language: Sequential Segmental Approach to Cardiac Anatomy

Tal Geva, MD, Boston Children's Hospital

8:35 am – 8:55 am Yasui, Kawashima, Lecompte and Co: Surgical Anatomy for CMR in CHD

Michael Seed, MD, The Hospital for Sick Children

8:55 am – 9:25 am Because You Need to Understand It to Adjust It to Your Patient: MRI Physics for Imaging Patients with CHD

Taylor Chung, MD, Children's Hospital and Research Center Oakland

9:25 am – 9:50 am Smaller, Faster, and Moving: Patient Handling, Hardware and Software Settings for Scanning Young and Very Young Patients

Rajesh Krishnamurthy, MD, Texas Children's Hospital

9:50 am – 10:10 am Ventricular Volumes: How to Get and How to Interpret Them

Olga Toro Salazar, MD, Connecticut Children's Medical Center

10:10 am – 10:30 am Flow Measurements with CMR: Asset and Pitfalls

Philipp Beerbaum, MD, PhD, Children's Hospital, Hanover Medical Hanover

10:30 am – 10:50 am Outside the Heart: Angiography With and Without Contrast

Sohrab Fratz, MD, PhD, German Heart Centre Munich

10:50 am – 11:10 am Viability Imaging in Pediatric Heart Disease

Carsten Rickers, MD, University Medical Center Schleswig-Holstein

11:10 am – 11:30 am Refreshment Break

11:30 am – 11:50 am Cardiac Masses: Non-invasive Tumor Characterization with CMR

Tiffanie Johnson, MD, Riley Hospital for Children

11:50 am – 12:10 pm CMR in Acquired Pediatric Heart Disease: Vasculitis and Kawasaki Disease

Niall Keenan, MD, Imperial College

12:10 pm – 1:00 pm Tetralogy of Fallot, Transposition, & Coarctation of Aorta

Andrew Powell, MD, Boston Children's Hospital

1:00 pm – 2:00 pm Lunch (on own)

2:00 pm – 6:00 pm Afternoon Sessions

Moderators:

Lars Grosse-Wortmann, MD, The Hospital for Sick Children

Andrew Taylor, MD, Great Ormond Street Hospital

2:00 pm – 2:25 pm The Cardiomyopathies: ARVC, DCM, HCM

Lars Grosse-Wortmann, MD, The Hospital for Sick Children

2:25 pm – 2:55 pm Single Ventricle Circulations: CMR through the Stages

Andrew Taylor, MD, Great Ormond Street Hospital

2:55 pm – 3:10 pm Simple and Complex Shunts

Ashwin Prakash, MD, Boston Children's Hospital

3:10 pm – 3:25 pm Moving Beyond the Basics: Implementation of Newer Techniques: 4D Flow

Arno Roest, MD, PhD, University of Leiden Medical Center

Congenital / Pediatric Pre-Conference Course

3:25 pm - 3:40 pm	Moving Beyond the Basics: Implementation of Newer Techniques: Myocardial Mechanics Imaging with CMR Kan Hor, MD, Nationwide Children's Hospital	4:15 pm - 5:15 pm	Putting it all Together: Clinical Cases with an Edge Beth Printz, MD, Rady Children's Hospital
3:40 pm - 3:55 pm	Moving Beyond the Basics: Implementation of Newer Techniques: Tissue Characterization with CMR Paaladinesh Thavendiranathan, MD, MSc, University of Toronto	4:15 pm	
		4:30 pm	Matthew Harris, MD, Children's Hospital of Philadelphia
		4:45 pm	Shelby Kutty, MD, University of Nebraska Medical Center
3:55 pm - 4:15 pm	Refreshment Break	5:00 pm	Gordon Culham, MD BC Children's Hospital
		5:15 pm - 6:00 pm	Summary/Discussion

MEETING APP AND SOCIAL MEDIA

Meeting APP

For the 17th Annual Scientific Sessions, SCMR is introducing an attendee Meeting App which is partially supported by funding from Siemens Healthcare.

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Friday, January 17, 2014

6:30 am - 8:00 am Continental Breakfast **Chemin Royale**

7:00 am - 8:00 am Cardiology for Non-clinicians 1 - Ischemic Heart Disease **Grand Ballroom C**

At the conclusion of this session, participants will be better able to:

- Comprehend basic concepts of pathophysiology, and clinical presentation of patients with ischemic heart disease
- Comprehend basic concepts of pathophysiology, and clinical presentation of patients with infiltrative cardiomyopathy
- Comprehend basic concepts of pathophysiology, and clinical presentation of patients with aortic and mitral valve disease

Moderators: Ingo Eitel, MD
Stefano Muzzarelli, MD, Cardiocentro
Ticino Foundation

7:00 am **Coronary Perfusion: Physiology and Pathophysiology**
Stefano Muzzarelli, MD, Cardiocentro Ticino Foundation

7:20 am **Acute Myocardial Infarction: Pathogenesis and Consequences**
Suma Konety, MD, MS, University of Minnesota

7:40 am **Interesting Case of Ischemic Heart Disease in CMR**
Gregory Kicska, MD, PhD, University of Washington

7:50 am Q & A

7:00 am - 8:00 am Physics for Physicians - Cardiac Function and Morphology **Grand Ballroom D**

At the conclusion of this session, participants will be better able to:

- Discuss the basics of data acquisition and image reconstruction techniques for the following applications: cardiac function and morphology, late gadolinium enhancement and perfusion MRI
- Describe the basics of post-processing techniques for the following applications: cardiac function and morphology, late gadolinium enhancement and perfusion MRI
- Explain an overview of the recent technological advances in these techniques and the impact these technical advances could have on clinical diagnosis and therapy follow-up in the future

Moderators: Sonia Nielles-Vallespin, PhD, National Institutes of Health

7:20 am **Acquisition**
Frank Kober, PhD, Centre de Résonance Magnétique Biologique et Médicale Marseille

7:40 am **Post-processing**
Alistair Young, PhD, University of Auckland

7:50 am **Future Perspective**
Michael Hansen, PhD, National Institutes of Health

7:00 am - 8:00 am Clinical Trials - Workshop 1 **Oak Alley**

At the conclusion of this session, participants will be better able to:

- Discuss the role of CMR in clinical trials
- Critique the design of clinical trials using CMR
- Appreciate the challenges of performing clinical trials using CMR

Moderators: Alex Pitcher, MRCP, University of Oxford
Joseph Selvanayagam, MBBS, Flinders Medical Centre

7:00 am **The Challenges of Conducting Outcome Based CV Imaging Trials**
Raymond Kwong, MD, MPH, Brigham and Women's Hospital

7:15 am **How To Do It: Choosing a Trial Design**
Jemma Hopewell, BSc (Hons), Oxford University

7:30 am **Advantages and Disadvantages of Imaging Registries**
Oliver Bruder, MD, Elisabeth Hospital Essen

7:45 am Q & A

7:00 am - 8:00 am Case Review 1 - Fascinating Vascular Disease Cases **Grand Salon A**

Moderators: Marcus Chen, MD, National Institutes of Health
Edward Martin, MD, Oklahoma Heart Center

Takayasu Arteritis in an Adolescent Non-compliant with Juvenile Idiopathic Arthritis Therapy
Arni Nutting, MD, Medical University of South Carolina

Acute Coronary Thrombus in a Giant Coronary Aneurysm in Kawasaki's disease
Keri Shafer, MD, Boston Children's Hospital

First Description of a Vascular System Originating from the Left Atrium Doubling the Aorta and the Left Brachiocephalic Trunk as an Incidental Finding in an Asymptomatic Patient with Bicuspid Aortic Valve
Peter Bernhardt, MD, University of Ulm

8:00 am - 8:10 am Welcome Address / Opening Remarks **Grand Ballrooms A-B**

Albert de Roos, MD, PhD, SCMR President

8:10 am - 9:30 am Opening Plenary Session

At the conclusion of this session, participants will be better able to:

- Understand pathophysiology and relevant issues in coronary artery disease
- Integrate diagnostic tools in diagnostic algorithms
- Oversee strengths and limitations of quantitative MRI applications

Moderators: Jens Bremerich, MD, University Hospital Basel
Michael McConnell, MD, MSEE, Stanford University School of Medicine

8:10 am **Perfusion and FFR in CAD**
Colin Berry, MD, PhD, University of Glasgow

8:30 am **Perfusion Analysis**
Sven Plein, MD, PhD, University of Leeds

8:50 am **Hibernating Myocardium**
Eike Nagel, MD, PhD, King's College London

9:10 am **The Future of Quantitative Imaging**
Orlando Simonetti, PhD, The Ohio State University

Due to speaker conflicts and requests, the abstracts may not follow numerical order.

9:30 am – 10:00 am **CMR Questionnaire** **Grand Ballroom A-B**
 Gerald Pohost, MD, University of Southern California

10:00 am – 10:30 am **Refreshment Break / Exhibits and Posters** **Grand Salons B-D**

10:30 am – 12:00 pm **Invited Lecture Session 1 - Small Animal Imaging** **Grand Ballroom A**

At the conclusion of this session, participants will be better able to:

- Describe various methods for imaging cardiac function, perfusion and parameter mapping in small animals
- Give examples that demonstrate the use of molecular and cellular imaging in small animal models
- Discuss how to evaluate novel therapies using CMR in small animal models of heart disease

Moderator: Frederick Epstein, PhD, University of Virginia
 Victor Ferrari, MD, University of Pennsylvania Medical Center

10:30 am **Myocardial Function, Perfusion, and Parametric Mapping in Small Animal Models of Heart Disease**
 Xin Yu, Sc.D, Case Western Reserve University

10:45 am **Molecular and Cellular MRI Methods in Small Animal Models of Heart Disease**
 Gustav Strijkers, PhD, Eindhoven University of Technology

11:00 am **Enhanced CMR in Small Animals using State-of-the-Art Acceleration Techniques**
 Jurgen Schneider, PhD, University of Oxford

11:15 am **Experimental Therapies and Molecular Mechanisms Explored using CMR in Mouse Models of Ischemic Heart Disease**
 David Sosnovik, MD, Massachusetts General Hospital

11:30 am **Developmental Changes of Cardiomyocyte Architecture**
 Samuel Wickline, MD, Washington University School of Medicine

11:45 am **Q & A**

10:30 am – 12:00 pm **Case Review 2 – All Things Bright: Late Gadolinium Enhancement Patterns** **Grand Ballroom B**

Moderators: Scott Flamm, MD, MBA, Cleveland Clinic
 Joseph Selvanayagam, MBBS, Flinders Medical Centre

A Patient with Overlapping Cardiomyopathy Phenotypes
 Andrew Ertel, MD, National Institutes of Health

Devil in Disguise
 Patrizia Pedrotti, MD, Niguarda Hospital

Right Ventricular Infarction Post Alcohol Septal Ablation in Hypertrophic Cardiomyopathy: New Questions and Challenges
 Vrinda Sardana, MD, University of Kentucky

An Interesting Case of Cryptogenic Stroke in Young: Role of CMR in the Accurate Diagnosis
 Arun Kannan, MD, University of Arizona

Ventricular Arrhythmias in a Patient with Left Ventricle Aneurysm of Unexpected Origin
 Patrizia Pedrotti, MD, Niguarda Hospital

IN A PINCH: Pattern of Myocardial Enhancement in Two Siblings with Limb-girdle Muscular Dystrophy
 Katrina Newbigin, MBBS, BSCi, Ottawa General Hospital

Sustained Ventricular Tachycardia as Unusual Trigger of Acute Coronary Syndrome in Unknown Arrhythmogenic Right Ventricular Cardiomyopathy: Role of Cardiac Magnetic Resonance Imaging and Genetic Coding
 Alberto Roghi, MD, Niguarda Ca'Granda Hospital

Acute Cocaine-induced Cardiotoxicity – A Word of Caution
 Joao Cavalcante, MD, University of Pittsburgh

A Case of Left Ventricular Non-compaction with Circumferential Late Gadolinium Enhancement
 Gherardo Finocchiaro, MD, Heart Hospital, London

10:30 am – 12:00 pm **Oral Abstract Session 1: Early Career Award - Clinical** **Grand Ballroom C**

Moderators: Gerald Pohost, MD, University of Southern California
 Nathaniel Reichel, MD, St. Francis Hospital

O 001 'Splenic Switch-off' to Detect Adenosine Understress; A Novel Method to Improve Test Sensitivity
 Charlotte Manisty, MD, PhD, Heart Hospital Imaging Centre and Imperial College

O 002 Weight Loss Decreases Progressive Left Ventricular Remodeling: The Multi-ethnic Study of Atherosclerosis
 Siddique Abbasi, MD, Brigham and Women's Hospital

O 003 Multiparametric Cardiovascular Magnetic Resonance Assessment of Cardiac Allograft Vasculopathy
 Christopher Miller, MBChB, University Hospital of South Manchester

O 004 Native T1 Mapping in ATTR Cardiac Amyloidosis – Comparison with AL Cardiac Amyloidosis - A 200 Patient Study
 Marianna Fontana, MD, The Heart Hospital

O 005 Cardiac Amyloid Burden Assessment by T1 Mapping Predicts Survival in Patients with Systemic AL Amyloidosis – A 2 Year Follow-up Study
 Sanjay Banyersad, MD, The Heart Hospital

O 006 Native T1-Mapping Displays the Extent and Non-ischemic Patterns of Injury in Acute Myocarditis Without the Need for Contrast Agents
 Vanessa Ferreira, MD, DPhil, University of Oxford

10:30am – 12:00 pm Oral Abstract Session 2: Grand Ballroom D
Rapid, Efficient Imaging

Moderators: Felipe Bisbal, MD, Affhythmia University Hospital Clinic
Gunnar Lund, MD, University Hospital
Hamburg Eppendorf

O 007 Phase Contrast MRI with Flow Compensation View Sharing (FCVS)

Da Wang, University of California-Los Angeles

O 008 CMRA with 100% Navigator Efficiency with 3D Self Navigation and Interleaved Scanning

Jonathan Powell, MSc, King's College London

O 009 Accelerated Myocardial T1 Mapping Using SMART1Map and Compressed Sensing with Temporal PCA

Jeff Stainsby, GE Healthcare

O 010 Real-time Magnetic Resonance Cine Imaging with Compressed Sensing and Iterative Reconstruction for Ventricular Measures: Comparison with Gold-standard Segmented Steady-state Free Precession

Ilan Gottlieb, MD, PhD, National Institute of Cardiology

O 011 The Spatial and Temporal Fidelity in Real-time MRI in Patients with Sinus Rhythm and Arrhythmias

Francisco Contijoch, MSE, University of Pennsylvania

O 012 Evaluation of Accelerated Real-time CMR Using Sparse Sampling with Iterative SENSE Reconstruction in Patients and Volunteers

Bradley Allen, MD, Northwestern University

12:00 pm – 12:30 pm The Global CMR Registry (GCMR) Grand Ballroom A

Moderator: Albert de Roos, MD, PhD, Leiden University Medical Center

Presenter: Raymond Kwong, MD, Brigham and Women's Hospital

12:30 pm – 1:30 pm Lunch (on own)/ Exhibits and Posters Grand Salons B-D

1:30 pm – 3:00 pm Invited Lecture Session 2 - Grand Ballroom A
Systemic Inflammation and Sclerosis Involving the Heart

At the conclusion of this session, participants will be better able to:

- Understand the value of CMR in systemic disorders
- Perform CMR-studies in these diseases
- Identify CMR appearance of the most common systemic disease affecting the heart

Moderators: Sophie Mavrogeni, MD, Onassis Cardiac Surgery Center
Subha Raman, MD, The Ohio State University

1:30 pm Clinical Needs in Systemic Disease - A Cardiologist View

Peter Buser, MD, University Hospital Basel

1:45 pm CMR in Mixed Connective Tissue Disease
Valentina Puntmann, MD, PhD, King's College London

2:00 pm Sarcoidosis - The Chamaeleon affecting the Heart

Jeanette Schulz-Menger, MD, Charité
Universitätsmedizin Berlin

2:15 pm CMR in Transplant Rejection

Andrew Taylor, PhD, Alfred Heart Center and Baker Heart Research Institute

2:30 pm Early Cardiovascular Involvement in the Metabolic Syndrome

Karen Ordovas, MD, MAS, University of California - San Francisco

2:45 pm Q & A

1:30 pm – 3:00 pm Pro/Con Debate - Grand Ballroom B
Congenital Heart Disease / Pediatric

Moderators: Lars Grosse-Wortmann, MD, The Hospital for Sick Children
Andrew Powell, MD, Boston Children's Hospital

1:30 pm Echocardiography is Sufficient as a Routine Screening Test for Right Ventricular Size in the Follow-up for Patients after Tetralogy of Fallot Repair

Pro: Mark Friedberg, MD, The Hospital for Sick Children

Con: Mark Fogel, MD, Children's Hospital of Philadelphia

2:00 pm Diastolic Function Assessment Should Be Left to Echo

Pro: Wyman Lai, MD, MPH, Children's Hospital of New York

Con: Carsten Rickers, MD, University Hospital Kiel

2:30 pm I Do Not Report Ventricular Volume Normative Data or Z Scores as All Published Data Are from Smallish Cohorts and/or Use Different Post-processing Techniques than at my Center

Pro: Andrew Taylor, MD, UCL Institute of Cardiovascular Science

Con: Willem Helbing, MD, Erasmus University Medical Center

1:30 pm – 3:00 pm Oral Abstract Session 3: Grand Ballroom C
Early Career Award – Basic Science

Moderators: Leon Axel, MD, PhD, Langone NYU Medical Center
Matthias Stuber, PhD, University of Lausanne

O 013 In Vivo Characterization of Abdominal Aortic Aneurysms Using an Elastin Specific Molecular MR Probe

Marcus Makowski, MD, PhD, Kings College London

O 014 Probing Myocardial Blood Oxygenation Reserve with Controlled Hypercapnia Using BOLD CMR
Hsin-Jung Yang, MS, Cedars-Sinai Medical Center

Due to speaker conflicts and requests, the abstracts may not follow numerical order.

O 015 Feasibility of In Vivo Whole Heart DTI and IVIM with a 15 Minute Acquisition Protocol
Martijn Froeling, PhD, University Medical Center

O 016 Performance of T1 Mapping vs. T2 Mapping for Assessing Myocardial Edema
Janelle Yu, Montreal Heart Institute

O 017 Compressed Sensing with Synchronized Cardio-respiratory Sparsity for Free-breathing Cine MRI: Initial Comparative Study on Patients with Arrhythmias
Li Feng, New York University School of Medicine

O 018 Dynamic Self-navigated 3D Whole-heart Radial Coronary MRA with Retrospective Acquisition Window Selection
Simone Coppo, University Hospital of Lausanne

1:30 pm - 3:00 pm Oral Abstract Session 4: Grand Ballroom D Ischemic Heart Disease

Moderators: David Bluemke, MD, PhD, National Institutes of Health
Christopher Kramer, MD, University of Virginia

O 019 Diagnostic Accuracy of the Core Components of a Multi-parametric Cardiovascular Magnetic Resonance Imaging Protocol: a CE-MARC Sub-study
David Ripley, BSc MBChB, University of Leeds

O 020 Age-corrected Measurement of Extracellular Volume Fraction in Remote Normal Myocardium Is Correlated with Extent of Risk Area in AMI Patients
Yoshitaka Goto, Mie University Hospital

O 021 Overestimation of Infarct Size Following Acute Myocardial Infarction is Related to Extent of Myocardial Edema
Ananth Kidambi, BMBCh, University of Leeds

O 022 MOLLI T1 Mapping versus T2W-SPAIR at 3T: Myocardial Area at Risk Measurements and the Influence of Microvascular Obstruction
Donnie Cameron, University of Aberdeen

O 023 Mid-wall Fibrosis on Delayed Enhancement CMR – A Marker for Adverse Left Ventricular Chamber Remodeling Independent of Cardiomyopathic Etiology
Jiwon Kim, Memorial Sloan Kettering Cancer Center

O 024 Positive Effect of Intravenous Iron-Oxide Administration on Left Ventricular Remodelling in Patients with Acute ST-Elevation Myocardial Infarction – A Cardiovascular Magnetic Resonance (CMR) Study
Ali Yilmaz, MD, University Hospital Münster

3:00 pm - 3:30 pm Refreshment Break / Exhibits and Posters Grand Salons B-D

3:30 pm - 5:00 pm Invited Lecture Session 3 - Grand Ballroom A Multi Modality and Hybrid Imaging

At the conclusion of this session, participants will be better able to:

- Understand when CMR and PET can be used together
- Describe how CTA can be applied to measure perfusion and function
- Understand the potential utility of image fusion for EP applications

Moderators: Albert de Roos, MD, PhD, Leiden University Medical Center
Steffan Zimmerman, MD, Johns Hopkins University School of Medicine

3:30 pm Strategies for Cardiovascular MRI-PET
Pamela Woodard, MD, Washington University School of Medicine

3:45 pm Inflammation and Cardiovascular Imaging with PET
Nehal Mehta, MD, MSCE, National Institutes of Health

4:00 pm Perfusion Imaging with CT: State of the Art and Outlook
Joao Lima, MD, Johns Hopkins University

4:15 pm Strategies for Image Fusion: Electrophysiology Applications
Saman Nazarian, MD, Johns Hopkins University

4:30 pm Cardiovascular Function: Lessons to Learn from CT
Daniel Boll, MD, Duke University School of Medicine

4:45 pm Q & A

3:30 pm - 5:00 pm Case Review 4: Perfusion Imaging by CMR: Both Usual and Unusual Cases Grand Ballroom B

Moderators: Federico Mordini, MD, Washington DC VA Medical Center
Jürg Schwittr, MD, University Hospital Lausanne

Adenosine Stress Perfusion Cardiovascular Magnetic Resonance and the Identification of Coronary Artery Occlusion Following the Ross Operation
M. Jay Campbell, MD, Duke University

Adenosine Stress – Expect the Unexpected
Thomas Treibel, MBBS, University College London

Splenic Perfusion – An Augury for the Adequacy of Adenosine Stress
Charlotte Manisty, MBBS, Imperial College

3:30 pm - 5:00 pm Oral Abstract Session 5: Grand Ballroom C Early Career Award Translational

Moderators: Andrew Arai, MD, National Institutes of Health
Dudley Pennell, MD, Royal Brompton Hospital

O 025 Registration of Coronary MRA to DCE-MRI Myocardial Perfusion Series Improves Diagnostic Accuracy through the Computation of Patient-Specific Coronary Supply Territories: A CE-MARC Sub-Study
Constantine Zakkaroff, PhD, University of Leeds

O 026 Accuracy and Reproducibility of Four T1 Mapping Sequences: A Head-To-Head Comparison of MOLLI, ShMOLLI, SASHA, and SAPHIRE
Sébastien Roujol, Harvard Medical School

O 027 Improved In-vivo Cardiac DTI Using Optimal B-values
Andrew Scott, The Royal Brompton Hospital

O 028 High Resolution 3D Diffusion MRI of Carotid Plaque on 3T
Yibin Xie, Cedars-Sinai Medical Center

O 029 Artifact Reduction with a Wideband Late Gadolinium Enhancement (LGE) MRI Technique for Patients with Implanted Cardiac Devices: A Two-Center Study
Shams Rashid, PhD, University of California-Los Angeles

O 030 Advanced Assessment of Cardiac Morphology and Prediction of Gene Carriage by CMR in Hypertrophic Cardiomyopathy-The HCMNet/UCL Collaboration
Gaby Captur, MD, University College London

3:30 pm - 5:00 pm Oral Abstract Session 6: Grand Ballroom D
Clinical Outcome and Prognosis

Moderators: Daniel Berman, MD, Cedars-Sinai Medical Center
Sven Plein, MD, PhD, University of Leeds

O 031 The Utility of Cardiovascular Magnetic Resonance in the Investigation of Aborted Sudden Cardiac Death
Peter Swoboda, MBBS, University of Leeds

O 032 Influence of Right Ventricular Ejection Fraction on the Occurrence of Arrhythmic Events in Patients with Systolic Dysfunction
Umjeet Jolly, MD, London Health Sciences Centre

O 033 Prognostic CMR Parameters for Heart Failure and Arrhythmias in Large Cohort of Well Treated Thalassemia Major Patients
Antonella Meloni, PhD, Fondazione G. Monasterio
CNR-Regione Toscana and Institute of Clinical Physiology

O 034 Arterial Stiffness in Severe Aortic Stenosis following Transcatheter Aortic Valve Implantation (TAVI) Compared to Surgical Aortic Valve Replacement (SAVR)
Tarique Musa, MD, University of Leeds

O 035 Cardiac Magnetic Resonance Imaging for Risk Stratification in Patient with Diabetes Mellitus and Coronary Heart Disease – A Prospective Long-term Follow-up Study
Dominik Buckert, MD, University of Ulm

O 036 Prognostic Value of CMR in Suspected CHD: 3 Year Follow-up of the CE-MARC Study
John Greenwood, MD, PhD, University of Leeds

5:00 pm - 6:30 pm Invited Lecture Session 4 - Grand Ballroom A
Phenotyping and Risk Stratification in Hypertrophic Cardiomyopathy

At the conclusion of this session, participants will be better able to:

- Consider the prevalence and incidence of LGE in HCM
- Appreciate the current data on prognostic significance of LGE in risk stratification of HCM
- Appreciate challenges of risk stratification in HCM

Moderators: Alexis Jacquier, MD, CHU La Timone/
CEMEREM Marseille
Sanjay Prasad, MD, Royal Brompton Hospital

5:00 pm CMR for Diagnosis and Phenotypic Characterization in HCM
Ethan Hawkes Rowin, MD, Tufts Medical Center

5:15 pm How Should I Quantify LGE in HCM?
Rory O'Hanlon, MD, Centre for Cardiovascular Magnetic Resonance, Blackrock Clinic

5:30 pm Debate: LGE can be Used for Risk Stratification of Sudden Death in HCM
Pro: Martin Maron, MD, Tufts Medical Center
Con: Sanjay Prasad, MD, Royal Brompton Hospital

6:00 pm Future Directions for CMR in HCM... T1 Mapping and Other Novel Methods for Detection of Abnormal Substrate
Alexis Jacquier, MD, CHU La Timone/
CEMEREM Marseille

6:15 pm Q & A

5:00 pm - 6:30 pm Case Review 5 Grand Ballroom B
– Best Cases from the SCMR Website

Moderators: Vikas Rath, PhD, Bon Secours Heart and Vascular Institute
Kevin Steel, DO, San Antonio Military Medical Center

Takotsubo Cardiomyopathy Triggered by Myocardial Infarction in a Patient with Apical Hypertrophic Cardiomyopathy
Gerald McCann, BSc, MB ChB, University Hospitals Leicester

PAPVR to the Superior and Inferior Vena Cavae
Wilson T. King, MD

Sawtooth Cardiomyopathy
Ashish Aneja, MD

Times They are [a] Changing
Arash Seratnahaei, MD

Acute MI in Cardiac Amyloidosis
Heiko Kindler, MD

5:00 pm - 6:30 pm Oral Abstract Session 7: Grand Ballroom C
Basic Translational - Post-processing

Moderators: Robert Judd, MD, Duke Cardiovascular Magnetic Resonance Center
Alban Redheuil, MD, PhD, University of Paris Descartes - INSERM

O 037 Principal Component Analysis of Myocardial Strains to Optimize Cardiac Resynchronization Therapy Patient Selection
Raghav Ramachandran, MS, University of Virginia

Due to speaker conflicts and requests, the abstracts may not follow numerical order.

