Society for Cardiovascular Magnetic Resonance

Sixth Annual Scientific Sessions
February 7-9, 2003
Orlando, Florida

Final Program
THE GOALS OF THE CONFERENCE ARE TO:

1. Deliver state of the art information on the science of cardiovascular MR and spectroscopy.
2. Provide a forum for the presentation of new information on cardiovascular resonance.
3. Compare and contrast cardiovascular magnetic resonance methods with other cardiovascular imaging approaches.

WHO SHOULD ATTEND?
The intended audience consists of trainees and clinical practitioners in cardiology, cardiothoracic surgery, and cardiovascular radiology.

ACCREDITATION STATEMENT
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.

DISCLOSURE
The University of Minnesota Office of Continuing Medical Education has a policy regarding disclosure of financial relationships. It requires course faculty to disclose whether or not they have financial interests or affiliations with organizations with a direct and substantial interest in the subject matter of their presentations. This information is provided in an addendum to the faculty listing as a matter of information for the audience.

SPONSOR
The Society for Cardiovascular Magnetic Resonance was founded to be an international organization dedicated to the education of interdisciplinary cardiovascular investigators and clinicians in the application of magnetic resonance to the heart and its circulation; to the advancement and dissemination of the understanding, appropriate use and performance techniques; and to the provision of a forum for discussion of clinical, research, and other issues relevant to the field.

ACKNOWLEDGMENTS
The Society for Cardiovascular Magnetic Resonance gratefully acknowledges the support of its objectives from:

- Berlex
- Epix
- GE Medical System
- Philips Medical System
- Siemens

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  Washington University School of Medicine, USA
- Norbert Wilke, MD
  University of Minnesota, USA
TABLE OF CONTENTS

Acknowledgments . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .Inside Front Cover
Officers . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .Inside Front Cover
Board Members . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .Inside Front Cover
Program Committee . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .Inside Front Cover
Pre-Conference Physicians Workshop . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .Page 2
Sixth Annual Scientific Sessions . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .Page 4
Technologist Workshop . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .Page 13
Exhibitor Directory . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .Page14

ADMISSION TO THE SCIENTIFIC
SESSIONS AND OTHER EVENTS
Your name badge is your admission ticket and will be required for access to all annual scientific sessions, including admission to the exhibit hall and the social event and will be included in your registration package. Please be sure to wear your name badge each day.

SPEAKER READY ROOM – DEVON ROOM
The 2003 Program Committee is committed to providing cutting edge technology at the Annual Scientific Meeting with its use of complete AudioVisual Networking capabilities. This will enable each speaker to view/edit their presentation in the speaker ready room in advance and the changes to be available to them in their respective meeting room when they arrive. Each meeting room will have a networked desktop computer at the podium and each presentation will be virtually a click away.

REGISTRATION HOURS

<table>
<thead>
<tr>
<th>Great Hall Assembly Area</th>
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<tbody>
<tr>
<td>Wednesday, February 5</td>
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<td>Thursday, February 6</td>
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<td>Saturday, February 8</td>
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<td>Sunday, February 9</td>
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EXHIBIT HALL HOURS

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<tr>
<td>Friday, February 7</td>
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<td>Saturday, February 8</td>
<td>10:00