O 038 Comparison of Strain Measurement from Multimodality Tissue Tracking with Strain-encoding MRI and Harmonic Phase MRI in Pulmonary Hypertension
Yoshiaki Ohyama, MD, PhD, Johns Hopkins University

O 039 Two-dimensional Estimates of Left Ventricular Strains are Significantly Affected by Through-plane Motion
Jonathan Suever, PhD, University of Kentucky

O 040 Super-resolution Reconstruction of Late Gadolinium Enhanced MRI from Multiple Views
Qian Tao, Leiden University Medical Center

O 041 Left Atrial Spherical Shape Change in Atrial Fibrillation
Erik Bieging, MD, University of Utah

O 042 Temporal Interpolation of Real-time Cine Images for Ventricular Function Assessment
Haris Saybasili, PhD, Siemens Healthcare USA, Inc.

5:00 pm - 6:30 pm Oral Abstract Session 8: **Grand Ballroom D**
Congenital Heart Disease: Flow and Arterial Coupling

Moderators: Tiffanie Johnson, MD, Riley Hospital for Children
Arno Roest, MD, PhD, Leiden University Medical Center

O 043 Combined CMR and Catheterization Data in Determining Right Ventricular-arterial Coupling in Children and Adolescents with Pulmonary Arterial Hypertension
Uyen Truong, Children's Hospital Colorado

O 044 Differences in Pulmonary Flow Patterns between Surgical and Percutaneous Implanted Bovine Valves to Restore the Right Ventricle Outflow Tract Continuity: A Four Dimensional Flow Magnetic Resonance Study
Soha Romeih, MD, AMC

O 045 Four Dimensional Pulmonary Flow Evaluation in Adolescent Patients after Surgical and Percutaneous Pulmonary Valve Implantation
Soha Romeih, MD, AMC

O 046 Right Ventricular Kinetic Energy: 4D Flow MRI Analysis of Healthy Volunteers and Repaired Tetralogy of Fallot
Daniel Jeong, MD, University of Wisconsin

O 047 Impact of Beta-blocker Therapy on Thoracic Aorta 3D Wall Shear Stress in Patients with Bicuspid Aortic Valve
Bradley Allen, MD, Northwestern University

O 048 CMR-derived Aortic Stiffness Is Associated with More Rapid Aortic Dilation and Surgical Replacement in Children and Young Adults with Connective Tissue Disorders
Ashwin Prakash, MD, Boston Children's Hospital

6:30 pm - 7:30 pm Moderated Poster **Grand Salons B-D**
Session 1 / Wine and Cheese Reception

Moderators: Martin Prince, MD, PhD, Cornell and Columbia Universities
Hajime Sakuma, MD, PhD, Mie University Hospital

M 02 Long-term Follow-up of Coronary MR and CT Angiography for Prediction of Cardiac Events
Sebastian Kelle, MD, PhD, German Heart Institute

M 03 Distinction of Salvaged and Infarcted Myocardium within the Ischemic Area-at-Risk with T2 Mapping
Sophia Hammer-Hansen, MD, National Institutes of Health

M 04 T1 and T2 Mapping have a Higher Diagnostic Accuracy for the Ischaemic Area-at-Risk in NSTEMI Patients Compared with Dark Blood Imaging
Colin Berry, PhD, University of Glasgow

M 05 High Resolution Coronary MR Angiography at 7 Tesla: Comparison with Standard Bright Blood and Black Blood Imaging
Maurice Bizino, MD, Leiden University Medical Center

M 06 Initial Results of a New Very Rapid Rest/Regadenoson Stress Myocardial Perfusion Protocol in Patients with Atrial Fibrillation
Lowell Chang, MD, University of Utah School of Medicine

M 07 Pre- and Post-contrast T1 Mapping for Detection of Myocardial Fibrosis in Severe Aortic Stenosis Before and After Aortic Valve Replacement
Emmanuelle Vermes, MD, University Hospital of Trousseau

Saturday, January 18, 2014

6:30 am - 8:00 am Continental Breakfast / Exhibits and Posters **Grand Salon B-D**

7:00 am - 8:00 am Cardiology for Non-clinicians 2: Non-Ischemic Heart Disease **Grand Ballroom C**

At the conclusion of this session, participants will be better able to:

- Comprehend the basic concepts of pathophysiology, and clinical presentation of patients with nonischemic heart disease
- Comprehend basic concepts of pathophysiology, and clinical presentation of patients with infiltrative cardiomyopathy
- Comprehend basic concepts of pathophysiology, and clinical presentation of patients with aortic and mitral valve disease

Moderators: Karen Ordovas, MD, University of California-San Francisco

7:00 am Infiltrative Cardiomyopathies: An Overview
Dan Sado, BM BSc, The Heart Hospital

7:20 am Myocarditis: Pathogenesis and Consequences
Sanjay Prasad, MD, Royal Brompton Hospital

7:40 am Interesting Case of Non-Ischemic Heart Disease
Dan Sado, BM BSc, The Heart Hospital

7:50 am Q & A

7:00 am – 8:00 am Physics for Physicians 2: Grand Ballroom D
Late Gadolinium Enhancement

At the conclusion of this session, participants will be better able to:

- Discuss the basics of data acquisition and image reconstruction techniques for the following applications: cardiac function and morphology, late gadolinium enhancement and perfusion MRI
- Describe the basics of post-processing techniques for the following applications: cardiac function and morphology, late gadolinium enhancement and perfusion MRI
- Explain an overview of the recent technological advances in these techniques and the impact these technical advances could have on clinical diagnosis and therapy follow-up in the future

Moderators: Sonia NIELLES-Vallespin, PhD, National Institutes of Health

- 7:00 am Acquisition**
Peter Kellman, PhD, National Institutes of Health
- 7:20 am Post-processing**
Robert Judd, PhD, Duke Cardiovascular Magnetic Resonance Center
- 7:40 am Future Perspective**
Reza Nezafat, PhD, Beth Israel Deaconess Medical Center

7:00 am – 8:00 am Clinical Trials - Workshop 2 Oak Alley Room

At the conclusion of this session, participants will be better able to:

- Discuss the role of CMR in clinical trials
- Critique the design of clinical trials using CMR
- Appreciate the challenges of performing clinical trials using CMR

Moderators: Steffen Petersen, MD, DPhil, Barts and The London NHS Trust
Joseph Selvanayagam, MBBS, Flinders Medical Centre

- 7:00 am How To Do It: Choosing a CMR Outcome**
Alex Pitcher, MRCP, University of Oxford
- 7:15 am How To Do It: Power Calculations and Sample Size**
Jemma Hopewell, BSc (Hons), University of Oxford
- 7:30 am How To Do It: Incorporating Imaging Data into a Trial**
John Greenwood, MBChB, PhD, University of Leeds
- 7:45 am Q & A**

7:00 am – 8:00 am Case Review 6: CMR in Grand Ballroom B
Valvular Heart-Disease Decision-Making

Moderators: Amit Patel, MD, University of Chicago
Jonathan Weinsaft, MD, Weill Medical College of Cornell University

Pulmonary Valve Replacement in a Woman with a History of Repaired Anomalous Left Coronary Artery from the Pulmonary Artery (ALCAPA) Complicated by Severe Pulmonary Regurgitation
Gina LaRocca, MD, National Institutes of Health

Culture-negative Endocarditis: A Comprehensive Evaluation Using Cardiac Magnetic Resonance Imaging and Four-Dimensional Flow Magnetic Resonance Imaging

Samir Thadani, MD, University of California-San Francisco

A Middle Aged Man with Post-MI Mitral Regurgitation: Utility of Navigator Gated 3-Dimensional DE-MRI for Mitral Apparatus Tissue Characterization

Jiwon Kim, MD, Weill Cornell Medical College, Memorial Sloan Kettering Cancer Center

Pulmonic Regurgitation Following Complete Tetralogy of Fallot Repair: Not a Benign Condition

Gillian Murtagh, MD, University of Chicago

Comprehensive Assessment of Bicuspid Aortic Valves Using CMR: Looking Beyond the Valve

Karima Addetia, MD, University of Chicago

8:00 am – 9:30 am Invited Lecture Session 5: Grand Ballroom A
T1 Mapping

At the conclusion of this session, participants will be better able to:

- Discuss methods for T1- and ECV-mapping
- Describe the physiological mechanisms for elevated T1 and ECV
- Identify the clinical applications of T1 mapping
- Understand the clinical applications of ECV mapping

Moderators: Peter Kellman, PhD, National Institutes of Health
Daniel Messroghli, MD, Deutsches Herzzentrum Berlin

- 8:00 am T1- and ECV-Mapping Methods**
Daniel Messroghli, MD, Deutsches Herzzentrum Berlin
- 8:15 am Fibrosis and Edema**
Martin Ugander, MD, PhD, Karolinska Institute
- 8:30 am Native Contrast T1-Mapping Applications**
James Moon, MRCP, The Heart Hospital
- 8:45 am ECV Mapping Applications**
Erik Schelbert, MD, University of Pittsburgh Medical Center
- 9:00 am Multi-parametric Mapping in One Acquisition**
Francesco Santini, PhD, University of Basel
- 9:15 am Q & A**

8:00 am – 9:30 am Case Review 7: Congenital Grand Ballroom B
Heart Disease / Pediatric Cases

Moderators: Rajesh Krishnamurthy, MD, Texas Children's Hospital
Reza Razavi, MD, King's College London

Use of 3D Respiratory Navigated Inversion Recovery FLASH Sequence to Detect Intracardiac Thrombus in a Fontan Patient
Catherine Avitabile, MD, Children's Hospital of Philadelphia

A Case of Fontan-related Liver Fibrosis Successfully Predicted and Quantified by Liver MR Elastography
Suraj Serai, PhD, Cincinnati Children's Hospital Medical Center

Due to speaker conflicts and requests, the abstracts may not follow numerical order.

Acute Vascular Rejection of Pulmonic Conduit Xenograft in a Patient Affected by Tetralogy of Fallot. CMR Findings in the Acute Phase and Follow Up
Patrizia Pedrotti, MD, Niguarda Hospital

CMR Evaluation of an Anomalous Origin of the Right Coronary Artery from the Main Pulmonary Artery in an Athletic Adult
Susan Dusenbery, MD, Boston Children's Hospital

Suppression of PVC's by Supine Cycle Ergometry during CMR Evaluation for Cardiomyopathy
Kevin Whitehead, MD, PhD, Children's Hospital of Philadelphia

Use of Dual Gadolinium Contrast Agents for Comprehensive Evaluation of Takayasu's Arteritis in a Pediatric Patient
Tim Slesnick, MD, Emory University

O 055 Pressure Gradient Measurement in the Coronary Artery Using 4D PC-MRI: Towards Noninvasive Quantification of Fractional Flow Reserve
Zixin Deng, Cedars-Sinai Medical Center

O 056 Coronary Magnetic Resonance Angiography of Coronary Artery Total Occlusion: Imaging Findings and Success Rates of Percutaneous Coronary Intervention According to Intraluminal Signal Intensity Patterns
Yeon Hyeon Choe, MD, Samsung Medical Center

O 057 Prevalence and Correlation of Abnormal Flow Reserve by Stress CMR and Coronary Artery Plaque by Cardiac CTA in Symptomatic Diabetics
Yasmin Hamirani, MD, University of Virginia

O 058 Adenosine Stress CMR with Variable Density Spiral Pulse Sequences Accurately Detects CAD with minimal Dark-rim Artifacts
Michael Salerno, MD, PhD, University of Virginia

O 059 Regadenoson Blood Flow in Type 1 Diabetes (RABIT1 D Study)
Daniel Groves, MD, University of Colorado

O 060 Perfusion Dephasing Discriminated between Coronary Microvascular Disease and Multivessels Coronary Artery Disease
Amedeo Chiribiri, MD, PhD, King's College London

8:00 am - 9:30 am Oral Abstract Session 9: **Grand Ballroom C** EP and Interventional

Moderators: Matthias Gutberlet, MD, University of Leipzig
Dara Kraitchman, VMD, PhD, Johns Hopkins University

O 049 Comprehensive MRI-guided Intracardiac Electrophysiological Interventions in Swine Using a Combination of Active Tracking and Passive Real-time Catheter Imaging
Matthias Grothoff, University Leipzig - Heart Center

O 050 MRI-based Visual and Haptic Catheter Feedback: Simulating a Novel System's Contribution to Efficient and Safe MRI-guided Cardiac Electrophysiology Procedures
Ka-Wai Kwok, PhD, University of Georgia

O 051 Left Atrial Blood Stasis by 4D Flow MRI Correlates with Stroke Risk Estimation by CHA2DS2-VASc Score
Daniel Lee, MD, Northwestern University

O 052 Presence of a CMR-based U-shaped Contraction Pattern and Optimal LV Pacing Lead Position Determines Best Response to CRT
Gregory Hartlage, MD, Emory University

O 053 Electromechanical and Scar Characteristics at Left Ventricular Lead Implant Site in the Context of Overall Dyssynchrony with Cine DENSE Predict Cardiac Resynchronization Therapy Outcomes
Kenneth Bilchick, MD, University of Virginia Health System

O 054 Off-resonance Insensitive LGE MRI for Imaging Ventricular Scar without Image Artifacts Induced by Cardiac Devices
Daniel Kim, PhD, University of Utah

8:00 am - 9:30 am Oral Abstract Session 10: **Grand Ballroom D** Coronary Artery Disease

Moderators: Eike Nagel, MD, PhD, King's College London
Warren Manning, MD, Beth Israel Deaconess Medical Center

9:30 am - 10:00 am Refreshment Break / Exhibits and Posters **Grand Salons B-D**

10:00 am - 11:30 am Invited Lecture Session 6: **Grand Ballroom A** Vascular Imaging and Endothelial Function

At the conclusion of the session, participants will be better able to:

- Describe recent advances and applications in MRI of the vascular system and assessment of endothelial function
- Define methods and results and identify clinical applications for quantifying vascular function
- Describe approaches, recent developments and limitations to obtaining CMR images of the coronary arteries

Moderators: Jeffrey Maki, MD, PhD, University of Washington
Paul Finn, MD, University of California-Los Angeles

10:00 am Quantifying Vascular Function
Alban Redheuil, MD, PhD, Université Paris-Descartes

10:15 am Ultra Fast or High Resolution? Technical Approaches for MRA
Paul Finn, MD, University of California-Los Angeles

10:30 am Pulmonary Vascular and Lung Function
Jens Vogel Claussen, MD, Johns Hopkins Hospital

10:45 am Aortic and Peripheral Vessel Assessment
Martin Prince, MD, PhD, Cornell University

11:00 am Coronary Imaging: State of the Art
Debiao Li, PhD, Cedars-Sinai Medical Center

11:15 am Q & A

10:00 am – 11:30 am Invited Lecture Session 7: **Grand Ballroom B** CMR in Asia

At the conclusion of this session, participants will be better able to:

- Understand the role of CMR in clinical applications among Asian countries
- Discuss the current potentials and challenges of utilizing CMR in Asia
- Appreciate the review of the top 5 CMR papers originated from Asia

Moderators: Byoung Wook Choi, MD, PhD, Yonsei University College of Medicine
Carmen Wing-Sze Chan, MBBS, Queen Mary Hospital

10:00 am **Insights from Asia**

Yeon Hyeon Choe, MD, PhD, Sungkyunkwan University School of Medicine

10:15 am **Prognostic Value of CMR and Coronary MRA**

Hajime Sakuma, MD, Mie University Hospital

10:30 am **Cost-effectiveness of CMR in Asia**

Carmen Chan, MBBS, Queen Mary Hospital

10:45 am **Diffusion Tensor Imaging for Myocardium**

Ming Ting Wu, MD, Kaohsiung Veterans General Hospital

11:00 am **Q & A**

10:00 am – 11:30 am Invited Lecture Session 8: **Grand Ballroom C** CMR in Electrophysiology

At the conclusion of this session, participants will be better able to:

- Comprehend the potential role of CMR for EP-studies
- Discuss current imaging protocols and identify unique needs
- Discuss and be aware of current and future developments

Moderators: Eugene Kholmovski, PhD, University of Utah
Matthias Gutberlet, MD, University of Leipzig

10:00 am **Techniques to Visualize Atrial Tissue**

Eugene Kholmovski, PhD, University of Utah

10:15 am **Real-time Imaging - In Case of Atrial Fibrillation**

Peter Kellman, PhD, National Institutes of Health

10:30 am **CMR to Guide Intervention in EP-studies**

Matthias Grothoff, MD, The Herzzentrum Leipzig – University Hospital

10:45 am **Left Atrial Sphericity Predicts AF Ablation Outcome**

Felipe Bisbal, MD, Hospital Clinic de Barcelona

11:00 am **Devices and EP - Safety in MR**

Mohammad Shenasa, MD, Heart & Rhythm Medical Group

11:15 am **Q & A**

10:00 am – 11:30 am Oral Abstract Session 11: **Grand Ballroom D** Myocarditis and Other Myocardial Pathologies

Moderators: Robert Rollings, MD, Savannah Cardiology
Jeanette Schulz-Menger, MD, Charité Universitätsmedizin Berlin

O 061 **T1 Mapping in Discrimination between Hypertrophic and Hypertensive Cardiomyopathy**

Rocio Hinojar, MD, King's College London

O 062 **Native T1 Values in Discrimination Between in Acute and Chronic Myocarditis**

Rocio Hinojar, MD, King's College London

O 063 **Myocardial T2 Mapping for Improved Detection of Inflammatory Myocardial Involvement in Acute and Chronic Myocarditis**

Rocio Hinojar, MD, King's College London

O 064 **Systemic Sclerosis: Detection of Early Subclinical Diffuse Myocardial Fibrosis and Impaired Left Ventricular Strain by Cardiovascular Magnetic Resonance**

Ntobeko Ntusi, MBChB, MD, University of Oxford

O 065 **Quantification of Diffuse Myocardial Fibrosis in Patients with Resistant Hypertension Undergoing Renal Denervation versus Hypertensive Controls - Preliminary Results**

Adelina Doltra, MD, German Heart Institute

O 066 **Early stage Chronic Kidney Disease: A Paradigm for Diffuse Fibrosis and Clinical Progression**

Nicola Edwards, PhD, University of Birmingham

11:30 am – 12:30 pm Moderated Poster Session 2 **Grand Salons B-D** / Lunch (on own) / Exhibits and Posters

Moderators: Byoung Wook Choi, MD, PhD, Yonsei University College of Medicine
Steffen Petersen, MD, DPhil, Barts and The London NHS Trust

M 01 **Evidence from a Multicenter CMR Registry Indicates that Stress CMR imaging Provides Highly Effective Risk Stratification in Patients Suspected to Have Myocardial Ischemia**

Raymond Kwong, MD, Brigham and Women's Hospital

M 08 **Extracellular Volume Assessed by CMR T1-Mapping Correlates with Histologically Determined Amount of Diffuse Fibrosis in DCM**

Fabian aus dem Siepen, University of Heidelberg

M 09 **Improved Precision in SASHA T1 Mapping with a Variable Flip Angle Readout**

Kelvin Chow, University of Alberta

M 10 **Severity of Blood Flow Reduction Associated with Detectable T2 Enhancement in the Area-at-Risk of a Reperfused Canine Model of Acute Myocardial Infarction**

Sophia Hammer-Hansen, MD, National Institutes of Health

M 11 **Free-breathing T2 Mapping at 3T for the Monitoring of Cardiac Allograft Rejection: Initial Results**

Ruud van Heeswijk, PhD, University Hospital Lausanne

Due to speaker conflicts and requests, the abstracts may not follow numerical order.

M 12 Assessment of Myocardial Oxygenation in Patients with Severe Aortic Stenosis Before and After Aortic Valve Replacement: An Oxygenation-sensitive CMR Study

Masliza Mahmud, MBChB, DPhil, Radcliffe Hospital

12:30 pm – 2:00 pm Invited Lecture Session 9 - **Grand Ballroom A** Congenital I - Unravelling the Complexity of CHD with MR

At the conclusion of this session, participants will be better able to:

- Have insight in the use of Computational Fluid Dynamics for better understanding of the impact of congenital heart disease before and after correction on hemodynamics
- Understand the different visualization techniques to assess intracardiac flow and how these can help us in understanding (patho)physiology and assessment of cardiac dysfunction
- Conceive the importance of rapid prototyping of complex congenital heart disease for patient management

Moderators: Philipp Beerbaum, MD, PhD, Children's Hospital, Hanover Medical University
Mark A. Fogel, MD, Children's Hospital of Philadelphia

12:30 pm **CMR-based Computational Fluid Dynamics of Coarctation of the Aorta**

Alberto Figueroa, MD, PhD, King's College London

12:45 pm **CMR-based Computational Fluid Dynamics in Staged Repair of Hypoplastic Left Heart Syndrome**

Giovanni Biglino, MD, UCL Institute of Cardiovascular Science

1:00 pm **Intra-cardiac 4D Flow in Health and Congenital Heart Disease**

Arno Roest, MD, PhD, Leiden University Medical Center

1:15 pm **Rapid Prototyping in Complex CHD**

Shi-Joon Yoo, MD, The Hospital for Sick Children

1:30 pm **CMR-based Myocardial Deformation Imaging in Tetralogy of Fallot**

Adam Dorfman, MD, University of Michigan

1:45 pm **Q & A**

12:30 pm – 2:00 pm **Case Review 8 – When CMR Complements Other Modalities** **Grand Ballroom B**

Moderators: Joao Lima, MD, Johns Hopkins University
Carlos Rochitte, MD, Heart Institute-Incor

Iatrogenic or Infarct? An Unexpected Case of Syncope Defined by Cardiac Magnetic Resonance
Andrew Choi, MD, Georgetown University

Diagnostic Challenge in a Patient with Known Multiple Myeloma: Is it Hypertrophic Cardiomyopathy (HCM) or Cardiac Amyloidosis?
Yasmin Hamirani, MD, University of Virginia

Double Orifice Mitral Valve and LV Non-compaction: Two Rare Diseases, One Common Link?
Vassilis Vassiliou, PhD, Royal Brompton Hospital

Usefulness of Cardiac MRI (CMR) in the Diagnosis and Management of Chest Pain Syndromes with Elevated Troponins. A Comparison of Two Cases.
Evan Nelson, Advocate Lutheran General Hospital

Role of Cardiovascular Magnetic Resonance in the Diagnosis of Mitral-aortic Pseudoaneurysm
Andre Fernandes, MD, Hospital Ana Neri

Low Voltage Electrograms and Severely Fibrotic Right Atrium Associated with Atrial Tachycardia. Cardiac MRI and Electrophysiological Approach.
Lilia Sierra-Galan, MD, American British Cowdray Medical Center

Spontaneous Coronary Artery Dissection: Better Understanding this Rare Condition with 3.0T Contrast-enhanced Coronary Magnetic Resonance Angiography
Qi Yang, MD, PhD, Xuanwu Hospital

Hampton's Hump On Cardiac Magnetic Resonance
Miguel Vieira, MD, Royal Brompton & Harefield NHS Foundation Trust

12:30 pm – 2:00 pm **Oral Abstract Session 12: Grand Ballroom C** Basic Translational - Pre-clinical

Moderators: Rene Botnar, PhD, King's College London
David Firmin, PhD, Royal Brompton Hospital

O 67 Infarct Size is Overestimated By Contrast-enhanced CMR in the Acute Phase But not at 7 Days When Compared with Histopathology
Robert Jablonowski, Lund University Hospital

O 68 Correlation of DTI Tractography with Electroanatomic Mapping in Normal and Infarcted Myocardium
Choukri Mekkaoui, PhD, Harvard Medical School

O 69 Cine DENSE MRI Detects Delayed Mechanical Activation of the Left Ventricular Free Wall in a Canine Model of Heart Failure with Left Bundle Branch Block
Sophia Cui, BS, University of Virginia

O 70 Mitral Valve Stenosis and Left Ventricular Hemodynamic Alterations after Mitral Valve Repair
Donald Zhang, University of Pennsylvania

O 71 High-resolution T2 Relaxometry Detects Intramyocardial Hemorrhage Post Myocardial Infarction in Swine
Haiyan Ding, PhD, Tsinghua University

O 72 Hemorrhage Promotes Inflammation and Myocardial Damage following Acute Myocardial Infarction
Mihaela Pop, PhD, Sunnybrook Research Institute

12:30 pm – 2:00 pm Oral Abstract Session 13: **Grand Ballroom D** Vascular

Moderators: Robert Edelman, MD, Evanston Hospital
Bernd Wintersperger, PhD, University of Toronto

- O 73 **Improvement in Pulmonary Hypertension Discrimination Using Multiple MRA Pant-leg Parameters of Pulmonary Artery**
Phillip Kilgas, University of Wisconsin-Madison
- O 74 **Real Time Magnetic Resonance Assessment of Septal Curvature Accurately Tracks Acute Hemodynamic Changes in Pediatric Pulmonary Hypertension**
Bejal Pandya, MBBS, University College London
- O 75 **Fast Three-dimensional Black-blood MR Imaging for Carotid Artery Intra-plaque Haemorrhage Using DANTE-prepared FLASH (3D-DASH)**
Luca Biasioli, DPhil, University of Oxford
- O 76 **Neutral Contrast MRI for the Detection of Peripheral Arterial Wall Calcifications**
Robert Edelman, MD, Evanston Hospital
- O 77 **Contrast Enhanced MRA with CAPR (Cartesian Acquisition with Projection like Reconstruction) Technique – Review of Initial Clinical Experience**
Manoharan Muthuvelu, MD, Mayo Clinic
- O 78 **Aortic Stiffness in the Presence of Self-limiting and Sustained Systemic Inflammation: Comparison of Acute Myocarditis and Chronic Inflammatory Diseases**
Rocio Hinojar, MD, King's College London

2:00 pm – 2:30 pm Refreshment Break / Exhibits and Posters **Grand Salons B-D**

2:30 pm – 4:00 pm Invited Lecture Session 10 - **Grand Ballroom A** Congenital II - Advanced CMR Ready for the Clinical Arena?

At the conclusion of this session, participants will be better able to:

- Appreciate the importance of advanced CMR techniques in the clinical care for pediatric patients or patient with congenital heart disease and arrhythmias
- Value the significance of gender differences also in pediatric and congenital cardiology
- Understand the technique of T1 mapping and its importance in the assessment of cardiac disease in patients with acquired and congenital heart disease

Moderators: Andrew Powell, MD, Boston Children's Hospital
Arno Roest, MD, PhD, Leiden University Medical Center

2:30 pm **CMR-based Electro-anatomical Mapping and Ablation Imaging in CHD**

Jerold Shinebane, MD, University of Southern California - Keck School of Medicine

2:45 pm **CMR Imaging of Kawasaki Disease: Assessing the Coronary Vessel Wall**

Gerald Greil, MD, King's College London

3:00 pm **An Old Idea Taken Further: CMR in Pediatric Heart Transplantation**

Tarique Hussain, MD, King's College London

3:15 pm **The Gender Impact on the Long-term Outcome after TOF Repair**

Philipp Beerbaum, MD, PhD, Children's Hospital, Hanover Medical University

3:30 pm **T1 Mapping in Pediatric and Congenital Heart Disease**

Lars Grosse-Wortmann, MD, The Hospital for Sick Children

3:45 pm **Q & A**

2:30 pm – 4:00 pm Case Review 9 – Novel **Grand Ballroom B** Characterization of Cardiac Physiology by CMR

Moderators: James Moon, MD, The Heart Hospital
Mark Westwood, MD, The London Chest Hospital

Streaming in Transposition of the Great Arteries Using Cardiac MRI

James Wong, MD, King's College London

Predicting Ventricular Arrhythmia in Acute Myocarditis: A Potential Role for Extracellular Volume Assessment?

Heerajnarain Bulluck, MBBS, The Heart Hospital

Too Short to Measure: Parametric Mapping in Severe Iron Overload

Steve Leung, MD, University of Kentucky

Severe Acute Myocarditis: T1-Mapping

Jonathan Nadjiri, Deutsches Herzzentrum München

Right Ventricular Ischemic Insult: A Novel Protocol with Cardiovascular Magnetic Resonance

Sherif Moustafa, MD, Prince Salman Heart Center

Biventricular Takotsubo Is Clinically Significant and Easily Identified

Anish Bhuvu, MBBS, The Heart Hospital

2:30 pm – 4:00 pm Oral Abstract Session 14: **Grand Ballroom C** Basic Translational - New Techniques for Clinical Application

Moderators: Francesco Santini, PhD, University of Basel Hospital
Alistair Young, PhD, University of Auckland School of Medicine

O 79 **Dual Echo bSSFP for Real-time Positive Contrast of Passive Nitinol Guidewires in MRI-guided Cardiovascular Interventions** Andrienne Campbell-Washburn, PhD, National Institutes of Health

O 80 **High-resolution Whole-heart Contrast-enhanced Coronary MRA in 5 Minutes with Self-Navigation and 100% Gating Efficiency** Jianing Pang, MS, Cedars-Sinai Medical Center

O 81 **Motion-corrected Compressed-sensing Enables Robust Spiral First-pass Perfusion Imaging with Whole Heart Coverage** Yang Yang, MS, University of Virginia

Due to speaker conflicts and requests, the abstracts may not follow numerical order.

O 82 3D-Quantification Using an Interleaved Look-locker Acquisition Sequence with T2-prep Pulse (3D-QALAS)
Sofia Kvernby, Linköping University

O 83 In Vivo 3D High Resolution Cardiac Diffusion Weighted MRI: A Motion Compensated Diffusion-prepared Balanced Steady-state Free Precession Approach
Christopher Nguyen, MS, Cedars-Sinai Medical Center

O 84 Inter-centre Reproducibility of Cardiac Diffusion Tensor Measures
Elizabeth Tunnicliffe, PhD, University of Oxford

4:15 pm Pediatric Applications of iCMR
Vivek Muthurangu, MD, UCL Institute of Cardiovascular Science

4:30 pm iCMR Software Platforms
Graham Wright, PhD, Sunnybrook Research Institute

4:45 pm Devices for iCMR
Steve Wedan, CEO, Imricor Medical Systems

5:00 pm MR Guided EP
Henry Halperin, MD, MA, Johns Hopkins University School of Medicine

5:15 pm Q & A

2:30 pm – 4:00 pm Oral Abstract Session 15: **Grand Ballroom D** Hypertrophic and Dilated CMP

Moderators: Scott Flamm, MD, MBA, Cleveland Clinic
Alexis Jacquier, MD, CHU la Timone/CEMEREM

O 085 Myocardial T2 Signal Enhancement in Hypertrophic Cardiomyopathy: Prevalence, Clinical Profile and Pathologic Correlation
Louis Kolman, MD, University of Calgary

O 086 Comparison of White Blood and Black Blood T2* Cardiovascular Magnetic Resonance at 3 Tesla
Mohammed Alam, MD, Royal Brompton Hospital

O 087 Cardiac MR Detects Impaired Myocardial Perfusion Reserve and Left-ventricular Hypertrophy in C57Bl/6 Mice Fed a High-fat Diet
Nivedita Naresh, University of Virginia

O 088 The Association between ECV and Microcirculation Perfusion Abnormalities in Non-ischemic Dilated Cardiomyopathy
Aamir Ali, MBChB, Royal Brompton Hospital

O 089 Titin: A Phenotype-genotype Descriptive Comparison of Dilated Cardiomyopathy
Arun Bakshi, MD, PhD, Royal Brompton Hospital

O 090 Prognostic Value of Myocardial Strain Analysis with Cardiac Magnetic Resonance in Patients with Dilated Cardiomyopathy
Florian Andre, MD, University of Heidelberg

4:00 pm – 5:30 pm Invited Lecture Session 11 - **Grand Ballroom A** Interventional CMR: State-of-the-Art and Future

At the conclusion of this session, participants will be better able to:

- Know about the current status of interventional CMR
- Understand the technical requirements for interventional CMR
- Identify future clinical applications

Moderators: Robert Lederman, MD, National Institutes of Health
Tobias Schaeffter, PhD, King's College London

4:00 pm Overview of Clinical iCMR
Kanishka Ratnayaka, MD, National Heart, Lung and Blood Institute

4:00 pm – 5:30 pm Invited Lecture Session 12 - **Grand Ballroom B** Future Directions in IHD: Perfusion, FFR, Tissue Characterization

At the conclusion of this session, participants will be better able to:

- Understand the role of FFR in therapeutic decision making for CAD
- Understand recent clinical trial data on myocardial perfusion imaging
- Appreciate recent advances and future directions in myocardial T1 and T2 characterization
- Comprehend the wide range of MR approaches to image coronary arteries

Moderators: Alexis Jacquier, MD, CHU la Timone/CEMEREM Marseille

4:00 pm Current and Future Role of FFR in Therapeutic Decision Making
Colin Berry, MD, PhD, University of Glasgow

4:15 pm Lessons from MR IMPACT-II
Jürg Schwitter, MD, University of Lausanne

4:30 pm Future Directions in T1 Characterization
Matthias Friedrich, MD, Montreal Heart Institute

4:45 pm Recent Advances in Myocardial T2-Mapping
Ruud van Heeswijk, PhD, University of Lausanne

5:00 pm From Coronary MRA to Coronary MRI - A Comprehensive Look at the Coronaries
René Botnar, PhD, King's College London

5:15 pm Q & A

4:00 pm – 5:30 pm Oral Abstract Session 16: **Grand Ballroom C** Molecular/Contrast Agent Imaging

Moderators: Wei Cheng, West China Hospital Sichuan University
Marc Dewey, MD, Charité Universitätsmedizin Berlin

O 091 Atherosclerosis Endothelial Activation Quantification in Vivo with Fluorine Magnetic Resonance Imaging and Spectroscopy
Hua Pan, PhD, Washington University School of Medicine

O 092 Evaluation of Iron Overload: Dual-energy Computed Tomography versus Magnetic Resonance Imaging
El-Sayed Ibrahim, PhD, Mayo Clinic

O 093 **Computational Model of Bloch Flow Equation for In-vivo Assessment of Contrast Agents**
Michael Dada, M.Tech, B.Tech, Federal University of Technology

O 094 **Comparison of Gadolinium Dose and Acquisition Time for Late Gadolinium Enhancement at 3.0 T**
Adelina Doltra, MD, German Heart Institute

O 095 **Manganese-enhanced MRI Enables Longitudinal Tracking of Transplanted Stem Cell Viability in the Murine Myocardium**
Rajesh Dash, MD, PhD, Stanford University

O 096 **Dual Contrast Enhanced Cardiac MRI Using Manganese and Gadolinium in Patients with Severe Ischemic Cardiomyopathy Detects the Peri-infarct Region (PIR)**
Yuka Matsuura, BS, Stanford University

4:00 pm - 5:30 pm **Oral Abstract Session 17: Grand Ballroom D**
Cost Effectiveness, Comparative Imaging

Moderator: Hakan Arheden, MD, PhD, Lund University Hospital
Phillip Yang, MD, Stanford University

O 097 **Cost Benefits of Cardiovascular Magnetic Resonance Imaging and Angiography Performed Earlier in the Diagnostic Assessment of Neonatal Complex Congenital Heart Disease**
Pierangelo Renella, MD, University of California-Los Angeles

O 098 **Influence of Disease Prevalence on Cost-effectiveness of Magnetic Resonance Imaging versus Coronary Angiography Combined with Fractional Flow Reserve Testing**
Jürg Schwitter, MD, University of Lausanne

O 099 **Motivation for Whole-heart Perfusion CMR: A Simulation Study Based on Retrospective Comparison of the Diagnostic Performance of 3-slice Vs. Whole-heart SPECT**
Behzad Sharif, PhD, Cedars-Sinai Medical Center

O 100 **Is Cardiac MRI Stress Imaging a Cost-saving Strategy for Obese Patients?**
J. Ronald Mikolich, MD, NEOMED

O 101 **Aortic Insufficiency Following Transcatheter Aortic Valve Replacement Is Underestimated by Echocardiography Compared with Cardiac MRI**
Wissam Abdallah, MD, Vanderbilt University Medical Center

O 102 **CMR to Stratify Post-TAVR Paravalvular Leak in Patients with Suboptimal Echocardiography**
Gregory Hartlage, MD, Emory University

5:30 pm - 6:00 pm **CMR Technology Updates Grand Ballroom A**

6:00 pm - 6:30 pm **Awards Ceremony Grand Ballroom A**

6:30 pm - 8:00 pm **Awards Reception Jefferson Ballroom**

Sunday, January 19, 2014

6:30 am - 8:00 am **Continental Breakfast Chemin Royale Foyer**

7:00 am - 8:00 am **Cardiology for Non-clinicians 3 - Valvular Heart Disease Grand Ballroom C**

At the conclusion of this session, participants will be better able to:

- Comprehend the basic concepts of pathophysiology, and clinical presentation of patients with ischemic heart disease
- Comprehend basic concepts of pathophysiology, and clinical presentation of patients with infiltrative cardiomyopathy
- Comprehend basic concepts of pathophysiology, and clinical presentation of patients with aortic and mitral valve disease

Moderators: Alex Barker, PhD, Northwestern University
Florian von Knobelsdorff-Brenkenhoff, MD, Charité Universitätsmedizin Berlin

7:00 am **Mitral Regurgitation: Causes and Hemodynamic Effects**
Florian von Knobelsdorff-Brenkenhoff, MD, Charité Universitätsmedizin Berlin

7:20 am **Aortic Stenosis: Pathogenesis and Cardiovascular Consequences**
Juliano Fernandes, MD, PhD, University of Campinas

7:40 am **Interesting Case of Valvular Heart Disease**
Nazima Kathiria, DO, University of California-San Francisco

7:50 am **Q & A**

7:00 am - 8:00 am **Physics for Physicians 3 - Grand Ballroom D**
Perfusion MRI

At the conclusion of this session, participants will be better able to:

- Discuss the basics of data acquisition and image reconstruction techniques for the following applications: cardiac function and morphology, late gadolinium enhancement and perfusion MRI
- Describe the basics of post-processing techniques for the following applications: cardiac function and morphology, late gadolinium enhancement and perfusion MRI
- Explain an overview of the recent technological advances in these techniques and the impact these technical advances could have on clinical diagnosis and therapy follow-up in the future

Moderators: Sonia NIELLES-Vallespin, PhD, National Institutes of Health
M. Jay Campbell, MD, Duke University Hospital

7:20 am **Acquisition**
Frederick Epstein, PhD, University of Virginia

7:40 am **Post-processing**
Li-Yueh Hsu, PhD, National Institutes of Health

7:50 am **Future Perspective**
Michael Salerno, MD, PhD, University of Virginia

7:00 am - 8:00 am **Clinical Trials - Workshop 3 Oak Alley Room**

At the conclusion of this session, participants will be better able to:

- Discuss the role of CMR in clinical trials
- Critique the design of clinical trials using CMR
- Appreciate the challenges of performing clinical trials using CMR

Due to speaker conflicts and requests, the abstracts may not follow numerical order.

Moderators: John Greenwood, MBChB, PhD, University of Leeds
Alex Pitcher, MRCP, University of Oxford

- 7:00 am Pitfalls in Cardiac Imaging Trials**
Andrew Arai, MD, National Institutes of Health
- 7:15 am An Industry Perspective on Clinical Trials using CMR**
Denise Yates, Novartis Institutes for Biomedical Research
- 7:30 am How I Did It: Lessons from a Real-world CMR Trialist**
John Greenwood, MBChB, PhD, University of Leeds
- 7:45 am Q & A**

8:00 am - 9:30 am Invited Lecture Session 13: Grand Ballroom A
Update on Major Prospective Cohort Studies with CMR

At the conclusion of this session, participants will be better able to:

- Describe the role of imaging and CMR in population based cardiovascular research
- Discuss challenges of setting up large scale CMR studies
- Present new findings from population based cohort studies using CMR

Moderators: Chiara Bucciarelli-Ducci, MD, Royal Brompton Hospital
Carlos Rochitte, MD, Heart Institute - Incor

- 8:00 am AGES (ICELAND)**
Andrew Arai, MD, National Institutes of Health
- 8:15 am MESA**
David Bluemke, MD, PhD, National Institutes of Health
- 8:30 am UK Biobank**
Steffen Petersen, MD, DPhil, FESC, Barts and The London NHS Trust
- 8:45 am Canadian Healthy Heart and Mind Cohort Study**
Matthias Friedrich, MD, The Montreal Heart Institute
- 9:00 am Framingham Heart Study**
Warren Manning, MD, Beth Israel Deaconess Medical Center
- 9:15 am Q & A**

8:00 am - 9:30 am Invited Lecture Session 14: Grand Ballroom C
Quantification in CMR: T1/T2/T2*/Flow/Perfusion

At the conclusion of this session, participants will be better able to:

- Understand the technical requirements for quantitative CMR
- Explain advantages and disadvantages of quantitative over non-quantitative CMR techniques
- Name primary applications for quantitative CMR techniques

Moderators: Tobias Heye, MD, University Hospital Basel
Michael Jerosch-Herold, PhD, Brigham and Women's Hospital

- 8:00 am T1 Mapping and Its Advantages over T2 Mapping**
Daniel Messroghli, MD, German Heart Institute
- 8:15 am T2 Mapping and Its Advantages over T1 Mapping**
Ruud van Heeswijk, PhD, University of Lausanne
- 8:30 am CMR Flow Quantification: Applications, Reproducibility and Pitfalls**
Jos Westenberg, PhD, Leiden University Medical Center
- 8:45 am CMR Perfusion Quantification: Fact or Fiction?**
Michael Jerosch-Herold, PhD, Brigham and Women's Hospital
- 9:00 am Myocardial CT Perfusion and CT-FFR**
Marc Dewey, MD, PhD, Charité Universitätsmedizin Berlin
- 9:15 am Q & A**

8:00 am - 9:30 am Case Review 10 – Grand Ballroom B
Cardiac Masses

Moderators: Anthon Fuisz, MD, Medstar Washington Hospital Center
Lauren Simprini, MD, Yale School of Medicine

Rare case of a Fifty-Four year-old Asymptomatic Male with Proteus Syndrome and Fatty Involvement of the Myocardium on CMR

Gina LaRocca, MD, National Institutes of Health

A Rare Case Presenting as SVC Syndrome
Kusum Lata, MD, University of Arizona

Pericardial Lymphangiohemangioma
Julie Robillard, University of Ottawa

Mediastinal Paraganglioma with Cardiac Involvement
Vishal Mehra, MD, PhD, National Institutes of Health

Sudden Cardiac Death: Rethinking the Definition of 'Large' Cardiac Mass
Gregory Kurio, MD, Children's Hospital & Research Center Oakland

A Very Rare Case of Cardiac Aspergillosis Characterized by CMR
Jan Smettan, MD, University Hospital Leipzig

Clinical Utility of T1 Mapping to Diagnose an Intracardiac Metastasis
Shahryar Saba, MD, National Institutes of Health

Cardiac Lymphovenular Mass in a Child
Cynthia Amirtharaj, MBBS, Cohen Children's Medical Center

Transformation of Mitral Annular Calcification (MAC) to Caseous Necrosis: Insights from Multimodality Imaging
Sujata Shanbhag, MD, MPH, National Institutes of Health

8:00 am – 9:30 am Oral Abstract Session 18: Grand Ballroom D
Congenital Heart Disease - Structure and Function

Moderators: Mark Fogel, MD, Children's Hospital of Philadelphia
 Willem Helbing, MD, Erasmus Medical Center

- O 103 **New Biplane X-Ray Magnetic Resonance Image Fusion Prototype for 3D Enhanced Cardiac Catheterization in Congenital Heart Diseases**
 Tanja Kurzendorfer, Siemens Corporate Technology
- O 104 **Myocardial Contractile Response to Dobutamine in Hypoplastic Left Heart Syndrome Post-fontan**
 James Wong, MD, King's College London
- O 105 **Assessment of Right Ventricular Function by Treadmill Exercise Stress Cardiovascular Magnetic Resonance in Patients with Repaired Tetralogy of Fallot**
 Juliana Serafim da Silveira, MD, The Ohio State University
- O 106 **Ventricular Growth, Measured by Cardiac MRI, is not Different in Patients with Tetralogy of Fallot versus Pulmonary Atresia with Intact Ventricular Septum or Critical Pulmonary Stenosis after Right Ventricular Outflow Tract Reconstruction**
 Jon Detterich, MD, Children's Hospital Los Angeles
- O 107 **Cardiac MRI Underlines the Role of BNP and Hematologic Parameters as Heart Failure Markers in Patients with Ebstein's Anomaly of the Tricuspid Valve**
 Michael Steinmetz, MD, Georg-August-University
- O 108 **Quantification of Intra and Inter-ventricular Dyssynchrony in Ebstein's Anomaly Using Cardiovascular Magnetic Resonance Myocardial Feature Tracking**
 Michael Steinmetz, MD, Georg-August-University

9:30 am – 10:00 am Refreshment Break Chemin Royale Foyer

10:00 am – 11:30 am Invited Lecture Session 15: Grand Ballroom A
Emerging CMR Technologies

At the conclusion of this session, participants will be better able to:

- Critique the advantages and disadvantages of the current state-of-the-art
- Describe five recent advances in cardiac MRI technology
- Recognize current limitations and how they are overcome by advanced techniques

Moderators: Daniel Ennis, PhD, University of California-Los Angeles
 Matthias Stuber, PhD, University of Lausanne

10:00 am CMR at 7 T: Quantum Leap in Vascular and Coronary Imaging?
 Andrew Webb, PhD, Leiden University Medical Center

10:15 am Self-navigation in CMR
 Davide Piccini, PhD, Siemens Switzerland

10:30 am Exercise Stress CMR
 Timothy Wong, MD, MS, University of Pittsburgh Medical Center

10:45 am Breaking the Speed Limits
 Sebastian Kozerke, PhD, ETH Zurich

11:00 am CMR Elastography
 Arunark Kolipaka, PhD, The Ohio State University Medical Center

11:15 am Q & A

10:00 am – 11:30 am Invited Lecture Session 16: Grand Ballroom B
NIHD Heart Failure: CMR to Guide Therapy

At the conclusion of this session, participants will be better able to:

- Discuss the diagnostic targets for CMR in heart failure
- Discuss the added value of the diagnostic information provided by CMR in heart failure
- Discuss added value of CMR for therapeutic management

Moderators: Francisco Leyva, MD, University Hospital Birmingham
 Michael McConnell, MD, MSEE, Stanford University School of Medicine

10:00 am CMR Findings in the Failing Heart: A Pattern Approach
 Luigi Natale, MD, Catholic University of Rome

10:15 am Impact of CMR on Therapy in Dilated Cardiomyopathy
 Francisco Leyva, MD, University Hospital Birmingham

10:30 am Treatment and Follow-up of Acute Myocarditis Based on CMR Findings
 Udo Sechtem, MD, Robert Bosch Krankenhaus

10:45 am Right Heart Failure in GUCH: Therapeutic Decisions Based on CMR
 Philip Kilner, MD, Royal Brompton & Harefield NHS Foundation Trust

11:00 am CMR to Guide Stem Cell Therapy in Heart Failure
 Piero Anversa, MD, Partners Healthcare

11:15 am Q & A

10:00 am – 11:30 am Invited Lecture Session 17: Grand Ballroom C
Multiorgan Diseases

At the conclusion of this session, participants will be better able to:

- Explain the diagnostic targets for CMR in suspected cardiac involvement in multiorgan disease
- Describe the most important CMR protocols for patients in multiorgan disease
- Discuss the added value of the diagnostic information provided by CMR in multiorgan disease

Moderators: Matthias Friedrich, MD, Montreal Heart Institute
 Jeanette Schulz-Menger, MD, Charité Universitätsmedizin Berlin

10:00 am Amyloidosis
 Daniel Sado, BSc, The Heart Hospital

Due to speaker conflicts and requests, the abstracts may not follow numerical order.

- 10:15 am Sarcoidosis**
James Moon, MD, The Heart Hospital
- 10:30 am Lupus**
Jeanette Schulz-Menger, MD, Charité
Universitätsmedizin Berlin
- 10:45 am Carcinoid**
Scott Flamm, MD, MBA, Cleveland Clinic
- 11:00 am Muscular Dystrophy**
Simon Schalla, MD, University Hospital Maastricht
- 11:15 am Q & A**

10:00 am – 11:30 am Oral Abstract Session 19: Grand Ballroom D
Metabolism, Spectroscopy, Lipid Imaging

Moderators: Frank Kober, PhD, Centre de Résonance Magnétique
Biologique et Médicale Marseille
Stefan Neubauer, MD, John Radcliffe Hospital

- O 109 Cardiac Energy Metabolism and Oxygenation during Exercise in the Hypertensive Heart**
Sairia Dass, MBBS, University of Oxford
- O 110 The Relationship of Myocardial Oxygenation to Coronary Flow and Oxygen Saturation During CO₂ Manipulations**
Kady Fischer, BHSc, Montreal Heart Institute
- O 111 Tau1, A High-resolution Metabolic Imaging Biomarker for Myocardium**
Charles Springer, PhD, Oregon Health & Science University
- O 112 Quantification of Epicardial Fat Volume Using Cardiovascular Magnetic Resonance Imaging**
Tonye Teme, MD, Loyola University Medical Center
- O 113 Longitudinal Monitoring of Cardiac Dysfunction with MRI in a Mouse Model of Obesity and Type 2 Diabetes**
Inès Abdesselam, CRMBM

- O 114 Myocardial Steatosis, Impaired Energetics and Reduced Circumferential Strain are Early Manifestations of Diabetic Cardiomyopathy and Precede Structural Changes**
Eylem Levelt, MBBS, University of Oxford

11:30 am – 1:00 pm Closing Plenary Grand Ballroom A

At the conclusion of this session, participants will be better able to:

- Standardize and structure CMR reports
- Understand indications, strengths and limitations of small animal imaging
- Oversee potential hazards and adverse effects of CMR

Moderators: Albert de Roos, MD, PhD, Leiden University Medical Center
Orlando Simonetti, PhD, The Ohio State University

- 11:30 am Enhance CMR Visibility: Advanced Structured Reporting**
Tobias Heye, MD, University Hospital Basel
- 11:50 am Lessons to Learn from Small Animal CMR**
Frederick Epstein, PhD, University of Virginia
- 12:10 pm Interventional CMR: Outlook and Challenges**
Reza Razavi, MD, King's College London
- 12:30 pm Is CMR Genotoxic?**
Massimo Lombardi, MD, University of Pisa
- 12:50 pm Q and A**

1:00 pm 2014 Scientific Session Highlights and Closing Remarks
Orlando Simonetti, PhD, The Ohio State University



This activity has been approved for credit by the American Society of Radiologic Technologists (ASRT) for a maximum of 17 CE credits. Each technologist should claim only those hours of credit actually spent in this activity.

Friday, January 17, 2014

Grand Salon A

10:15 am - 10:20 am Welcome Remarks

Jane Francis, DCR(R), DNM
The John Radcliffe Hospital
Oxford, United Kingdom

10:20 am - 12:30 pm CMR Essentials: The Nuts and Bolts

10:20 am CMR Physics is Fun

Vivek Muthurangu, MD, UCL Institute of Cardiovascular Science

At the conclusion of this session, the participant will be better able to:

- Discuss the importance of understanding physics getting good images
- Discuss the origin of common artefacts
- Demonstrate pushing the scanner to its limits

10:55 am ECG Interpretation for Techs - How this Helps Imaging

Vanessa Ferreira, MD, University of Oxford

At the conclusion of this session, the participant will be better able to:

- Identify waves and intervals of the ECG and correlate them to phases of the cardiac cycle
- Recognize a systematic approach to analyzing a rhythm
- Identify common dysrhythmias

11:30 am Safety Forum - Your Chance to Ask the Experts

Vikas Rathi, MD, Bon Secours Heart and Vascular Institute

At the conclusion of this session, the participant will be better able to:

- Describe basic knowledge of magnetic fields and their influence on objects outside and inside the human body
- Describe the importance of safety and screening when working around the MRI scanner
- Screening for devices and clarifying the myths about safety of common cardiac devices/implants in the MRI scanner

12:30 pm - 1:30 pm Lunch on Own/ Exhibits/Posters

Grand Salons B-D

1:30 pm - 3:15 pm Basic CMR: Anatomy, Function, and Flow

Moderator: Ronald Williams, BA, RT(R)(MR)

1:30 pm Normal and Abnormal Cardiac Anatomy - What Should be Where and Why

M. Jay Campbell, MD, Duke University Hospital

At the conclusion of this session, the participant will be better able to:

- Improve the learner's understanding of cardiac anatomy and cardiac inter-relationships
- Review common abnormalities of cardiac anatomy
- Introduce the learner to congenital heart disease and common defects

2:05 pm Ventricular Function - How to Acquire and Analyze

Christine Mancini, RT, National Institutes of Health

At the conclusion of this session, the participant will be better able to:

- Identify the landmarks needed to prescribe the short and long axis of the heart
- Describe how to use those images to make an assessment of the heart function
- Recognize the proper sequences to use to acquire high quality LV function

2:40 pm Cardiac Flow - How to Acquire and Analyze

David Wendell, PhD, Duke University Medical Center

At the conclusion of this session, the participant will be better able to:

- Understand the acquisition and interpretation of blood flow velocity encoded magnetic resonance imaging (VENC MRI) for accurate, reliable, and repeatable measurements in the assessment of vascular blood flow
- Utilize quantification techniques for VENC MRI to ensure accurate and repeatable measurements
- Recognize applications of VENC MRI acquisition and quantification in the assessment of intra- and inter-cardiac shunts, valvular stenosis and regurgitation, and blood flow velocity gradients across vascular stenoses

3:15 pm - 3:45 pm Refreshment Break/ Exhibits/Posters

Grand Salons B-D

3:45 pm - 5:45 pm Basic CMR: What's New to Clinical Practice

Moderator: Beth Goddu, RT, Beth Israel Deaconess Medical Center

3:45 pm T1 and T2 Mapping Techniques - Where They Can Help

Daniel Sado, MD, The Heart Hospital

At the conclusion of this session, the participant will be better able to:

- Understand the role of T1 mapping in CMR
- Understand the role of T2 mapping in CMR
- Understand the limitations with these techniques

4:20 pm Myocardial Strain - Tagging Techniques

Nael Osman, PhD, Diagnosoft, Inc.

At the conclusion of this session, the participant will be better able to:

- Understand the value of MRI tagging and its use for measuring regional function of the heart
- Use MRI tagging while imaging heart patients and determine the right parameters for measuring regional function
- Analyze tagged MR imaging and producing measurements describing the healthiness of the wall muscle based on its contractility

4:55 pm Contrast and Non-contrast Angiographic Techniques

Sohrab Fratz, MD, PhD, German Heart Centre

At the conclusion of this session, the participant will be better able to:

- Describe the principles of measuring blood pressure invasively by CMR
- Describe the principles of measuring blood pressure gradients non-invasively by CMR

5:30 pm Friday Round-up: Pertinent Points of the Day

6:30 pm – 7:30 pm Moderated Poster Session 1 **Grand Salons B-D**
Wine and Cheese Reception

Saturday, January 18, 2014 **Grand Salon A**

7:45 am – 9:30 am **Ischemia and Viability: How and Why**
Moderator: Chris Lawton, MR, Bristol Heart Institute

7:45 am **Adenosine Stress - How and Why**
Chiara Bucciarelli-Ducci, MD, Bristol Heart Institute

At the conclusion of this session, the participant will be better able to:

- Understand the clinical indications for adenosine stress perfusion CMR
- Understand how to manage a stress perfusion list (including challenging patients)
- Understand some trouble shooting techniques in stress perfusion CMR

8:20 am **Dobutamine Stress - How and Why**
Christopher Schneeweis, MD, German Heart Institute

At the conclusion of this session, the participant will be better able to:

- Understand the indications and contraindications of dobutamine stress MRI
- Learn how to perform dobutamine stress CMR
- Understand the strengths and limitations of dobutamine stress CMR to assess myocardial viability and ischemia

8:55 am **Viability - Dead is Bright or Bright is Dead?**
Charles Peebles, BBS, Southampton University Hospital

At the conclusion of this session, the participant will be better able to:

- Understand the utility of Late Gadolinium Enhanced imaging in CMR
- Identify patterns of myocardial scar and their clinical significance
- Recognize mimics of myocardial scar

9:30 am – 10:00 am **Refreshment break/ Exhibits /Posters** **Grand Salons B-D**

10:00 am – 11:30 am **Abstracts**
Moderator: Alison Fletcher, RT, Southampton General Hospital

10:00 am **T 03 Bioprosthetic Mitral Valve Effective Orifice Area by Phase-Contrast CMR. An In Vitro Comparison with Doppler Echocardiography**
Dimitrios Maragiannis, MD, Houston Methodist Hospital

10:10 am **T 02 Back to the Future: An Exploration of Cardiac Mass Measurements**
Geetha Rayarao, MS, Allegheny General Hospital

10:20 am **T 01 Technologist Primer for MRI Right**

Heart Catheterization: the NIH and CNMC Experience

Jonathan Mazal, MS, RRA, RT(R)(MR),
NIH/National Heart, Lung, and Blood Institute

10:30 am **Vendor Session - All You Wanted to Know About CMR but Were Afraid to Ask**

11:30 am – 12:30 pm **Moderated Poster Session 2/ Lunch (on own)/Exhibits/Posters** **Grand Salons B-D**

12:30 pm – 2:15 pm **CMR in the Assessment of Cardiomyopathies**
Moderator: Emer Sonnex, MPhil, Alberta Health Services

12:30 pm **Imaging in Hypertrophic Cardiomyopathy**
Christopher Kramer, MD, University of Virginia

At the conclusion of this session, the participant will be better able to:

- Recognize the important CMR findings in hypertrophic cardiomyopathy (HCM)
- Understand the prognostic implications of late gadolinium enhancement in HCM
- Describe the design of the multi-center international HCMR study that will use CMR

1:05 pm **Metabolic Cardiomyopathies**
Sophie Mavrogeni, MD, Onassis Cardiac Surgery Center

At the conclusion of this session, the participant will be better able to:

- Recognize disorders, storage or infiltration disorders, nutritional disorders and diabetic heart disease may lead to usually reversible metabolic cardiomyopathy
- Recognize oedema-fibrosis imaging facilitates early diagnosis, before overt MCM development
- Describe how stress-perfusion CMR and coronary MRA can assess metabolic cardiomyopathy progress in diabetics
- Recognize that iron overload assessment is essential in hemochromatosis
- Understand T1 and T2 mapping may offer earlier and more objective assessment of MCM

1:40 pm **Imaging in Heart Failure**
Andrew Taylor, MB BS, PhD, Alfred Heart Center and Baker Heart Research Institute

At the conclusion of this session, the participant will be better able to:

- Understand the role CMR plays in the assessment of patients with heart failure
- Recognize the specific CMR findings in a variety of cardiomyopathies
- Know how CMR may help predict outcomes in heart failure

2:15 pm – 2:45 pm **Refreshment Break/ Exhibits/Posters** **Grand Salons B-D**

2:45 pm – 5:30 pm **CMR in Pediatrics and Congenital Heart Diseases**
Moderator: Jennifer Bryant, MSc, University Hospitals Southampton NHS Foundation Trust

2:45 pm **Pediatric CMR - Tips and Tricks**
David Annese, RT (R), (MR), Boston Children's Hospital

At the conclusion of this session, the participant will be better able to:

- Understand some technical challenges related to CMRI in pediatric patients
- Improve communication skills with pediatric patients
- Recognize some common indications for CMRI in pediatric patients

3:20 pm GUCH- Imaging the Adult with Repaired Congenital Heart Disease

Ashwin Prakash, MD, Boston Children's Hospital

At the conclusion of this session, the participant will be better able to:

- Discuss the role of CMR in evaluation of adult patients with repaired congenital heart disease
- Identify the imaging protocols used for imaging common forms of repaired congenital heart disease in adults
- Review clinical examples of the use of CMR in adults with repaired congenital heart disease

3:55 pm Fetal Imaging

Michael Seed, MD, The Hospital for Sick Kids

At the conclusion of this session, the participant will be better able to:

- Understand the background and rationale for fetal CMR
- Discuss the techniques used in fetal CMR
- Appreciate some preliminary concepts about interpreting fetal CMR findings

4:30 pm Case Review - Read with the Experts

Mark Westwood, MD, The London Chest Hospital

Richard Steeds, MD, Queen Elizabeth Hospital

5:15 pm Saturday Round-up: Pertinent Points of the Day

5:30 pm – 6:00 pm CMR Technology Updates **Grand Ballroom A**

6:00 pm – 6:30 pm Awards Ceremony **Grand Ballroom A**

6:30 pm – 8:00 pm Awards Reception **Jefferson Ballroom**

Sunday, January 19, 2014

Grand Salon A

7:15 am – 9:30 am Hot Topics in CMR

Moderator: Jane Francis, DCR(R), DNM,
The John Radcliffe Hospital

7:15 am CMR Manifestations in Systemic Inflammatory Disease

Ntobeko Ntusi, MD, University of Oxford Centre for
Clinical Magnetic Resonance Research

At the conclusion of this session, the participant will be better able to:

- Understand how inflammatory arthropathies and systemic rheumatic disorders involve the cardiovascular system
- Understand the role of CMR in diagnosis and mechanisms of development of cardiovascular disease in systemic rheumatic diseases
- An evidence-based appreciation of the role of CMR in management of rheumatic diseases

7:50 am CMR in HIV

Ntobeko Ntusi, MD, University of Oxford Centre for
Clinical Magnetic Resonance Research

At the conclusion of this session, the participant will be better able to:

- Understand how HIV involves the cardiovascular system
- Recognize the role of CMR in HIV-associated heart disease
- Appreciate the role of complementary imaging modalities in management of HIV-associated heart disease

8:25 am Accelerated CMR - Have We Got Quicker?

Sònia Nelles-Vallespin, PhD, National Institutes
of Health

At the conclusion of this session, the participant will be better able to:

- Recognize the need for acceleration in CMR applications. Restrictions due to acquisition timing, motion compensation techniques, spatial and temporal resolution and anatomical coverage will be discussed
- Understand the existing technology available to accelerate CMR acquisitions
- Appreciate the evolution the field of CMR has made in terms of acceleration and the future clinical potential of the most recent technological advances

9:00 am 1H Spectroscopy for Cardiac Steatosis - A New Pre-clinical Tool?

Jürgen Schneider, PhD, University of Oxford

At the conclusion of this session, the participant will be better able to:

- Understand the potential role of cardiac 1H-MRS in the (pre-) clinical setting
- Understand the technical challenges and approaches for a successful 1H-MRS scan
- Describe applications of 1H-MRS in patients with heart disease

9:30 am – 10:00 am Refreshment Break

Chemin Royale

10:00 am – 11:05 am New Horizons in CMR

Moderator: Alison Fletcher, RT, Southampton
General Hospital

10:00 am 4D Flow in Aortic Disease - Do Flow Patterns Matter

Michael Markl, PhD, Northwestern University

At the conclusion of this session, the participant will be better able to:

- Understand the basic principles of 4D flow MRI imaging and data analysis
- Describe the role of 4D flow MRI as a tool for the evaluation of changes in blood flow in aortic disease
- Identify areas of potential future clinical applications of aortic 4D flow MRI

10:35 am Diffusion Tensor Imaging in the Heart

Elizabeth Tunnicliffe, MD, University of Oxford
Centre for Clinical Magnetic Resonance Research

At the conclusion of this session, the participant will be better able to:

- Describe the principles of cardiac diffusion tensor imaging and the main values derived from the raw images
- Appreciate the main anticipated applications of cardiac DTI
- Recognize the current pitfalls and challenges of cardiac DTI

11:05 am – 11:30 am Technologist Track Highlights

Moderator: Alison Fletcher, RT, Southampton
General Hospital

Friday, January 17, 2014

6:30 PM – 7:30 PM

Poster Session 1 – Not accredited for CME

You are invited to meet the poster authors of the following categories on Friday evening during the Wine and Cheese Reception.

CATEGORIES BEING PRESENTED IN POSTER SESSION 1 ARE:

Basic Translational – New Techniques Ready for Clinical Application
Basic Translational – Pre-clinical Validation
Clinical Outcome and Prognosis
Congenital Heart Disease
Cost Effectiveness and Comparison to Other Modalities
EP and Interventional Applications
Molecular Imaging; Contrast Agents
Vascular MRI
Technologists

Poster Directory

Basic Translational - New Techniques Ready for Clinical Application (Poster Session 1)

P001	Shuhei Nitta	Automatic 14-Plane Slice-alignment Method for Ventricular and Valvular Analysis in Cardiac Magnetic Resonance Imaging
P002	Joseph Pagano	Reduced Native Right Ventricular T1 in Anderson-Fabry Disease as Compared to Patients with Pulmonary Hypertension
P003	Adam McDiarmid	Effect of Changes to Modified Look-Locker Inversion (MOLLI) Sequence on T1 Mapping at 3.0 Tesla in Healthy Volunteers
P004	Sophia Cui	Cine Dense Strain Imaging of the Right Ventricle: Improved Methods and Initial Experience in Heart Failure
P005	Jeremy Collins	Regional Left Ventricular Myocardial T1 and Velocity Mapping: Elevated Extracellular Volume Fraction is Associated with Altered Myocardial Velocities
P006	Jennifer Keegan	Improved 3D Late Gadolinium Enhancement (LGE) Imaging with Dynamic-TI in Patients with Persistent Atrial Fibrillation
P007	Laura-Ann McGill	Influence of Subject Characteristics on DTI Parameters in the Normal Heart
P008	Iain Pierce	3D LGE Imaging of the LV Short Axis Stack using Spiral Readouts at 3T
P009	Jan Sohns	Simultaneous Flow Dynamics in Small and Great Thoracic Vessels during Physiological Stress Tests and Normal Breathing using Real-time Cardiac Magnetic-Resonance
P010	David Lopez	Post-Occlusion Hyperemia ASL Differentiates Peripheral Artery Disease from Controls
P011	Jeff Stainsby	Comparing the Accuracy and Precision of SMART1Map, SASHA and MOLLI
P012	Bara Erhayiem	Quantification of Septal and Whole Slice Myocardial Blood Flow by Myocardial Perfusion CMR is Similar in Healthy Volunteers
P013	Ilan Gottlieb	Performance of CMR Stress/Rest Automated Myocardial Perfusion Parametric Mapping (Perfusion Map) as Compared to Manual Plotting of the Slope Curves
P014	Andreas Schuster	Cardiovascular Magnetic Resonance Myocardial Feature Tracking for the Measurement of Myocardial Twist and Untwist at Rest and during Dobutamine Stress in Healthy Volunteers
P015	Alexander Honeyman	Vorticity for the Assessment of Pulmonary Vascular Hemodynamics in Pulmonary Arterial Hypertension
P016	Darach O H-Ici	T1 Mapping Allows the Study of the Development of Oedema in a Small Animal Model of Ischemia-reperfusion
P017	Choukri Mekkaoui	In Vivo fiber Tractography of the Right and Left Ventricles using Diffusion Tensor MRI of the Entire Human Heart
P018	Teerapat Yingchoncharoen	Reproducibility of Multiple T1 Mapping Techniques and to ECV Quantification
P019	Shams Rashid	Improved Inversion Time (TI) Scout Sequence for Late Gadolinium Enhancement MRI of Patients with Implantable Cardiac Devices
P020	Shahryar Saba	Quantification of Mitral Annular Excursion From Cine MRI and Validated by Doppler Echocardiography
P021	Anders Greve	Heterogeneity of Resting and Hyperemic Myocardial Blood Flow in Healthy Volunteers: A Quantitative CMR Perfusion Pixel-map Study
P022	Heerajnarain Bulluck	A Simple Technique to Measure TAPSE and MAPSE on CMR and Normal Values
P023	Valentina Puntmann	Age-Gender Normal Values of Native and Post-Contrast Myocardial T1 Relaxation Times (Lambda) on 1.5T And 3T using MOLLI: A Multicenter, Single Vendor Cardiovascular Magnetic Resonance Study
P024	Abbas Moghaddam	Regional Rotation of the Left Ventricle in Healthy and Cardiomyopathic Subjects Measured with Radial Myocardial Tagging
P025	Kyungpyo Hong	Cardiac ECV is more Robust than Post-Contrast Cardiac T1 For Evaluating Temporal Changes in LV Fibrosis
P026	Jiaxin Shao	Instantaneous Signal Loss Simulation (Insil) – An Alternative Algorithm for Myocardial T1 Mapping using the MOLLI Sequence
P027	David Lopez	k_{Trans} as a Quantitative Indicator of Calf Muscle Perfusion at Peak Exercise
P028	Hélène Feliciano	Radial Cardiac T2 Mapping With Alternating T2 Preparation Intrinsically Introduces Motion Correction

Saturday, January 18, 2014

11:30 AM – 12:30 PM

Poster Session 2 – Not accredited for CME

You are invited to meet the poster authors of the following categories on Saturday during the break for Lunch.

CATEGORIES BEING PRESENTED IN POSTER SESSION 2 ARE:

Basic Translational - Post-Processing
CAD - Ischemia and Viability
CAD – Other
Non-ischemic Heart Disease – Other
Non-ischemic Heart Disease - Primary and Secondary CMP
Rapid, Efficient Imaging

- P029** Wolfgang Rehwald Dark Blood Cine for Improved Visualization of Intracavitary Structures (Ivis)
- P030** Hui Wang Comparison of Breath Hold and Free Breathing Respiratory Triggered Retrospectively Cardiac Gated Cine Steady-State Free Precession (RT-SSFP) Imaging in Adults
- P031** Abbas Moghaddam Non-Uniform Polar Tagging
- P032** Anthony Faranesh Interactive Black Blood Preparation for Interventional Cardiovascular MRI
- P033** Florian Bönner MR-Guided Renal Denervation: First Experience on Pigs
- P034** Christina Unterberg-Buchwald Real Time Cardiac MRI And Its Clinical Usefulness In Arrhythmias And Wall Motion Abnormalities
- P035** Edward Hulthen Myocardial Strain Imaging with Radial Acquisitions (SIRA) Reduces Tag Fading Compared To Cartesian Sampling
- P036** Yi Wang Towards Automated Evaluation of Left Atrial Transit Time
- P037** Hou-Jen Chen Protocol Optimization and Physiological Specificity of ASL-Measured Reactive Hyperemia in Skeletal Muscle
- P038** Robert Jablonowski Moderate Intensity Supine Exercise Causes Decreased Cardiac Volumes and Increased Outer Volume Variations – A Cardiac Magnetic Resonance Imaging Study
- P039** Laura-Ann McGill Comparison of Cardiac DTI Parameters between Systole And Diastole
- P040** Robin Simpson Breath-Hold Spiral Tissue Phase Velocity Mapping (TPVM) with Non-cartesian SENSE
- P041** Ruud Van Heeswijk Numerically Optimized Radiofrequency Pulses for Robust and Low-Power Cardiovascular T2 Preparation at 3T
- P042** Mohammed Elbaz Three Dimensional Right Ventricular Diastolic Vortex Rings: Characterization and Comparison with Left Ventricular Diastolic Vortex Rings from 4D Flow MRI
- P043** Till Huelnhagen Withdrawn by author
- P044** Christophe Meyer Towards a New Method for Cardiac Tissue Velocity Measurements using MRI, Comparison with Echocardiography
- P045** Sébastien Roujol Improved Motion Correction For T1 Mapping
- P046** Zhaoyang Fan  Carotid Multicontrast Atherosclerosis Characterization (MATCH) in a Single Scan
- P047** Julio Garcia Assessment of Transvalvular Flow Jet Angle in Aortic Dilation Patients using 4D Flow Jet Shear Layer Detection Method
- P387** Sarah Khan Myocardial Tagging in the Polar Coordinate System; Early Clinical Experience

Basic Translational - Pre-Clinical Validation (Poster Session 1)

- P048** Gregory Wehner  High Resolution Cine Displacement Encoding with Stimulated Echoes (DENSE) at 3T with Navigator Feedback for Quantification of Cardiac Mechanics
- P049** Kady Fischer Breathing Maneuvers May Elicit a Stronger Myocardial Vascular Response than Clinical Adenosine Protocols
- P050** Xiaoguang Lu Time-Resolved 3D-CMR using Free-Breathing 2D-Acquisitions
- P051** Gaby Captur CMR Trabecular Fractal Analysis -Technical Development of a Measurement System
- P052** Jonathan Suever Quantification of Right Ventricular Function from Short-Axis Displacement-Encoded Images
- P053** Kyungpyo Hong Comparison Of ECV Measurements During Equilibrium Between IR- and SR-based Cardiac T1 Mapping
- P054** Alexis Jacquier Accuracy and Precision of Myocardial T1mapping With MOLLI and Shmolti at 1.5T and 3.0T: A Phantom Study
- P055** Glenn Slavin On the use of the 'Look-Locker Correction' for Calculating T1 Values from MOLLI
- P056** Christopher Nguyen Preliminary Application of In Vivo Cardiac Diffusion Weighted MRI in Chronic Myocardial Infarction Porcine Model
- P057** Walter Witschey The Frank-Starling Relationship of the Heart Revealed in a Large Animal Study Utilizing Real-Time Undersampled Radial MRI at Variable Inotropic State and Heart Rate
- P058** Merlin Fair Method for Correcting Respiratory Artefacts in Parallel-Accelerated First-Pass Myocardial Perfusion Imaging
- P059** Wolter De Graaf Accelerated Self-Gated UTE of Murine Heart
- P060** Ee Ling Heng Temporal Stability of Gel Relaxation-Time Phantoms for Quality Control of T1 and Extracellular Volume Fraction Measurements
- P061** Guan Wang Quantitative¹⁹F MRI and CT Tracking of the Microencapsulated Stem Cells in a Rabbit Peripheral Arterial Disease Model
- P062** Peter Smith Biventricular Strain Analysis at 1.5T Cardiac MR Imaging: Preliminary Results in Volunteers using an Iterative SENSE Reconstruction with L1 Regularization
- P063** Eric Schrauben Free-breathing 3D Cardiac Function with Accelerated Magnetization Transfer Prepared Imaging
- P064** Kyungpyo Hong Comparison of Canine ECV Measurements Derived from CMR: Bolus Injection vs. Slow Infusion of Gd-BOPTA
- P065** Joseph Pagano Fat-Water Separated Myocardial T1 Mapping With IDEAL-T1 Saturation Recovery Gradient Echo Imaging
- P066** Ausami Abbas The Effect of Gender, Piloing and Segmental Analysis on T1 Quantification in Normal Individuals using MOLLI
- P067** Mohamad Ghosn An In Vitro Validation of Cardiac Magnetic Resonance 4D Flow Measurements with Bioprosthetic Mitral Valve Flow Volumes Quantification
- P068** Juliet Varghese Integrated Treadmill Stress Testing and MR Relaxometry (T1, T2, T2*): Response in Healthy Calf Muscles
- P069** Pauline Ferry Myocardium T1 Measurement using Single and Multi-Shot SMART1Map Acquisition: Pros and Cons
- P070** Qiao Han The Influence of Static and RF Field Heterogeneity on T1rho Cardiovascular MRI
- P071** Peter Smith Myocardial Strain Analysis in Patients with Heart Failure with Preserved Ejection Fraction using Bright Blood Cine MR Images: A Comparison with Speckle-Tracking Echocardiography.
- P072** Yoonyoung Choi Feasibility of Free-Breathing Diffusion Tensor Imaging in Porcine Acute Myocardial Infarction Model

P073	Glenn Slavin	Electromechanical Analysis of Optimal Trigger Delays for Cardiac MRI
P074	Marcos Botelho	Application of Feature Tracking at Cine Cardiac MR for the Semiautomated Prediction of Normal Right Ventricular Systolic Function: A Feasibility Study
P075	Bernd Muller-Bierl	Signal Increase for Dipiridamol Induced Stress on Cardiac Magnetic Resonance Perfusion in Minipig
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P077	Martijn Froeling	Ex Vivo Cardiac DTI: On the Effects of Diffusion Time and B-value
P078	Sean Hamlet	Effect of Variable Breath-Hold Positions During Cardiac Magnetic Resonance on Measures of Left Ventricular Mechanics
P079	Alexis Jacquier	Intersite Reproducibility of Myocardial Assessment of T1 and Partition Coefficient on Phantom and one Volunteer at 1.5T and 3.0T
P080	Robert Jablonowski	Quantification of Myocardial Viability in Diffuse and Contiguous Infarction using 3D Inversion Recovery MRI: Validation Against Microscopy
P081	Gobinath Nadesalingam	Presence of Diastolic Dysfunction after Biphasic Synchronized Transthoracic Shocks in a Porcine Model Evaluated with CMR
P082	Juliana Serafim Da Silveira	MR Elastography-derived Right Ventricular Myocardial Stiffness in Dogs with Congenital Pulmonary Valve Stenosis: Correlation with Myocardial Relaxation Times and ECV

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P085	Sebastian Kelle	Still Waters Run Deep: Progression of Left Ventricular Mass and Stagnant Atherosclerosis of Carotid Artery in Patients with Type 2 Diabetes Mellitus and Coronary Heart Disease – Insights from a Long-Term CMR Study
P086	Sahadev Reddy	Is the Detection of Hepatocellular Carcinoma in Liver Transplantation Candidates Impaired using a Dedicated CMR Stress Test as a 'One-Stop-Shop'? A Pathological Correlation Study
P087	Joon-Won Kang	Evaluation of Accuracy for Detection and Extent of Occult Myocardial Scars Using Delayed-enhancement CT in Patients with Asymptomatic Diabetes: Results from the ACCREDIT Study
P088	Katharina Koopmann	Predicting Mortality in Patients with Non-Ischemic Dilative Cardiomyopathy: Potential of Extracellular Volume Imaging by Cardiovascular Magnetic Resonance
P089	Erik Schelbert	Feasibility of the Redcap Platform for Single Center and Collaborative Multicenter CMR Research
P090	Nicholas Naro	Baseline 2D PC-MRI Hemodynamic Markers Correlate to Aorta Growth in Serially Monitored Bicuspid Aortic Valve Patients
P091	Gareth Crouch	Quantitative Analysis of Paravalvular Leak of Transcatheter Aortic Valves using Cardiac MR
P092	Promptorn Suksaranjit	Incidental MRI Findings of Left Ventricular Myocardial Scar in Atrial Fibrillation Patients is Associated with Increased Stroke Risk
P093	Lucia Alvarez	Utility of Late Gadolinium Enhancement Cardiac MRI (LGE-CMR) in Troponin-positive Chest Pain with Unobstructed Coronary Arteries
P094	Jan Paul	Quantitative Comparison of Left Ventricular Motion Parameters for the Assessment of Asynchrony and Motion Abnormalities
P095	Sahadev Reddy	Evaluation of RV and LV Mass by CMR and Comparison to Recipient Heart Following Heart Transplant; The First-Ever CMR Human Autopsy Study
P096	Agnieszka Toepper	Cardiac Magnetic Resonance in Patients with Pectus Excavatum: Impact of Thoracic Surgery on Cardiac Function – A Follow-Up Study
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P098	Robert Biederman	What does Valve, not Myocardial LGE Mean? Could it Portend Post-MI Emergence of Mitral Regurgitation?
P099	William Moody	Normative Annual Changes in Left Ventricular Volumes, Mass and Function Among Healthy Adults: A Prospective Cardiac Magnetic Resonance Imaging Study
P100	Emmanuelle Vermes	Cardiac Magnetic Resonance T1 Mapping Pre and Post Contrast in Heart Transplant Patients with Clinical Antibody-mediated Rejection: A Preliminary Experience
P101	Robert Biederman	Imaging The PM/AICD Patient; Just because We can, should We?
P102	Michael Chuang	Prevalence and Distribution of Abdominal Aortic Plaque in a Community-Dwelling Cohort Free of Clinical Cardiovascular Disease and Major Cardiovascular Disease Risk Factors
P103	Marc Sirol	Impact of Intramyocardial Hemorrhage on LV Remodeling after ST-Elevation Myocardial Infarction
P104	Sebastien Joncas	Differentiation of Physiologic Versus Pathologic Basal Septal Fibrosis: Proposed Diagnostic Criteria and Associations with Clinical and CMR-Based Markers of Cardiovascular Disease
P105	Roja Tumma	Evaluation Of Cardiac Masses By CMR: A Tertiary Center Experience of Cases Presenting with Suspicion of Mass by Echo or CT

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P106	Shafkat Anwar	Feature Tracking Strain is Similar to Harmonic Phase Cardiac Magnetic Resonance in Fontan Patients: A Validation Study
P107	Kai Laser	Impact of Respiration on Stroke Volumes in Paediatric Controls and Fontan Patients Assessed by MR Real-Time Phase Velocity Mapping
P108	Ahmed Kharabish	Long Standing Cyanosis in Congenital Heart Disease does not Cause Diffuse Myocardial Fibrosis
P109	Kevin Whitehead	Use of a 3D Respiratory Navigated IR-FLASH Sequence after Gadofosveset in the Pediatric and Adult Congenital Population

- P110** *Tarique Hussain* Coronary Artery Size and Origin Imaging in Children: A Comparative Study of MRI and Trans-thoracic Echocardiography
- P111** *Cory Noel* Prospective Comparison of Circumferential and Longitudinal Strain in Asymptomatic Children with Single Left Ventricle, Single Right Ventricle and Normal Hearts
- P112** *Scott Simpson* Obesity Leads to Underestimation of Ventricular Volumes and Abnormal Myocardial Strain in Repaired Tetralogy of Fallot as Measured by Cardiac MRI
- P113** *Jason Christensen* Pulse Wave Velocity does not Predict Ventricular Strain in Ross Patients
- P114** *Susanne Schnell* Hemodynamics in Bicuspid Aortic Valve Relatives with Trileaflet Aortic Valves Compared to Normal Controls using 4D Flow MRI
- P115** *Shaine Morris* Vertebral Artery Tortuosity in Turner Syndrome: Is Tortuosity a Component of the Aortopathy Phenotype?
- P116** *Cemil Izgi* Cardiovascular Magnetic Resonance Follow-Up of the Marfan's Thoracic Aorta after Personalized External Aortic Root Support Surgery
- P117** *Benjamin Goot* Rapid 3D Imaging of the Airway by MRI on Patients with Congenital Heart Disease: Comparison of Delayed Volume Interpolated Breath Hold Examination (VIBE) Technique to the Turbo Spin Echo (TSE)
- P118** *Joshua Robinson* Enhanced Segmentation Improves 4D Blood Flow Quantification in Patients with Tetralogy of Fallot and Pulmonary Regurgitation
- P119** *Puja Banka* CMR Techniques and Findings in Children with Myocarditis: A Multicenter Retrospective Study
- P120** *Linyuan Jing* Assessment Of Intra- and Inter-ventricular Cardiac Dyssynchrony in Patients with Repaired Tetralogy of Fallot: A Cardiac Magnetic Resonance Study
- P121** *Dominik Daniel Gabbert* Method for a Detailed Evaluation of Respiratory Cardiac Contributions to Blood Flow in Fontan Circulation
- P122** *Ramkumar Krishnamurthy* Comparison of Myocardial Rotation and Torsion in Asymptomatic Children with Single RV, Single LV and Normal Hearts
- P123** *Shafkat Anwar* Strain to Evaluate Ventricular Function in Fontan Patients undergoing Exercise Cardiac Magnetic Resonance Imaging
- P124** *Ahmed Kharabish* Cardiac Volumes can be Quantified Accurately during Free-Breathing in Young Patients with Congenital Heart Disease by Cardiovascular Magnetic Resonance
- P125** *Benedetta Leonardi* The Impact of Age on Right Ventricular Morphology and Function Late After Repair of Tetralogy of Fallot: A Cardiac Magnetic Resonance Study
- P126** *Yucheng Chen* Real World Performance of Cardiac Magnetic Resonance Imaging in Patients with Clinical Indications: Initial Experience from a Tertiary Referral Hospital in China
- P127** *Michael Quail* Determinants of Right Heart Size and Function in Repaired Tetralogy of Fallot
- P128** *Hopewell Ntsinjana* Role of Adenosine Stress Perfusion CMR in Guiding Clinical Decision Making in Pediatric and Congenital Cardiology: A Single Pediatric Center Experience
- P129** *Liyang Cai* Inter-technique Agreement between Two-Dimensional Echocardiography and Cardiovascular Magnetic Resonance Imaging in the Setting of Bicuspid Aortic Valve Disease
- P130** *Emily Ruckdeschel* Echocardiographic Parameters of Systemic Right Ventricular Size and Function Compared to Cardiac MRI
- P131** *Joel McLarry* Aortic Enlargement in Coarctation is Not Common in Patients without a Bicuspid Valve: Rethinking Etiologies
- P132** *Benedetta Leonardi* The Role of Cardiac Magnetic Resonance to Address the Treatment of Choice for Pulmonary Valve Replacement Late After Repair of Tetralogy of Fallot
- P133** *Ramkumar Krishnamurthy* Inter-observer Variability in Manual Measurement of Aortic Root Dimensions in Pediatric Patients: Benefits of Using a Semi-automated Tool
- P134** *Rajesh Krishnamurthy* Unsupervised Free-breathing 3D Imaging of Morphology, Function and Flow in Congenital Heart Disease
- P135** *Eugenie Riesenkaempff* Diffuse Myocardial Fibrosis on Children after Heart Transplantation
- P136** *Emmeline Calkoen* The Pathway of Left Ventricular Blood Flow in Healthy Subjects and Patients with Corrected Atrio-ventricular Septum Defect: An Observational Study using 4dflow MRI and Particle Tracing
- P137** *Kevin Whitehead* Studying Effect of Respiration on Total Cavopulmonary Connection Flows using Real-time Cardiac Magnetic Resonance
- P138** *Emmeline Calkoen*  Characterization and Quantification of Dynamic Left Atrioventricular Valve Regurgitation after Atrioventricular Septal Defect Correction with 4D Flow MRI and Retrospective Valve

Cost Effectiveness and Comparison to Other Modalities (Poster Session 1)

- P139** *Suchi Grover* Serial Monitoring of LV Function Following Chemotherapy: Assessment Using Advanced Echocardiography and Cardiovascular Magnetic Resonance

EP and Interventional Applications (Poster Session 1)

- P140** *Ehud Schmidt* MRI-Compatible Voltage-based Electroanatomic Mapping System for 3T MR-Guided Cardiac Electrophysiology: Swine Validations
- P141** *Jonathan Suever* A New Method For Accurate Localization of the LV Pacing Lead from Fluoroscopy Images to MRI Images: Application to Studies Involving Lead Placement and CRT
- P142** *Christian Mahnkopf* Acute Esophageal Tissue Reaction after Cryoballoon Ablation in Patients with Paroxysmal Atrial Fibrillation – A LGE-MRI Study
- P143** *Toby Rogers* Provocative MRI Catheterization
- P144** *Akshay Pendyal* Incidental Cardiac Findings on Cardiovascular MRI obtained Prior to Atrial Fibrillation Ablation can Affect Patient Management

- P145** Jose Flores-Arredondo Detection of Left Atrial Scar and Changes of Cardiac Function in Relation to AF Ablation, by 3D Late Gadolinium Enhancement
- P146** Sathya Vijayakumar Dependence of Image Quality of Late Gadolinium Enhancement MRI of Left Atrium on Number of Patients Imaged: Results of Multi-Center Trial DECAAF
- P147** Claire Raphael Use of Contrast Enhanced Magnetic Resonance Angiography in Assessment of Anatomic Suitability for Renal Denervation in the Hypertensive Population
- P148** Thomas Gregory Comparing 3DQRS and VCG Approaches for ECG QRS Detection within 1.5T, 3T and 7T MRI
- P149** Steven Williams Cardiac Magnetic Resonance of Acute Atrial Ablation Injury - Impact of Catheter-myocardium Contact Force
- P150** Yue Chen MRI-conditional Catheter Sensor for Contact Force and Temperature Monitoring During Cardiac Electrophysiological Procedures
- P151** Shelley Zhang Computation of the Gradient-induced Electric Field Noise In 12-lead ECG Traces during Rapid MRI Sequences
- P152** Dana Peters Left Atrial Remodeling by MRI: Comparison in Patients With and Without Cardiovascular Disease
- P153** Dana Peters Comparison of Electroanatomic Voltage Mapping with Late Gadolinium Enhancement CMR
- P154** Steffen Petersen Clinical Applicability of Cardiac Magnetic Resonance Feature Tracking Analysis in Patients with Atrial Fibrillation Undergoing Ablation
- P155** Sathya Vijayakumar Assessment of Cardiac RF Ablation Lesions by DCE-MRI
- P156** Thomas Gregory Peripheral Perfusion Index Measured using Magnetohydrodynamic Voltages in 3T MRI
- P157** Dominik Guensch T1 and T2 Mapping Detect Myocardial Edema after Repeated 200J Electrical Cardioversion
- P388** Jonathan Suever Regions of Latest Mechanical Contraction Correspond to Regions of Latest Electrical Activation: An Electro-Mechanical Coupling Study in Patients Undergoing Cardiac Resynchronization Therapy

Molecular Imaging; Contrast Agents (Poster Session 1)

- P158** Fabio Raman Gadofosveset Trisodium in Coronary Magnetic Resonance Angiography at 3 Tesla
- P159** Edouard Semaan High-Resolution Modified Look-Locker Inversion Recovery (HR-MOLLI) for RV Extracellular Volume Fraction at 3T and 1.5T: A Feasibility Study
- P160** Fabio Raman Optimization of Gadofosveset Intravenous Injection Scheme for Coronary MRA: The Pharmacokinetics Approach

Vascular MRI (Poster Session 1)

- P161** Pim Van Ooij Thoracic Aortic Wall Shear Stress Atlases in Patients with Bicuspid Aortic Valves
- P162** Wouter Potters 4D MRI-Based Wall Shear Stress Quantification in the Carotid Bifurcation: A Validation Study in Volunteers using Computational Fluid Dynamics
- P163** Tom Gyllenhammar Left Ventricular Myocardial Perfusion in Young Patients Evaluated for Hypertrophic Cardiomyopathy at Rest and during Adenosine Hyperemia using Cardiac Magnetic Resonance Imaging
- P164** Mitchel Stacy Evaluation of Peak Skeletal Muscle Perfusion in the Lower Extremities of Athletes Using Arterial Spin Labeling
- P165** Florian Von Knobelsdorff Native High-resolution 3D SSFP MR Angiography for Assessing the Thoracic Aorta
- P166** Daniel Kim High-permittivity Thin Dielectric Pad Improves Peripheral Non-Contrast MRA at 3T
- P167** Michiel Sala Evaluation of Reducing Temporal Resolution on the Accuracy of Aortic Pulse Wave Velocity Assessment from Velocity Encoded MRI
- P168** Shivraman Giri Non-contrast Peripheral Angiography at 3T using QISS: Improving Venous Suppression
- P169** Aaron Hess Aortic 4D Flow: Quantifying the Effects of Contrast and Field Strength at 1.5 T, 3T and 7T
- P170** Gerd Brunner Calf Muscle Perfusion Maps from Contrast-enhanced Magnetic Resonance Imaging (CE-MRI) to Assess Peripheral Arterial Disease
- P171** Alexis Jacquier Cardiovascular Magnetic Resonance-Derived Aortic Compliance, Distensibility and Pulse Wave Velocity at Rest and During a Supine Bicycle Exercise in Young Adults: A Pilot Study
- P172** Sebastian Kelle Non-invasive Quantification of Anatomical and Functional Renal Artery Vessel Wall Changes in Patients with Resistant Hypertension Undergoing Renal Denervation using MRI
- P173** Luca Biasioli Histological Validation of Carotid Plaque Characterization by In-Vivo T2 Mapping in Patients with Recent Cerebrovascular Events: Preliminary Results
- P174** Xiangzhi Zhou Comparison of Non-Contrast Fresh Blood Imaging and Quiescent Inflow Single-shot Imaging at Abdominal/Pelvic Station at 3T
- P175** Maryam Nezafat Coronary MRA Angiography at 3T: Fat Suppression versus Water-fat Separation
- P389** William Kenyhercz  Quantification of Aortic Stiffness Across the Cardiac Cycle using Magnetic Resonance Elastography

CAD - Ischemia and Viability (Poster Session 2)

- P176** Suchi Grover Myocardial Oxygenation in Hibernating Myocardium: Insights from Blood Oxygen Level Dependent Imaging Pre and Post Revascularization
- P177** Behzad Sharif Dark-Rim-Free Ungated First-pass Perfusion CMR with 3-Slice End-Systolic Imaging: Initial Experience
- P178** John Biglands Is the Rest Perfusion Measurement Necessary for the Diagnosis of Myocardial Ischaemia in Quantitative Cardiac Perfusion? A CE-MARC Sub-study

- P179** Christopher Schneeweis Value of Strain Analysis with Feature Tracking in Dobutamine Stress Cardiac Magnetic Resonance Imaging for Detecting Coronary Artery Disease
- P180** Peter Bernhardt Quantitative and Qualitative Adenosine Perfusion Magnetic Resonance Imaging for the Detection of Coronary Artery Disease at 3 Tesla
- P181** Anthony Pisaniello Dobutamine Stress Cardiac MRI Reliably Predicts Significant Coronary Disease in Renal Transplant Candidates
- P182** Pascale Beliveau Textural Analysis of Late Gadolinium Enhanced Magnetic Resonance Images Can Discriminate Acute from Chronic Myocardial Infarction
- P183** Elisa McAlindon Infarct Size by SS-SSFP vs. IR-GRE: Influence of Imaging Time after Contrast Administration and Infarct Age, and Implications for Clinical Trials
- P184** Craig Bradbrook Myocardial Oxygenation is Reduced in End-Stage Renal Failure: A Novel Blood Oxygen Level Dependant (BOLD)-Cardiac MRI Study
- P185** Dominik Buckert Acute and Chronic Phase Myocardial Tissue Characteristics in Non ST-Elevation Myocardial Infarction in Dependence of Early versus Delayed Revascularisation Assessed by Cardiac Magnetic Resonance Imaging
- P186** Siddique Abbasi Risk Stratification by Regadenoson Stress MRI in Patients with Known or Suspected Coronary Artery Disease
- P187** Christie McComb Assessment of Longitudinal Changes in Strain using DENSE in Patients with Myocardial Infarction
- P188** David Ripley Heart Rate Adaptive Maximal Resolution Cardiovascular Magnetic Resonance Myocardial Stress Perfusion Imaging at 3.0T
- P189** Ulrika Pahlm Regional Wall Function Before and After Acute Myocardial Infarction; An Experimental Study in Pigs
- P190** Christie McComb In-vivo Assessment of the Diagnostic Performance of DENSE in Patients with Myocardial Infarction
- P191** Erica Dall'Armellina Native T1 Mapping Correlates with Severity of Microvascular Dysfunction Measured by Coronary Flow Reserve (CFR) in Acute Myocardial Infarction
- P192** Ananth Kidambi Early vs. Persistent Microvascular Obstruction Following Primary PCI- Two Pathologies or One? A Cardiovascular Magnetic Resonance Study
- P193** Christopher Schneeweis Value Of Strain Analysis With Feature Tracking In Adenosine Stress Myocardial Perfusion Magnetic Resonance Imaging
- P194** Dominik Buckert Assessment of Myocardium At Risk in Non-ST-elevation Infarction by Cardiac Magnetic Resonance Imaging and Invasive Angiographic Validation by the APPROACH-Score
- P195** Adam McDiarmid Quantification of Perfusion Defects with High Resolution 2D and 3D Adenosine Stress Perfusion 3.0 Tesla CMR
- P196** Martin Janich Robust Fat Saturation Applied To Late Enhancement
- P197** Lorenzo Monti Relevance of Small Areas of Myocardial Ischemia in Adenosine Stress MR
- P198** Maurice Bizino 3D Free-breathing Late Gadolinium Enhancement 3T MRI: Comparison with Standard 2D Imaging
- P199** Gunnar Lund Accuracy and Saving of Time using a New Algorithm for Quantitative Measurement of Infarct and Edema Size in Patients with Acute Myocardial Infarction
- P200** El-Sayed Ibrahim Cine Delayed Hyper-enhancement CMR Imaging without Additional Scan Time
- P201** Mark Doyle Bio-Informatics Assessment Schema (BIAS) to Improve Myocardial Perfusion Image Diagnostic and Prognostic Value: The NHLBI-Sponsored Women's Ischemia Syndrome Evaluation (WISE) Study
- P202** David Chen Non-ECG-triggered Perfusion Imaging with Integrated T1 Mapping for Quantifying Myocardial Blood Flow
- P203** Sohae Chung MR Myocardial Perfusion Analysis of First-Pass Enhancement Kinetics with a Lagrangian Approach
- P204** Magalie Viallon CMRSegTools: An Osirix Plugin for Myocardial Infarct Sizing on DE-CMR Images
- P205** Avinash Kali Contrast-free T1 Mapping at 3T can Characterize Chronic Myocardial Infarctions with High Diagnostic Accuracy
- P206** Constantine Zakkaroff A Comparison of Methods for Automated Motion Correction of DCE-MRI Perfusion Datasets Evaluated in Terms of Diagnostic Accuracy: A CE-MARC Sub-study
- P207** Suzanne de Waha Withdrawn by author
- P208** Steven White CMR Detects a Reduction in Infarct Size and Myocardial Edema when Primary PCI is Augmented by Remote Ischemic Conditioning. A Randomized Trial
- P209** John Biglands Which Quantitative Perfusion Estimation Model is Better at Diagnosing Myocardial Ischaemia? A CE-MARC Sub-study
- P210** Michael Milks Right Ventricular Stress-induced Perfusion Defects and Late Gadolinium Enhancement in Coronary Artery Disease
- P211** Lourens Robbers The Influence of Microvascular Injury on T1- and T2*-Relaxation Times after Acute Myocardial Infarction
- P212** Elisa McAlindon The Association between Microvascular Obstruction by CMR and the Index of Microcirculatory Resistance Assessed Invasively
- P213** Goran Abdula Synthetic Phase Sensitive Inversion Recovery Late Gadolinium Enhancement from Post-contrast T1-mapping Shows Excellent Agreement with Conventional PSIR-LGE for Diagnosing Myocardial Scar
- P214** Allison Ta Feasibility and Preliminary Diagnostic Results of Pixel-wise Quantification of Regadenoson First Pass Cardiac Magnetic Resonance Perfusion Imaging

CAD Ischemia – Other (Poster Session 2)

- P215** Vanessa Ferreira Cardiovascular Magnetic Resonance using T1-mapping, T2-weighted and Late Gadolinium Enhancement Imaging Provides a High Diagnostic Yield in Patients Presenting with Acute Chest Pain, Positive Troponin and Non-obstructive Coronary Arteries
- P216** Konstantinos Bratis Abnormal Myocardial Perfusion Pattern in Convalescent Kawasaki Disease Patients Assessed by Stress Perfusion Cardiovascular Magnetic Resonance

- P217** Guoxi Xie  3D Coronary Dark-blood Interleaved with Gray-blood (cDIG) MRI
- P218** Masaki Ishida Learning-based Super-resolution Technique Significantly Improves Detection of Coronary Artery Stenoses on 1.5T Whole-heart Coronary MRA
- P219** Michael Bauml Determinants of Myocardial Perfusion Reserve Measured from Coronary Sinus Phase-contrast Imaging During Regadenoson Stress CMR
- P220** Nauman Ahmed The Diagnostic Role of Cardiovascular Magnetic Resonance Imaging in Patients Surviving Non Traumatic Out of Hospital Cardiac Arrest
- P221** Gerry McCann Evaluation of Techniques for Quantification of Infarct Size and Oedema on Late Gadolinium Enhancement and T2-Weighted STIR Imaging using Cardiovascular Magnetic Resonance in Patients with Acute Myocardial Infarction
- P222** Florian von Knobelsdorff Differentiation of Acute and Chronic Myocardial Infarction using T2-Weighted Imaging, Late Enhancement and T1 and T2 Mapping - A Pilot Study at 3T
- P223** Lin Zhang Dynamic Changes in Myocardial Architecture after Reperfused Acute Myocardial Infarction (AMI): Insights from the Prospective REMI Study (Remodeling After Myocardial Infarction)
- P224** Brett Cowan Coronary Artery Bifurcation Haemodynamics - Comparison between Phase Contrast MRI and Computational Fluid Dynamics
- P225** Jiwon Kim Cine-CMR Quantified Left Atrial Diameter – A Simple Index of Left Atrial Remodeling that Closely Parallels Chamber Area and Stratifies Longitudinal Atrial Arrhythmic Risk
- P226** Craig Bradbrook Reduced Myocardial Perfusion in Post Renal Transplant Population is Not Associated with Aortic Stiffness
- P227** Yang Yang High-resolution Quantitative Spiral Perfusion for Microvascular Coronary Dysfunction Detection
- P228** Erica Dall'Armellina Reproducibility of Short Axis Slice Locations in Longitudinal Cardiovascular Magnetic Resonance (CMR) Studies
- P229** Joao Cavalcante Global Left Ventricular Remodeling, Extent of Inferior Wall Infarct, and Mitral Valve Geometry are Important Predictors of Mitral Regurgitation Severity than Total Infarct Size in Advanced Ischemic Cardiomyopathy
- P230** Ausami Abbas The Role of Cardiac MR in Patients Successfully Resuscitated from Out of Hospital Sudden Cardiac Arrest: 5 Year Experience from a UK Tertiary Referral Cardiac Imaging Centre
- P231** Yeon Hyeon Choe Coronary Magnetic Resonance Angiography Combined with Stress-perfusion and Delayed-enhancement Magnetic Resonance Imaging for the Detection of Occult Coronary Artery Disease in Asymptomatic Individuals

Non-ischemic Heart Disease – Other (Poster Session 2)

- P232** Jonathan Nadjiri T1 Mapping in Daily CMR Practice
- P233** Eun Kyoung Kim Why Does Apical Hypertrophic Cardiomyopathy have a Favorable Outcome than Non-apical Types? Cardiac Magnetic Resonance and Echocardiographic Findings from 350 Patients with Hypertrophic Cardiomyopathy
- P234** Jie Cao Effects of Breath-Hold Patterns, Gadolinium Concentrations and Temporal Resolutions on Determination of Mean Left Atrial Circulation Transit Time by MR First Pass Perfusion
- P235** Qiao Han RV Work Efficiency is Greatly Reduced in Patients with Pulmonary Arterial Hypertension as Evidenced by 4D Flow Cardiac MRI
- P236** Punam Pabari Comprehensive Cardiovascular MRI in Hypertension: A UK Single Centre Experience
- P237** Hoshang Farhad Left Atrial Passive Function after Aortic Valve Replacement in Aortic Stenosis
- P238** Nicola Edwards Optimum Management of Asymptomatic Moderate-severe Degenerative Mitral Regurgitation: A Role For T1 Mapping in Risk Stratification?
- P239** Naila Choudhary Comparison of Myocardial Mechanical Properties in Patients with Dilated Cardiomyopathy With and Without Acute Heart Failure
- P240** Alexandros Kallifatidis The Duration of Interventricular Septal Displacement in Patients with Precapillary Pulmonary Hypertension as a Potential Marker of Right Ventricular Dysfunction and Pressure Overload. A Cardiac Magnetic Resonance Study
- P241** Rocio Hinojar Native T1 Values in Discrimination of Subclinical Profibrotic Phenotype in Relatives of Patients with Hypertrophic Cardiomyopathy
- P242** Roux Charles Cushing's Disease is Associated with Reversible Cardiac Dysfunction and Remodelling Assessed By CMR
- P243** Francisco Contijoch Left Ventricular Dyssynchrony can be Observed via Cine CMR with use of Aortic Valve Timing
- P244** Antonella Meloni Regional Myocardial Contractility on Thalassemia Major by Magnetic Resonance Tagging
- P245** Julianne Matthews Assessment of Left Ventricular Volume Overload: Comparison of 2-D Echo and Cardiac MRI
- P246** Sebastian Kelle Comprehensive Characterization of Cardiac Morphology and Function in Adult Patients with Phenylketonuria using CMR
- P247** Steven Wolff COVA (Cardiac Output Valve Area): A Reliable Method for Determining Aortic Transvalvular Pressure Gradients That Does not use Phase Contrast Imaging
- P248** Amy Burchell Utility of MRI as the Primary Imaging Tool in Hypertension
- P249** Christian Luecke Interobserver Variability of Myocardial T1 and T2 Mapping in Patients with Suspected Myocarditis
- P250** Animesh Tandon The Effect of Right Ventricular Compression on Cardiac Function in Pediatric Pectus Excavatum
- P251** Rocio Hinojar Native T1 and T2 Values by Cardiovascular Magnetic Resonance Imaging in Patients with Systemic Inflammatory Conditions
- P252** Michael Quail Novel Magnetic Resonance Wave Intensity Analysis in Pulmonary Hypertension
- P253** Daniel Knight Abnormal Systolic and Diastolic LV Motion by Novel Tissue Phase Mapping Accounts for Functional Capacity in Pulmonary Hypertension

- P254** Antonella Meloni Myocardial Iron Overload in Thalassemia Major. How Early To Check?
- P255** Joshua Cheng Feasibility of Performing In-scanner Exercise Testing and Assessing Myocardial Mechanical Reserve in Normal Volunteers and in Patients with Cardiomyopathy
- P256** W. Patricia Bandettini In the Absence of Obstructive Coronary Artery Disease, Patients with Class II and III Obesity Have Decreased Myocardial Perfusion Reserve
- P257** Antonella Meloni Right Ventricular Wall Motion Abnormalities In Thalassemia Major Patients
- P258** Madhusudan Ganigara Utility of Cardiac Magnetic Resonance Imaging in the Diagnosis of Cardiac Sarcoidosis
- P259** Juliano Fernandes Comparison of Different T2* Sequences with and without Parallel Imaging for the Assessment of Iron Overload
- P260** Akhlaque Uddin CMR Evaluation of Change in Myocardial Strain Following Transcatheter Aortic Valve Implantation
- P261** Andreas Fredholm The Pulmonary Blood Volume Measured by Cardiovascular Magnetic Resonance Imaging - Relation to Cardiac Pumping and Anthropometric Measures
- P262** Julian Kley Can T2 Weighted Imaging in Cardiac MRI Chest Pain Protocols Improve Diagnostic Capability?
- P263** Lorenzo Monti Magnetic Resonance Predictors of Arrhythmic Events during the Acute Phase of Hemodynamically Stable Myocarditis
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- P391** Ornella Rimoldi Comparison of myocardial T1 mapping techniques at 1.5T to detect interstitial fibrosis in patients with orthotopic cardiac transplant
- P392** Marcus Chen High Prevalence of Atypical Delayed Enhancement in Alkaptonuria
- P393** Sujith Kuruvilla Increased Extracellular Volume and Altered Mechanics are Associated with Left Ventricular Hypertrophy in Hypertensive Heart Disease, not Hypertension Alone

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P395 Antonella Meloni  Myocardial fibrosis by CMR LGE in a large cohort of pediatric thalassemia major patients

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- P292** Ntobeko Ntusi Diffuse Myocardial Fibrosis is Associated with Impaired Myocardial Strain and Disease Activity in Rheumatoid Arthritis: A Cardiovascular Magnetic Resonance Study
- P293** Bradley Allen Ascending Aorta Flow Derangement is a Marker of Outflow Obstruction in Hypertrophic Cardiomyopathy
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- P295** Mohammed Alam Myocardial Iron Assessment by T1 Cardiovascular Magnetic Resonance at 1.5 Tesla
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- P297** Christopher Haggerty Characterizing the Temporal Evolution of Altered Cardiac Mechanics in Diet-induced Obese Mice Using Cine DENSE CMR
- P298** Linda Chu Evaluation of Diastolic Function by Cardiac MRI in Hypertrophic Cardiomyopathy: Validation of 3D Model-Based Analysis of Left Ventricular Filling Curves
- P299** Richard Coulden Cardiac MRI and FDG-PET in the Diagnosis of Cardiac Sarcoidosis
- P300** Gangadhara Kabbli Comparisons of Myocardial Strain and Strain Rate in Patients with Heart Failure with Preserved and Reduced Ejection Fraction using Feature Tracking of Cine MR Images
- P301** Henrique Moreira Right Ventricular Dysfunction in Chagas' Cardiomyopathy. Primary Involvement or a Resonant Manifestation of Left Ventricular Dysfunction?
- P302** Gillian Murtagh Refining Risk Assessment in Cardiac Sarcoidosis: A Role for Burden of Late Gadolinium Enhancement and Right Ventricular Function.
- P303** Florian Andre Assessment of Left and Right Ventricular Trabeculation and Non-compacted Myocardium in a Large Selected Healthy Reference Population
- P304** Eun Kyoung Kim Prevalence and Characteristics of Apical Aneurysm on Cardiovascular Magnetic Resonance in Patients with Hypertrophic Cardiomyopathy
- P305** Oisín Flanagan The Validity of a Free Breathing Motion Corrected Phase Sensitive Inversion Recovery Sequence in the Detection of Delayed Myocardial Enhancement in Non-ischemic Heart Disease
- P306** Jonathan Soslow Left Ventricular Function by Echocardiography Correlates Poorly with Cardiac MRI Measures in Duchenne Muscular Dystrophy
- P307** Ntobeko Ntusi Diffuse Myocardial Fibrosis is Subclinical and is Associated with Impaired Myocardial Deformation Characteristics in Systemic Lupus Erythematosus: A Cardiovascular Magnetic Resonance Study
- P308** Robin Taylor Mechanical Effects of Midwall Fibrosis in Non-ischemic Dilated Cardiomyopathy
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- P311** Marly Silva Progression of Myocardial Fibrosis by Magnetic Resonance Imaging in Patients with Duchenne and Becker Muscular Dystrophy and Preserved Left Ventricular Ejection Fraction - A Randomized Clinical Trial for Treatment with ACE Inhibitors
- P312** Linda Chu Evaluation of Left Ventricular Outflow Tract Obstruction with 4D Phase Contrast in Patients with Hypertrophic Cardiomyopathy
- P313** Nessim Amin Is there Concordance between LV Fibrosis and RV Fibrosis in Patients with Hypertrophic Cardiomyopathy; Should there be?
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- P316** Jie Cao Association of Increased Extracellular Volume Expansion with Elevated Left Ventricular End Diastolic Pressure in Patients with Nonischemic Cardiomyopathy
- P317** Philipp Lurz Assessment of Acute Changes in Biventricular Volumes, Systolic Function and Strain after Mitracliptm-Implantation using Magnetic Resonance Imaging and Feature Tracking
- P318** Mohamad Ghosn Replacement Fibrosis Detected by CMR is a Predictor of Outcome in Patients with Non-ischemic Cardiomyopathy
- P319** Laurent Bonnemains Free-breathing with Motion-correction and Video Projection during Cardiac MRI : A Paediatric Design!
- P320** Nathaniel Reichek Afterload Quantitation for Evaluation of Myocardial Strain
- P321** Florian Andre Cardiac Magnetic Resonance Strain Imaging in Systemic Light Chain Amyloidosis
- P322** Mitchell Cooper Early Post-contrast T1 Mapping Yields Maximal Discriminatory Capacity for Detection of Cardiac Amyloid – Influence of Temporal T1 Differences on MOLLI Imaging
- P323** Mohammed Alam Validation of Siemens T2* Inline WIP Package for Quantification of Cardiac and Hepatic Iron Loading at 1.5T and 3T
- P324** Adriana Villa Stress Perfusion CMR in Hypertrophic Cardiomyopathy: Comparison with Late Gadolinium Enhancement
- P325** Marly Silva Association between Specific Dystrophin Gene Mutations and Myocardial Fibrosis by Cardiovascular Magnetic Resonance Imaging in Patients With Duchenne and Becker Muscular Dystrophy

- P326** Mohamad Ghosn Relationship between CMR Derived Myocardial Extracellular Volume and Myocardial Replacement Scarring in Non-ischemic Cardiomyopathy
- P327** Francisco Contijoch Aortic Valve Timing is Critical for Accurate Estimation of MRI-derived Ejection Fraction
- P328** Keyur Parekh Assessment of Myocardial Motion in Children and Young Adults using High-temporal Resolution MR Tissue Phase Mapping
- P329** Eun Kyoung Kim Withdrawn by author
- P330** Fabian Morsbach Quantitative Comparison of 2D and 3D Late Gadolinium Enhancement MR Imaging for Cardiomyopathies
- P331** Timothy Wong Extracellular Volume Fraction is Associated with B-type Natriuretic Peptide in Hypertrophic Cardiomyopathy
- P332** Andrew Lewis Characterisation of a Novel Cardiac Phenotype in Patients with GFPT1 or DPAGT1 Mutations
- P333** Tazim Merchant Myocardial Contractility Indices Based On Strain Imaging
- P334** Jimmy Lu Comparison of Feature Tracking and Harmonic Phase Imaging for Strain Measurement on Cardiovascular Magnetic Resonance in Pediatric Cancer Survivors
- P335** Bara Erhayiem Characterisation of Sub-clinical Primary Myocardial Disease in Systemic Sclerosis - Preliminary Findings from a Cardiac Magnetic Resonance Study
- P336** Christine Jellis Right Ventricular T1 Mapping is Technically Feasible and Correlates with Right Ventricular Dysfunction in Non-ischemic Cardiomyopathy
- P337** Yasuyuki Kobayashi Detection of Left Ventricular Regional Dysfunction and Myocardial Abnormalities using Complementary Cardiac Magnetic Resonance Imaging in Patients with Systemic Sclerosis without Cardiac Symptoms
- P338** Pedro Ferreira Aberrant Myocardial Sheetlet Mobility in Hypertrophic Cardiomyopathy Detected Using In Vivo Cardiovascular Magnetic Resonance Diffusion Tensor Imaging
- P339** Jacob Blount The Relationship between Gene Positive Hypertrophic Cardiomyopathy Patients and Presence of Scar on Cardiac Magnetic Resonance Imaging
- P340** Yoko Mikami Precision and Reproducibility of Semi-automated Late Gadolinium Enhancement Quantification Techniques in Patients with Hypertrophic Cardiomyopathy
- P341** Marianna Fontana AL and ATTR Cardiac Amyloid are Different: Native T1 Mapping and ECV Detect Different Biology
- P342** Niall Keenan Genotype Positive Hypertrophic Cardiomyopathy is Associated with Myocardial Perfusion Abnormalities
- P343** Gustavo Volpe Presence of Scar by Late Gadolinium Enhancement is a Strong Predictor of Events in Chagas Heart Disease

Basic Translational - Post-Processing (Poster Session 2)

- P344** Constantine Zakkaroff Automated Registration of Dynamic Contrast Enhanced DCE-MRI Cardiac Perfusion Achieves Comparable Diagnostic Accuracy to Manual Motion Correction: A CE-MARC Sub-study
- P345** Robert Jablonowski  Longitudinal and Circumferential Strain Assessment of Left and Right Ventricles in Acute Myocardial Infarction Superimposed with Microemboli
- P346** Qian Tao Automated Myocardium Segmentation in Late Gadolinium Enhanced MR Images
- P347** Giorgos Papanastasiou Assessing the Reliability of DP and Fermi Estimates in Single and Dual Bolus Cardiac MR Perfusion Imaging
- P348** Mytra Zareian Left Atrial Structure and Functional Quantitation using Cardiac Magnetic Resonance: Comparison of Manual Delineation vs. Multimodality Tissue Tracking Based Semi-automated Methods
- P349** Ek Tan Nonlinear Self-calibrated Phase-contrast Correction in Quantitative Cardiac Imaging
- P350** Hannah Conn Interobserver Reproducibility of Fully Quantitative Pixel-wise Analysis of Clinical CMR Perfusion Imaging
- P351** Rebecca Thornhill Quantitative Texture Features as Objective Metrics of Enhancement Heterogeneity in Hypertrophic Cardiomyopathy
- P352** Christopher Miller Voxel-wise Quantification of Myocardial Blood Flow with Cardiovascular Magnetic Resonance: Effect of Variations in Methodology and Validation with Positron Emission Tomography
- P353** Emmeline Calkoen The Added Value of Streamline Visualization in the Evaluation of Left Atrioventricular Valve Flow and Left Ventricular Diastolic Function with 4dflow MRI
- P354** Anvesha Singh Inter-study Reproducibility of Circumferential Strain and Strain Rates at 1.5T and 3T: A Comparison of Tagging and Feature Tracking
- P355** Sebastian Bidhult A New Method for Vessel Segmentation Based on a Priori Input from Medical Expertise in Cine Phase-Contrast Magnetic Resonance Imaging
- P356** Julio Sotelo 3D Quantification of Wall Shear Stress using Finite-Element Interpolations from 4D Flow MR Data in the Thoracic Aorta.
- P357** Valentina Puntmann T1 Values in Discrimination between Health and Disease using Different T1 Sequences: Comparison between 3'3'5-MOLLI, 3'5-MOLLI, shMOLLI and SASHA
- P358** Karl Diedrich Time Series Analysis Of In Vivo Cardiac MRI-PET Image Fusion of the Human Amniotic Mesenchymal Stem Cell (HAMSC) Engraftment
- P359** Ria Mazumder Estimation of Helical Angle of the Left Ventricle Using Diffusion Tensor Imaging with Minimum Acquisition Time
- P360** Felicia Seemann An Improved Segmentation Algorithm for Quantification Of Myocardial Infarction in Contrast Enhanced CMR Images - Validated in Ex-Vivo Studies
- P361** Travis Sharkey-Toppen Improved Pulse Wave Velocity Wave Front Detection by Template-matching
- P362** Kyungpyo Hong Synthetic LGE Derived from Cardiac T1 Mapping for Simultaneous Assessment of Focal and Diffuse Cardiac Fibrosis

- P363** *María Luaces* Automated Quantification of Epicardial Adipose Tissue in Cardiac Magnetic Resonance Imaging
- P364** *Christopher Miller* Quantitative Pixel-wise Measurement of Myocardial Blood Flow: A Comparison of Methods to Correct For Surface Coil-related Field Inhomogeneity
- P365** *Lennart Tautz* Evaluation of a Phase-Based Motion Tracking Method for the Calculation of Myocardial Stress and Strain from Tagged MRI
- P366** *Francisco Contijoch* Quantification of Left Ventricular Deformation Fields from Undersampled Radial, Real-time Cardiac MRI
- P367** *Allison Ta* Impact of Errors in Determining the Start of Myocardial Enhancement during Quantitative First Pass Perfusion Cardiovascular Magnetic Resonance Imaging
- P368** *Davis Vigneault* Withdrawn by author
- P369** *Amedeo Chiribiri* Scar Heterogeneity in Hypertrophic Cardiomyopathy. Comparison with Chronic Myocardial Infarction and Normal Subjects
- P370** *Ahmed Fahmy* HARP Tracking using Locally-uniform Deformation Assumption
- P371** *Julio Sotelo* Quantification of Wall Shear Stress using Finite-Element Interpolations in Multidimensional Phase Contrast MR data of the Thoracic Aorta
- P372** *Richard Coulden* Inter-observer Variation in LV Analysis in a Dedicated CMR Unit: The Impact of Audit and Consensus Guideline on Reproducibility
- P373** *Patrick Magrath* Evaluation of Automated Contour Detection to Produce Regional Delay Maps from High Temporal Resolution Cine Images in Patients Undergoing CRT

Rapid, Efficient Imaging (Poster Session 2)

- P374** *Steven Mason* How Much Heating is Associated with Magnetic Resonance Imaging in Patients with Pacemakers and Implantable Cardioverter Defibrillators?
- P375** *Emer Sonnex* Non-contrast Enhanced, EKG-triggered, Navigator MR Angiography of the Thoracic Aorta and Proximal Pulmonary Arteries: Initial Evaluation of using an Abdominal Compression Band to Reduce Acquisition Times
- P376** *Gabriella Vincenti* A Compressed Sensing Multi-Slice Cine CMR Approach for the Accurate Assessment Of Left Ventricular Volumes And Function
- P377** *Ahmed Kharabish* Cardiovascular Magnetic Resonance is Feasible in Many Patients Aged 3 to 8 Years Without General Anesthesia or Sedation
- P378** *Jesse Hamilton* Accelerated 2D Multi-slice First-pass Contrast-enhanced Myocardial Perfusion using Through-time Radial GRAPPA
- P379** *Yiu-Cho Chung* T1 Mapping of Myocardium using Inversion Recovery Cine at 3.0T
- P380** *Nii Addy* Accelerated Isotropic Resolution 3D Image-based Navigators for Coronary MR Angiography
- P381** *Brett Cowan* Accuracy of Compressed Sensing for Left Ventricular Mass and Volumes
- P382** *Martin Fasshauer* Pulse Wave Velocity in Real-time Cardiac Magnetic Resonance
- P383** *Robin Simpson* Retrospective Gating Leads to More Accurate Velocity Measurements than Prospective Gating in Spiral Phase Velocity Mapping
- P384** *Edward Kuoy* Quantitative Assessment of LV Function and Volumes with 3-Slice Segmentation of Cine SSFP Short Axis Images: Our Experience
- P385** *Prahlad Menon* Rapid 4D Regional Wall Motion Characterization of Abdominal Aortic Aneurysms with Intra-luminal Thrombus using Cine Cardiac MRI
- P386** *Julius Traber* Real-time Flow Assessment: From Model to Patients

Technologist Posters

- T 04** *Emer Sonnex* The EKG in cardiac MRI: what the technologist needs to know
- T 05** *Jonathan Mazal* An efficient, free-breathing protocol for MR right heart catheterization
- T 06** *Ronald Williams* Cardiac MRI and Pulmonary Hypertension-The Pressure is on!
- T 07** *June Yamrozik* Imaging the PM/AICD patient; Is it Beneficial to the Final Diagnosis?
- T 08** *Jennifer Bryant* Significant Incidental Findings in 9-Year Old Children Undergoing Cardiovascular Magnetic Resonance Imaging for Research
- T 09** *Michelle Walkden* An Unusual case of Hypertrophic Cardiomyopathy causing Right Ventricular Outflow Tract Obstruction
- T 10** *Michelle Walkden* Scanning MRI conditional implantable devices

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 Chang, Lowell: Nothing to disclose
 Charles, Roux: Nothing to disclose
 Chen, David: Nothing to disclose
 Chen, Hou-Jen: Nothing to disclose
 Chen, Yucheng: Nothing to disclose
 Cheng, Joshua: Nothing to disclose
 Childs, Helene: Nothing to disclose
 Chiribiri, Amedeo: Grant/Research Support: Philips Healthcare
 Choe, Yeon Hyeon
 Choi, Andrew: Nothing to disclose
 Choi, Yoonyoung: Nothing to disclose
 Choudhary, Naila: Nothing to disclose
 Chow, Kelvin: Nothing to disclose
 Christensen, Jason: Nothing to disclose
 Chu, Linda: Nothing to disclose
 Chuang, Michael: Nothing to disclose
 Chung, Taylor: Nothing to disclose
 Chung, Yiu-Cho: Nothing to disclose
 Chung, Sohae: Nothing to disclose
 Contijoch, Francisco: Nothing to disclose
 Cooper, Mitchell: Nothing to disclose
 Coppo, Simone: Nothing to disclose
 Coristine, Andrew: Nothing to disclose
 Coulden, Richard: Nothing to disclose
 Cowan, Brett: Grant/Research Support: Siemens Medical Systems
 Crouch, Gareth: Nothing to disclose
 Cui, Sophia: Nothing to disclose
 Culham, Gordon: Consultant: Medvoxel (advisor); Stock Shareholder (self managed): Medvoxel
 Dada, Michael: Nothing to disclose
 Dall'Armellina, Erica: Nothing to disclose
 Das, Anindita: Nothing to disclose
 Dash, Rajesh: Nothing to disclose
 Dass, Sairia: Nothing to disclose
 de Graaf, Wolter: Nothing to disclose
 Deng, Zixin: Nothing to disclose
 Deterich, Jon: Nothing to disclose
 Dewey, Marc: Nothing to disclose
 Diedrich, Karl: Full-time/part-time Employee: AZE Technology, Inc.
 Ding, Haiyan: Nothing to disclose
 Doltra, Adelina: Nothing to disclose

Doneva, Mariya: Full-time/part-time Employee: Philips
 Dorfman, Adam: Nothing to disclose
 Dusenbery, Susan: Nothing to disclose
 Edelman, Robert: Grant/Research Support: Siemens
 Edwards, Nicola: Nothing to disclose
 Eitel, Ingo: Nothing to disclose
 ElBaz, Mohammed: Grant/Research Support: Dutch Technology Foundation (STW)
 Ennis, Daniel: Grant/Research Support: Siemens Medical Solutions
 Epstein, Frederick: Grant/Research Support: Siemens
 Ertel, Andrew: Nothing to disclose
 Fahmy, Ahmed: Grant/Research Support: Diagnosoft, Inc.
 Fair, Merlin: Nothing to disclose
 Feliciano, Helene: Nothing to disclose
 Feng, Li: Nothing to disclose
 Fernandes, Juliano: Grant/Research Support: Siemens AG; Consultant: Novartis
 Fernandes, Andre: Nothing to disclose
 Ferreira, Vanessa: Nothing to disclose
 Ferry, Pauline: Nothing to disclose
 Figuera, Alberto: Nothing to disclose
 Figueroa, Carlos: Nothing to disclose
 Finn, J. Paul: Grant/Research Support: Siemens Medical Solutions, Bracco Diagnostics
 Finocchiario, Gherardo: Nothing to disclose
 Fisher, Kady: Nothing to disclose
 Flamm, Scott: Grant/Research Support: Philips Healthcare, Siemens Healthcare; Consultant: Bayer Healthcare, Precision Image Analysis, TeraREcon
 Flores-Arredondo, Jose: Nothing to disclose
 Fogel, Mark: Grant/Research Support: Siemens, Edwards
 Fontana, Marianna: Nothing to disclose
 Fratz, Sohrab: Nothing to disclose
 Friedberg, Mark: Nothing to disclose
 Friedrich, Matthias: Consultant: Circle CV Imaging; Stock Shareholder: Circle CV Imaging
 Froeling, Martijn: Nothing to disclose
 Gabbert, Dominik Daniel: Nothing to disclose
 Ganigara, Madhusudan: Nothing to disclose
 Garcia, Julio: Nothing to disclose
 Geva, Tal: Nothing to disclose
 Ghosn, Mohamad: Nothing to disclose
 Giannakidis, Archontis: Nothing to disclose
 Giese, Daniel: Nothing to disclose
 Gol Gungor, Derya: Nothing to disclose
 Goot, Benjamin: Nothing to disclose
 Goto, Yoshitaka: Nothing to disclose
 Gottlieb, Ilan: Nothing to disclose
 Greenwood, John: Nothing to disclose
 Gregory, Thomas: Nothing to disclose
 Greil, Gerald: Nothing to disclose
 Greve, Anders: Nothing to disclose
 Grosse, Luisa: Nothing to disclose
 Grosse-Wortmann, Lars: Nothing to disclose
 Grothoff, Matthias: Nothing to disclose
 Grover, Suchi: Nothing to disclose
 Groves, Daniel: Nothing to disclose
 Gulati, Gurpreet: Nothing to disclose
 Gyllenhammar, Tom: Nothing to disclose
 Halperin, Henry: Grand/Research Support: Zoll Circulation; Consultant: Zoll Circulation; Other: Imricor; Stock Shareholder (self managed): MRI Interventions
 Hamilton, Jesse: Nothing to disclose

Hamirani, Yasmin: Nothing to disclose
 Hamlet, Sean: Nothing to disclose
 Hammer-Hansen, Sophia: Nothing to disclose
 Hansen, Michael: Nothing to disclose
 Harris, Matthew: Nothing to disclose
 Hartlage, Gregory: Nothing to disclose
 Heng, Ee Ling: Nothing to disclose
 Hess, Aaron: Nothing to disclose
 Heye, Tobias: Nothing to disclose
 Hinojar, Rocio: Nothing to disclose
 Honeyman, Alexander: Nothing to disclose
 Hopewell, Jemma: Nothing to disclose
 Hsu, Li-Yueh: Nothing to disclose
 Huelnhagen, Till: Nothing to disclose
 Hulten, Edward: Nothing to disclose
 Hussain, Tarique: Nothing to disclose
 Ibrahim, El-Sayed: Nothing to disclose
 Izgi, Cemil: Nothing to disclose
 Jablonowski, Robert: Nothing to disclose
 Jacquier, Alexis: Nothing to disclose
 Janich, Martin: Full-time/part-time Employee: GE
 Jellis, Christine: Nothing to disclose
 Jeong, Daniel: Nothing to disclose
 Jerosch-Herold, Michael: Nothing to disclose
 Johnson, Tiffanie: Nothing to disclose
 Jolly, Umjeet: Nothing to disclose
 Judd, Robert: Stock Shareholder (self managed): Heart Imaging Technologies
 Kabbli, Gangadhara: Nothing to disclose
 Kallifatidis, Alexandros: Nothing to disclose
 Kannan, Arun: Nothing to disclose
 Kappanayil, Mahesh: Nothing to disclose
 Kathiria, Nazima: Nothing to disclose
 Keegan, Jennifer: Nothing to disclose
 Kelle, Sebastian: Nothing to disclose
 Kellman, Peter: Nothing to disclose
 Kenyhercz, William: Nothing to disclose
 Khan, Sarah: Nothing to disclose
 Kharabish, Ahmed: Nothing to disclose
 Kholmovski, Eugene: Grant/Research Support: Marrek Inc.
 Kicska, Gregory: Nothing to disclose
 Kidambi, Ananth: Nothing to disclose
 Kilgas, Phillip: Nothing to disclose
 Kilner, Philip
 Kim, Daniel: Nothing to disclose
 Kim, Jiwon: Nothing to disclose
 Kim, Eun Kyoung: Nothing to disclose
 Kley, Julian: Nothing to disclose
 Kobayashi, Yasuyuki: Nothing to disclose
 Kober, Frank: Nothing to disclose
 Kolipaka, Arunark: Nothing to disclose
 Kolman, Louis: Nothing to disclose
 Konety, Suma: Nothing to disclose
 Koopmann, Katharina: Nothing to disclose
 Kozerke, Sebastian: Nothing to disclose
 Kramer, Christopher: Grant/Research Support: Siemens Healthcare, Novartis; Consultant: Synarc, St. Jude Medical
 Krishnamurthy, Rajesh: Grant/Research Support: Koninklijke Philips Electronics
 Kuhara, Shigehide: Full-time/part-time Employee: Toshiba Medical Systems Corporation
 Kuoy, Edward: Nothing to disclose
 Kurio, Gregory: Nothing to disclose

Kurzendorfer, Tanja: Grant/Research Support: Siemens
 Kutty, Shelby: Nothing to disclose
 Kvernby, Sofia: Nothing to disclose
 Kwok, Ka-Wai: Nothing to disclose
 Kwong, Raymond: Nothing to disclose
 Lai, Wyman: Nothing to disclose
 Lai, Peng: Full-time/part-time Employee: GE Healthcare
 LaRocca, Gina: Nothing to disclose
 Laser, Kai: Nothing to disclose
 Lata, Kusum: Nothing to disclose
 Lee, Daniel: Nothing to disclose
 Leonardi, Benedetta: Nothing to disclose
 Letelier, Karis: Nothing to disclose
 Leung, Steve: Nothing to disclose
 Levelt, Eylem: Nothing to disclose
 Leyva, Francisco: Nothing to disclose
 Li, Debiao: Grant/Research Support: Siemens
 Lima, Joao: Nothing to disclose
 Liu, Chia-Ying: Nothing to disclose
 Liu, Ting: Nothing to disclose
 Lockshine, Karyn: Nothing to disclose
 Lombardi, Massimo: Nothing to disclose
 Lopez, David: Nothing to disclose
 Lu, Xiaoguang: Full-time/part-time Employee: Siemens
 Luaces, Maria: Nothing to disclose
 Luecke, Christian: Nothing to disclose
 Lund, Gunnar: Nothing to disclose
 Magrath, Patrick: Nothing to disclose
 Mahmood, Masliza: Nothing to disclose
 Mahnkopf, Christian: Nothing to disclose
 Makowski, Marcus: Nothing to disclose
 Mancini, Christine: Nothing to disclose
 Manisty, Charlotte: Nothing to disclose
 Manka, Robert: Nothing to disclose
 Manning, Warren: Grant/Research Support: Philips Medical Systems; Stock Shareholder (self managed): General Electric
 Markl, Michael: Nothing to disclose
 Maron, Martin
 Mascherbauer, Julia: Nothing to disclose
 Matsuura, Yuka: Nothing to disclose
 Matthews, Julianne: Nothing to disclose
 Mavrogeni, Sophie: Nothing to disclose
 Mazumder, Ria: Nothing to disclose
 McAlindon, Elisa: Nothing to disclose
 McCann, Gerry: Nothing to disclose
 McLarry, Joel: Nothing to disclose
 Mehra, Vishal: Nothing to disclose
 Mehta, Nehal: Nothing to disclose
 Mekkaoui, Choukri: Nothing to disclose
 Meloni, Antonella: Nothing to disclose
 Menon, Prahlad: Nothing to disclose
 Messroghli, Daniel: Nothing to disclose
 Meyer, Christophe: Nothing to disclose
 Mikolich, J. Ronald: Nothing to disclose
 Milks, Michael: Nothing to disclose
 Miller, Christopher: Nothing to disclose
 Moghaddam, Abbas: Stock Shareholder (self managed): Mapokardia
 Monti, Lorenzo: Nothing to disclose
 Moon, James: Nothing to disclose
 Moreira, Henrique: Nothing to disclose
 Morsbach, Fabian: Nothing to disclose
 Moustafa, Sherif: Nothing to disclose

Muller-Bierl, Bernd: Nothing to disclose
 Murtagh, Gillian: Nothing to disclose
 Musa, Tarique: Nothing to disclose
 Muthurangu, Vivek: Grant/Research Support: Siemens Medical Solutions
 Muthuvelu, Manoharan: Nothing to disclose
 Muzzarelli, Stefano: Nothing to disclose
 Nadjiri, Jonathan: Nothing to disclose
 Nagel, Eike: Grant/Research Support: Bayer Healthcare, Philips Healthcare; Speaker's Bureau: Bayer Healthcare
 Naresh, Nivedita: Nothing to disclose
 Naro, Nicholas: Nothing to disclose
 Natale, Luigi: Nothing to disclose
 Nazarian, Saman: Grant/Research Support: Biosense Webster, NIH; Consultant – Biosense Webster
 Nelson, Evan: Nothing to disclose
 Newbiggin, Katrina: Nothing to disclose
 Nezafat, Reza: Nothing to disclose
 Nezafat, Maryam: Nothing to disclose
 Nguyen, Christopher: Nothing to disclose
 Niendorf, Thoralf: Nothing to disclose
 Nitta, Shuhei: Full-time/part-time Employee: Toshiba Corporation
 Ntsinjana, Hopewell: Nothing to disclose
 Ntusi, Ntobeko: Nothing to disclose
 Nutting, Arni: Nothing to disclose
 Nyack, Krishna: Nothing to disclose
 O h-Ici, Darach: Nothing to disclose
 O'Hanlon, Rory: Nothing to disclose
 Ohyama, Yoshiaki: Nothing to disclose
 Ordovas, Karen: Nothing to disclose
 Pabari, Punam: Nothing to disclose
 Pan, Hua: Nothing to disclose
 Pandya, Bejal: Nothing to disclose
 Pang, Jianing: Nothing to disclose
 Papanastasiou, Giorgos: Nothing to disclose
 Parekh, Keyur: Grant/Research Support: Educational grant - Siemens Medical Solutions
 Paul, Jan: Nothing to disclose
 Pedrotti, Patrizia: Nothing to disclose
 Peebles, Charles: Nothing to disclose
 Pendyal, Akshay: Nothing to disclose
 Peters, Dana: Nothing to disclose
 Petersen, Steffen: Consultant: Circle Cardiovascular Imaging
 Piccini, Davide: Full-time/part-time Employee: Siemens Healthcare
 Pierce, Iain: Nothing to disclose
 Pisaniello, Anthony: Nothing to disclose
 Pitcher, Alex: Nothing to disclose
 Plein, Sven: Grant/Research Support: Philips Healthcare
 Pop, Mihaela: Nothing to disclose
 Potters, Wouter: Nothing to disclose
 Powell, Andrew: Nothing to disclose
 Powell, Jonathan: Nothing to disclose
 Prakash, Ashwin: Nothing to disclose
 Prasad, Sanjay: Speaker's Bureau: Bayer-Schering
 Prince, Martin: Other: Patent agreement with Bayer, Bracco, GE, Mallinckrodt, Philips, Siemens, Hitachi, Lantheus Topspins, Toshiba
 Printz, Beth: Nothing to disclose
 Puntmann, Valentina: Nothing to disclose
 Ramachandran, Raghav: Nothing to disclose
 Raman, Subha: Grant/Research Support: Siemens; Stock

Faculty Disclosures



Shareholder (self managed) – EXCMR	Simpson, Robin: Nothing to disclose	Wedan, Steve: Full-time/part-time Employee: Imricor Medical Systems
Ranjan, Shashi: Nothing to disclose	Simpson, Scott: Nothing to disclose	Weinsaft, Jonathan: Nothing to disclose
Rashid, Shams: Nothing to disclose	Sirol, Marc: Nothing to disclose	Wendell, Dave: Nothing to disclose
Ratnayaka, Kanishka: Grant/Research Support – Siemens Medical, Self	Slesnick, Tim: Nothing to disclose	Westenberg, Jos: Nothing to disclose
Razavi, Reza: Nothing to disclose	Smettan, Jan: Nothing to disclose	Westwood, Mark: Nothing to disclose
Reddy, Sahadev: Nothing to disclose	Smith, Peter: Nothing to disclose	Whitehead, Kevin: Nothing to disclose
Redheuil, Alban	Sodickson, Daniel: Other: Patent Royalties: General Electrical Healthcare, Bruker Biospin	Wickline, Samuel: Nothing to disclose
Rehwald, Wolfgang: Full-time/part-time Employee: Siemens Healthcare	Sohns, Jan: Nothing to disclose	Willem, Helbing
Reichek, Nathaniel: Nothing to disclose	Sonnex, Emer: Nothing to disclose	Williams, Steven: Nothing to disclose
Renella, Pierangelo: Nothing to disclose	Sorensen, Thomas: Nothing to disclose	Wintersperger, Bernd: Speaker's Bureau: Siemens Healthcare, Bayer Healthcare
Rickers, Carsten: Nothing to disclose	Sosnovik, David: Nothing to disclose	Wolff, Steven: Other: NeoSoft, LLC : Owner
Riesenkampff, Eugenie: Nothing to disclose	Sotelo, Julio: Nothing to disclose	Wong, Timothy: Nothing to disclose
Robbers, Lourens: Nothing to disclose	Springer, Charles: Nothing to disclose	Wong, James: Nothing to disclose
Robillard, Julie: Nothing to disclose	Stacy, Mitchel: Nothing to disclose	Woodard, Pamela: Grant/Research Support: Siemens Medical Systems, Bayer, Astellas; Consultant: GE Healthcare, Medtronic, Biotronik
Robinson, Joshua: Nothing to disclose	Stainsby, Jeff: Full-time/part-time Employee: GE Healthcare	Wright, Graham: Nothing to disclose
Rochitte, Carlos: Nothing to disclose	Steeds, Richard: Nothing to disclose	Wu, Ming: Nothing to disclose
Roest, Arno: Nothing to disclose	Steinmetz, Michael: Nothing to disclose	Wu, Holden: Grant/Research Support: Siemens Medical Solutions USA
Roghi, Alberto: Nothing to disclose	Strijkers, Gustav: Nothing to disclose	Xie, Yibin: Nothing to disclose
Romeih, Soha: Nothing to disclose	Suever, Jonathan: Nothing to disclose	Xu, Di: Nothing to disclose
Romeih, Soha: Nothing to disclose	Swoboda, Peter: Nothing to disclose	Yang, Qi: Nothing to disclose
Roujol, Sebastien: Nothing to disclose	Ta, Allison: Nothing to disclose	Yang, Yuesong: Nothing to disclose
Rowin, Ethan: Nothing to disclose	Tamene, Ashenafi: Nothing to disclose	Yang, Hsin-Jung: Nothing to disclose
Ruberg, Frederick: Nothing to disclose	Tan, Ek: Full-time/part-time Employee: General Electric	Yang, Yang,
Ruckdeschel, Emily: Nothing to disclose	Tandon, Animesh: Nothing to disclose	Yates, Denise: Full-time/part-time Employee: Novartis Institutes of Biomedical Research
Saba, Shahryar: Nothing to disclose	Tanimoto, Takashi: Nothing to disclose	Yilmaz, Ali
Sado, Daniel: Nothing to disclose	Tao, Qian: Nothing to disclose	Yingchoncharoen, Teerapat: Nothing to disclose
Sakuma, Hajime: Nothing to disclose	Tautz, Lennart: Nothing to disclose	Yoo, Shi-Joon: Speaker's Bureau: 3D HOPE Medical, IMIB-CHD
Sala, Michiel: Nothing to disclose	Taylor, Andrew: Grant/Research Support: Siemens	Young, Alistair: Consultant: Siemens
Salerno, Michael: Grant/Research Support: Siemens Medical	Taylor, Andrew: Nothing to disclose	Yu, Xin: Nothing to disclose
Samar, Huma: Nothing to disclose	Teme, Tonye: Nothing to disclose	Yu, Janelle: Nothing to disclose
Santini, Francesco: Nothing to disclose	Thadani, Samir: Nothing to disclose	Zakkaroff, Constantine: Nothing to disclose
Sardana, Vrinda: Nothing to disclose	Thavendiranathan, Paaladinesh: Nothing to disclose	Zarecian, Mytra: Nothing to disclose
Saybasili, Haris: Full-time/part-time Employee: Siemens Healthcare	Thornhill, Rebecca: Nothing to disclose	Zemrak*, Filip: Nothing to disclose
Sayin, Ozan: Nothing to disclose	Ting, Samuel: Nothing to disclose	Zhang, Xiaoxia: Nothing to disclose
Schalla, Simon	Toepper, Agnieszka: Nothing to disclose	Zhang, Lin: Nothing to disclose
Schelbert, Erik: Nothing to disclose	Toro-Salazar, Olga: Nothing to disclose	Zhang, Donald: Nothing to disclose
Schneider, Jurgen: Nothing to disclose	Treibel, Thomas: Nothing to disclose	Zhou, Xiangzhi: Full-time/part-time Employee: TMRU
Schulz-Menger, Jeanette: Nothing to disclose	Truong, Uyen: Nothing to disclose	Zhou, Zheng-Wei: Nothing to disclose
Schwittler, Jürg: Grant/Research Support: Bayer Healthcare; Consultant: Medtronic	Tumma, Roja: Nothing to disclose	
Scott, Andrew: Nothing to disclose	Tunncliffe, Elizabeth: Nothing to disclose	
Sechtem, Udo: Nothing to disclose	Ugander, Martin: Speaker's Bureau: Covidien	
Seed, Mike: Nothing to disclose	Valente, Anne Marie: Nothing to disclose	
Seemann, Felicia: Nothing to disclose	Vallee, Jean-Paul: Nothing to disclose	
Seiberlich, Nicole: Grant/Research Support: Siemens	van Heeswijk, Ruud: Nothing to disclose	
Semaan, Edouard: Nothing to disclose	van Ooij, Pim: Nothing to disclose	
Serafim da Silva, Juliana: Nothing to disclose	Varghese, Juliet: Nothing to disclose	
Serai, Suraj: Nothing to disclose	Vassiliou, Vassilis: Nothing to disclose	
Shafer, Keri: Nothing to disclose	Vermes, Emmanuelle: Nothing to disclose	
Shanbhag, Sujata: Nothing to disclose	Viallon, Magalie: Nothing to disclose	
Shao, Jiaxin: Nothing to disclose	Vieira, Miguel: Nothing to disclose	
Sharif, Behzad: Nothing to disclose	Vigneault, Davis: Nothing to disclose	
Sharkey-Toppen, Travis: Nothing to disclose	Vijayakumar, Sathya: Nothing to disclose	
Shenasa, Mohammad: Nothing to disclose	Vogel-Claussen, Jens: Nothing to disclose	
Shinebane, Jerold: Nothing to disclose	Volpe, Gustavo: Nothing to disclose	
Shinebe, Jerold: Nothing to disclose	von Knobelsdorff, Florian: Nothing to disclose	
Sierra-Galan, Lilia: Nothing to disclose	Walkden, Michelle: Nothing to disclose	
Simonetti, Orlando: Grant/Research Support: Siemens, Cook MED Institute; Consultant: Vannevar Group; Stock Shareholder (self managed): EXCMR, Inc.	Wang, Guan: Nothing to disclose	
Simpson, Robin: Nothing to disclose	Wang, Da: Nothing to disclose	
	Wang, Yi: Nothing to disclose	
	Wang, Hui: Full-time/part-time Employee: Philips Medical System	
	Webb, Andrew: Nothing to disclose	

SCMR Staff

Baumer, Kathy: Nothing to disclose
Berkowitz, Deborah: Nothing to disclose
Gallagher, Cheryl: Nothing to disclose
Lockshine, Karyn: Nothing to disclose
Northrup, Terry: Nothing to disclose
Traino, Maripat: Nothing to disclose



2014 Exhibitor Directory

American College of Radiology

1891 Preston White Drive
Reston, VA 20191
Tel:(703) 648-8900
Web: www.acr.org

The American College of Radiology (ACR), one of the world's largest medical specialty associations, is devoted to making medical imaging and radiation oncology safe, effective and accessible through its efforts in advocacy, education, clinical research, and quality and safety initiatives. ACR Accreditation and Appropriateness Criteria are the standards for safe imaging and patient care. ACR's 36,000 members include radiologists, radiation oncologists, and medical physicists.

Cardiovascular Imaging Solutions Ltd

Incubator, Bessemer Building
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Tel:+44(0) 7885 906770
Fax:+44(0) 208 673 2266
Email:r.merrifield@cmrtools.com
Web:www.cmrtools.com

CMRtools is a software package for viewing and analysing cardiovascular magnetic resonance images. It also acts as a launch pad for a suite of plug-in packages including VentricularTools and LVtools for ventricular assessment, ThalassaemiaTools for T2* quantification, PerfusionTools for first pass perfusion assessment and 3Dtools for 3D image viewing. The software provides a powerful workflow user interface to allow rapid, accurate and reproducible CMR assessment.

Circle Cardiovascular Imaging Inc.

815 8th Avenue SW, Suite 250
Calgary, AB T2P 3P2 Canada
Tel: (403) 453-2061
Fax: (403) 338-1895
Email: robyn@circlecvi.com
Web:www.circlecvi.com

Circle Cardiovascular Imaging Inc. develops and sells cardiac post-processing software that allows for the evaluation and analysis of MR and CT images. Available for clinical and research use, the stand-alone software provides full DICOM and PACS connectivity. Circle operates worldwide and its products (cvi42, cmr24, ct42, and report42) have been approved for the Canadian, American, Australian, and European markets. Circle's goal is to contribute to quality in cardiovascular imaging and research.

Diagnosoft, Inc.

5001 S. Miami Blvd., Suite 340
Durham, NC 27703
Tel:(919) 677-8100
Fax:(919) 882-1815
Email:jessica.mattison@diagnosoft.com
Web: www.diagnosoft.com

Diagnosoft's core MRI technologies were co-developed at John's Hopkins University and commercialized following several patent grants and a FDA 510(k) clearance in 2007. Our distinguished HARP and SENC technologies provide powerful tools to the research and clinical communities in the analysis of tagged magnetic resonance images. The company's mission is to enhance the patient experience, improve outcomes, and provide contained diagnostic costs. Diagnosoft supports clients on most every continent and enjoys a rich product development pipeline.

Booth# 300

GE Healthcare

9900 Innovation Drive
Wauwatosa, WI 53226
Tel:(414) 721-2461
Email:Jennifer.sedgwick@ge.com
Web:www.gehealthcare.com

Booth # 101

Heart Imaging Technologies

5003 Southpark Drive, Suite 140
Durham, NC 27713
Tel:(919) 323-3001
Fax: (866) 457-3694
Email:sales@heartit.com
Web:www.heartit.com

Booth# 312

Heart Imaging Technologies has set the standard in medical image management and is still leading the way with their innovative product, WebPAX. With over 250 installations around the world, WebPAX has continued to be a critical component in successful CMR programs. Being the first FDA approved zero footprint medical imaging workstation, the WebPAX has enabled CMR professionals to collaborate easily and review their diagnostic quality images utilizing iPads, tablets, smartphones, and computers.

HeartVista, Inc.

998 Hamilton Avenue
Menlo Park, CA 94025
Tel:(650) 336-6543
Email: info@heartvista.com
Web:www.heartvista.com

Booth# 207

HeartVista is a revolutionary software platform utilizing sophisticated imaging capabilities to implement a quick, comprehensive cardiac MRI solution. The streamlined interface simplifies the evaluation of anatomy and function, as well as of flow disturbances using real-time flow mapping and online analysis. Its real-time and advanced acquisition and reconstruction methods significantly reduce overall exam time and increase patient base to include patients with arrhythmia or who cannot effectively hold their breath. Availability following FDA 510(k) review.

Intersocietal Accreditation Commission

6021 University Blvd.
Ellicott City, MD 21043
Tel:(800) 838-2110
Fax:(866) 663-5663
Email:atarlton@intersocietal.org
Web:www.intersocietal.org

Booth# 209

Sponsored by the SCMR, the IAC MRI accreditation program offers a voluntary process for facilities to document their performance of quality patient care. Dedicated to the IAC's mission of Improving health care through accreditation, facilities inclusive of those performing cardiovascular MRI are encouraged to visit www.intersocietal.org/mri or stop by the exhibit. Information about The Standards and the Online Accreditation application, as well as details about payment policies requiring accreditation will be available.

Journal of Cardiovascular Magnetic Resonance (JCMR) Booth# 213

Cardiovascular MR Unit
Royal Brompton Hospital
Sydney Street
London, SW3 6NP
United Kingdom
Tel: +44 207-351-8825
Fax: +44 207-351-8816
Email: jcmr@imperial.ac.uk
Web: www.jcmr-online.com

JCMR, the official journal of the Society for Cardiovascular MR, is an open access, online journal that publishes articles on all aspects of basic and clinical research on the design, development, manufacture, and evaluation of magnetic resonance methods applied to the cardiovascular system. The only journal devoted exclusively to cardiovascular MR, JCMR aims to provide an international forum for communicating the latest findings and reviews on the burgeoning field of cardiovascular MR imaging and spectroscopy.

Medis Medical Imaging Systems, Inc.

Booth# 206

9360 Falls of Neuse Road, Suite 103
Raleigh, NC 27615
Tel: (919) 278-7888
Fax: (919) 847-8817
Email: tina@medis.nl
Web: www.medis.nl

Medis is a leading provider of software solutions for accurate quantification of cardiovascular images. At SCMR 2014 Medis will demonstrate its latest version of its flagship product QMass@ MR and QFlow@ Enterprise Solution, which includes a versatile cardiac MR viewer, an integrated connectivity platform and proven best in-class quantitative analyses. Its fast analyses and total workflow solution save valuable time in clinical practice. Visit Medis at booth 206 for more information.

MedVoxel Systems Inc.

Booth# 306

115-887 Great Northern Way
Vancouver BC V5T 4T5 Canada
Tel: (604) 424-8280
Email: info@medvoxel.com
Web: www.medvoxel.com

MedVoxel Systems is a leading medical image post-analysis tool company that develops innovative solutions for physicians. MedVoxel is a faster and more adaptable company because of its strong understanding of customer needs, and also because of its scientific research and implementation and capabilities. HeartPro cloud/in-house utilization is a suite of tools for evaluating Cardiac MR images and producing quantitative analytical results, which support all major MR scanners.

Nano4Imaging GmbH

Booth# 203

Pauwelsstrasse 17
Aachen 52074 Germany
Tel: (+49) 241.4758.4676
Email: info@nano4imaging.com
Web: www.nano4imaging.com

Nano4Imaging develops and markets cutting edge medical devices and coatings to enable interventions in multiple imaging techniques with focus on MRI. Our MRWire, an MRI safe and visible guide wire, enables hemodynamic measurement and interventions for diagnosis and treatment. Our initial company focus is on congenital heart diseases as being a patient population achieving large benefits from interventional MRI.

NeoSoft/NeoCoil, LLC

Booth# 201

N27 W23910A Paul Road
Pewaukee, WI 53072
Tel: (262) 347-1250
Fax: (262) 347-1251
Email: contactus@neocoil.com
Web: www.neosoftllc.com www.neocoil.com

NeoSoft, LLC is focused on developing innovative, cutting edge technology solutions for medical imaging, visualization, and diagnostics. Areas of expertise include: medical image processing and algorithm development. NeoCoil designs, manufacturers and services MRI surface coils compatible with various MRI systems. NeoCoil has shipped over 5,500 coils globally.

Philips Healthcare

Booth# 113

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Best 5684 PC The Netherlands
Tel: (+31) 61 5209542
Email: Annemarie.blotwijk@philips.com

Royal Philips Electronics of the Netherlands is a diversified Health and Well-being company, focused on improving people's lives through meaningful innovations. The future of healthcare is one of the most pressing global issues of our time. The Healthcare sector's vision is to improve the quality of clinicians' and patients' lives by simplifying the delivery of healthcare, improving clinical outcomes and reducing healthcare system costs around the world.

Precision Image Analysis

Booth# 205

12006 98th Avenue NE
Kirkland, WA 98034
Tel: (425) 822-8199
Fax: (425) 519-9971
Email: mspringer@piamedical.com
Web: www.PIAMedical.com

Cardiac MR images can require an hour or more of technical analysis. Precision Image Analysis (PIA) offers a professional service which lowers cost while maintaining high quality by freeing physicians to operate at the top of their license in a delegated model. PIA helps physicians interpret diagnostic images quicker at lower cost by shifting labor-intensive tasks to trained analysts under the supervision of a board-certified radiologist. PIA delivers a preliminary analysis with a detailed report.

Siemens Healthcare

Booth# 301

51 Valley Stream Parkway
Malvern, PA 19355
Tel: (888) 826-9702
Web: www.usa.siemens.com/healthcare

The Siemens Healthcare Sector is one of the world's largest suppliers to the healthcare industry and a trendsetter in medical imaging, laboratory diagnostics, medical information technology and hearing aids. Siemens offers its customers products and solutions for the entire range of patient care from a single source – from prevention and early detection to diagnosis, and on to treatment and aftercare. By optimizing clinical workflows for the most common diseases, Siemens also makes healthcare faster, better and more cost-effective.



2014 Exhibitor Directory

Society for Cardiovascular Magnetic Resonance (SCMR)

Booth# 215

19 Mantua Road
Mt. Royal, NJ 08061
Tel: (856) 423-8955
Fax: (856) 423-3420
Email: hq@SCMR.org
Web: www.scmr.org

Founded in 1994, SCMR is a professional association whose vision is to be the leading international representative and advocate for all physicians, scientists, and technologists working in CMR to improve patient outcomes through excellence in education, training, standards, research and development. SCMR's membership includes professionals from around the globe.

Toshiba America Medical Systems

Booth # 314

2441 Michelle Drive
Tustin, CA 92780
Tel: (800) 421-19687
Web: www.medical.toshiba.com

An innovator in medical imaging technology, Toshiba America Medical Systems markets, sells, distributes and services diagnostic imaging systems throughout the U.S. Toshiba is committed to providing customers with the patient-focused technology and optimum system performance needed to succeed in today's healthcare marketplace.

Wolters Kluwer Health (Lippincott Williams & Wilkins)

Booth# 211

318 N. Hartz Road
Coppell, TX 75019
Tel: (214) 244-7170
Fax: (972) 393-0611
Email: Curt.thompson@wolterskluwer.com
Web: www.LWW.com

On display at our booth will be our most up to date publications in cardiology and cardiovascular magnetic resonance. Of special significance is Dr. Higgins new edition on cardiovascular MRI and CT.

Browse Tables

ASCI 2014 Secretariat

4FL, 10, Yeoksam-ro 7-gil, Gangnam-gu
Seoul 135-936 Korea
Tel: 82 70 4603 4367
Fax: 82 2 521 8683
Email: ASCI2014@insession.co.kr

2nd Announcement describes every part of the 8th Congress of Asian Society of Cardiovascular Imaging (ASCI 2014) to provide the participants with the useful information including the scientific program, registration, accommodation, tours and transportation and so on.

ESCR – European Society of Cardiac Radiology

Neutorgasse 9/2
Vienna, Austria 1010 Austria
Tel: +43 1 535 50 93
Fax: +43 1 535 50 93 445
Email: office@escr.org

Publication Title: ESCR Annual Scientific Meeting 2014
Editor: European Society of Cardiac Radiology

The Annual Meeting of the European Society of Cardiac Radiology (ESCR), to be held from October 2-4, 2014 in Paris, France, has reached an outstanding reputation in Europe for Science and Education. The program balances the best of Europe and France in education as well as research in cardiac CT and MR.

ISMRM – International Society for Magnetic Resonance in Medicine

2030 Addison Street, Suite 700
Berkeley, CA 94704
Tel: (510) 841-1899
Fax: (510) 841-2340
Email: info@ismrm.org

Publication Title 1: Magnetic Resonance in Medicine
Publication Title 2: Journal of Magnetic Resonance Imaging

The International Society for Magnetic Resonance in Medicine is an international, nonprofit, scientific association whose purpose is to promote communication, research, development, and applications in the field of magnetic resonance in medicine and biology and to develop and provide facilities for continuing education in the field. Its multidisciplinary membership of over 6,000 consists of clinicians, physicists, engineers, biochemists, and technologists.

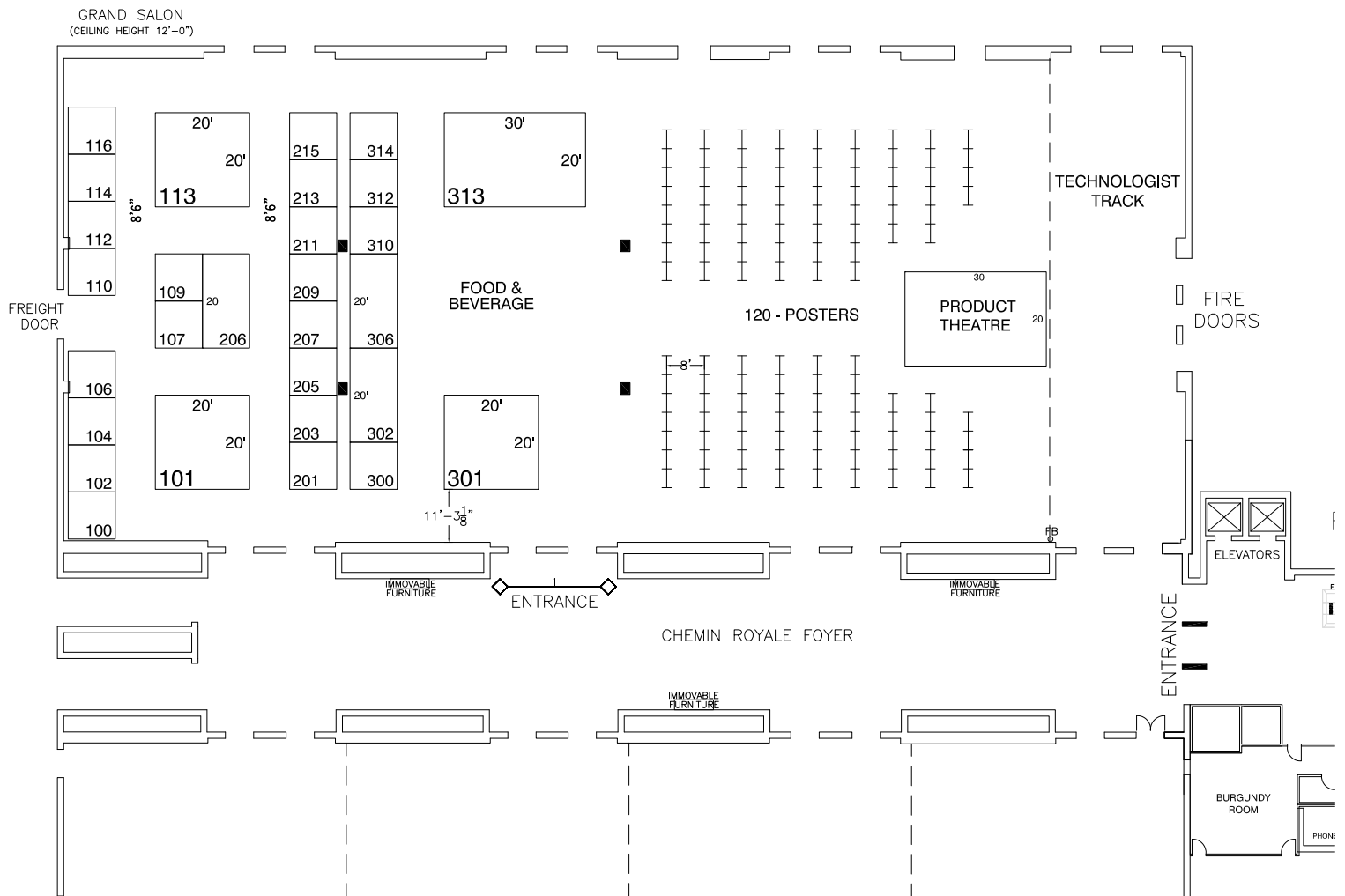
Oxford University Press

198 Madison Avenue
New York, NY 10016
Tel: (919) 677-0877 x5288
Fax: (919) 677-1714
Email: Gab.exhibitions.us@oup.com

Publication Title: European Heart Journal, Europace, European Heart Journal – Cardiovascular Imaging, Cardiovascular Research

Oxford University Press publishes some of the most renowned and respected cardiology books and journals in the world including, on behalf of the ESC, European Heart Journal – Cardiovascular Imaging and the European Heart Journal. Visit our display stand to pick up free copies of the journals, and to sign up for a free trial to European Heart Journal – Cardiovascular Imaging. Alternatively visit online at www.oxfordjournals.org for more information.

The Society for Cardiovascular Magnetic Resonance January 16 – 19, 2014 Hilton New Orleans Riverside





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Membership Descriptions

Regular Member A physician, scientist or industry (community) member who satisfies the requirements of good character and who has demonstrated an interest in cardiovascular magnetic resonance. All regular members have the right to hold office and vote providing that dues are paid and current.

Trainee Member Physicians in training, doctoral candidates and post-doctoral fellows who are receiving training, experience or competence in cardiovascular magnetic resonance. Trainee members are eligible for up to 4 years and must provide a letter of verification of active training from their institution yearly. Trainee members may vote and serve on committees.

Technologist/Allied Health Member Two years active, direct experience in the field are required to become a technologist/allied health member having the right to vote and to hold office, providing that dues are paid and current.

Emeritus Member Emeritus member status is available to a member in good standing for the previous five years who is retired from active practice, teaching and research, and is at least 65 years of age. Applications are reviewed and approved by the Executive Committee. Emeritus members cannot hold elected office or serve as committee chairs, but do receive member discounts to meetings, may vote and serve on committees.

Associate Member The Associate Membership category is available to medical professionals (MD and PhD) who work in developing countries where the prevailing wage makes regular Society membership dues unaffordable. The features and application procedure are detailed on the SCMR website.

Visit the SCMR website www.scmr.org for additional membership and Society information.

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Notes

This image shows a full page of blank, lined paper. It features approximately 20 evenly spaced horizontal grey lines across its entire width, providing a guide for writing. The paper itself is a clean, off-white color. There are no margins, text, or other markings present on the page.



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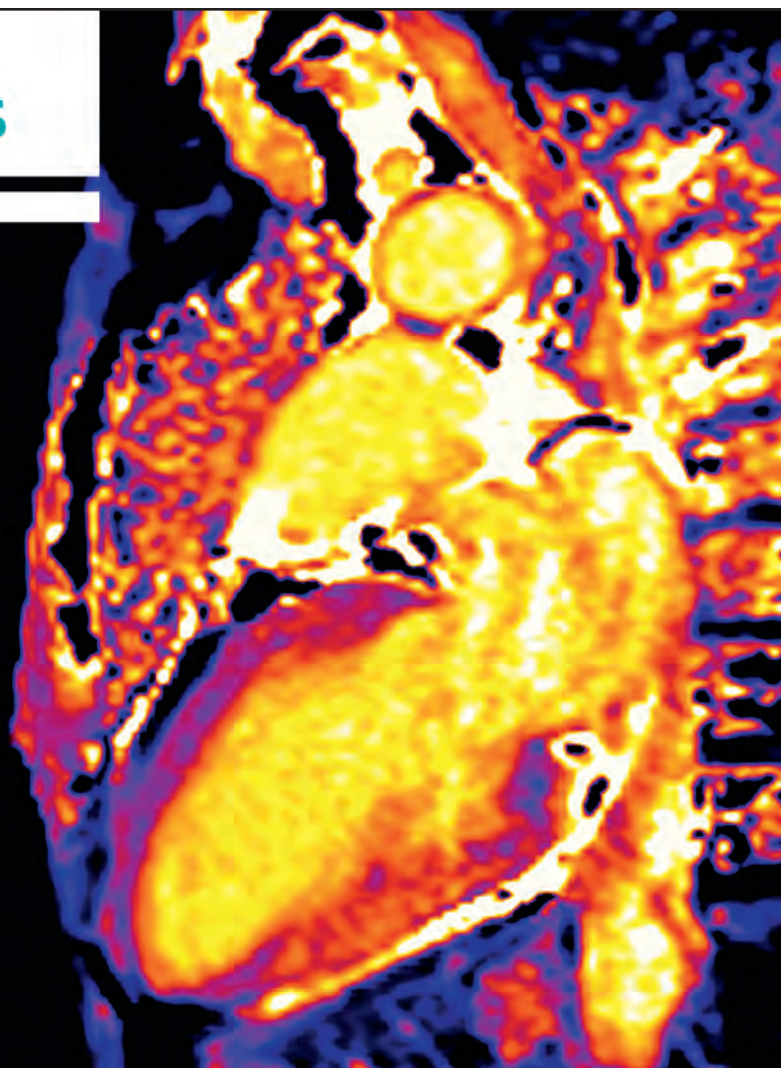


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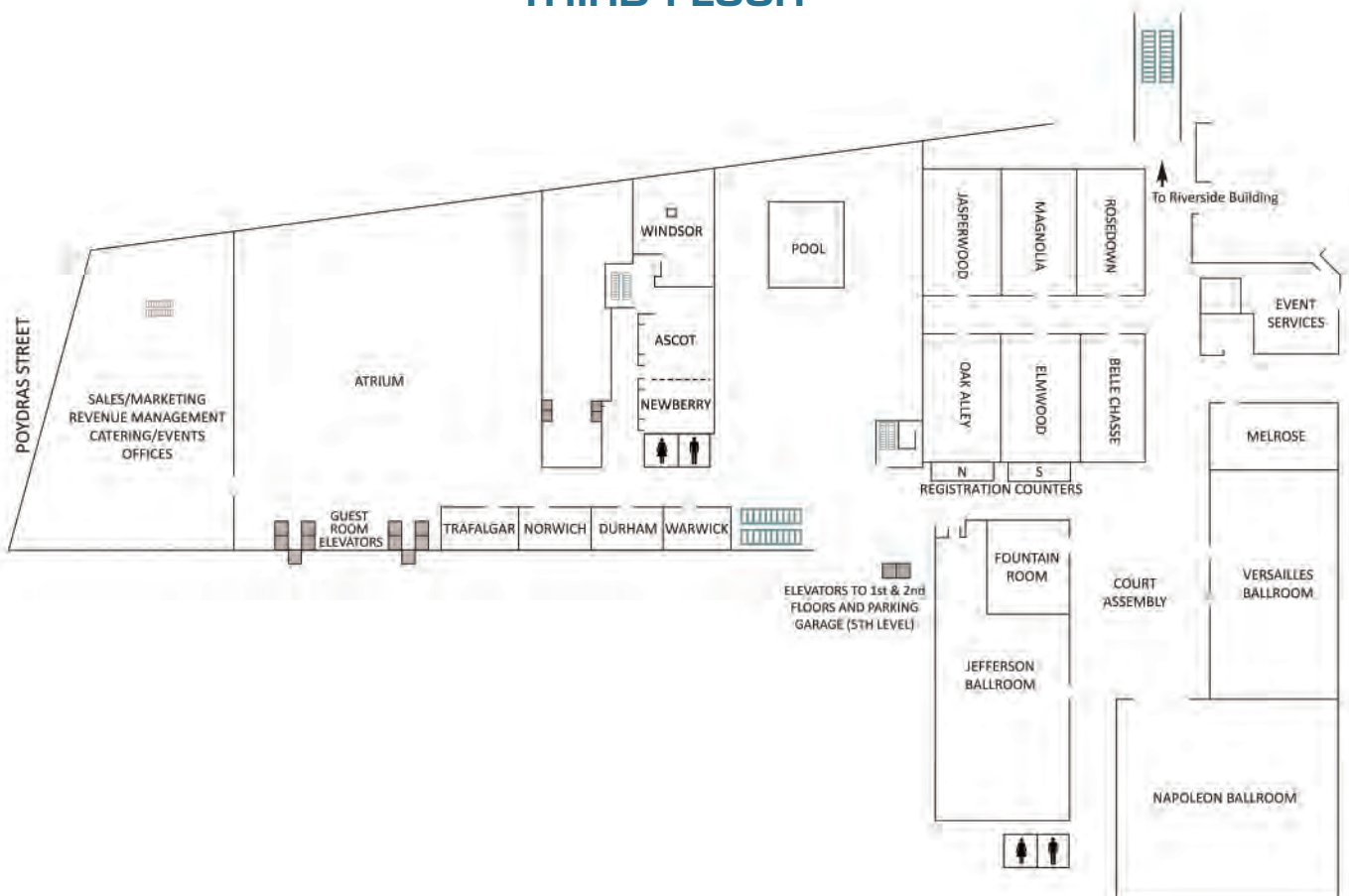
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**a meeting of the European Association of Cardiovascular Imaging (EACVI) - Section CMR*

February 5-7, 2015

Nice Acropolis Convention Centre | Nice, France

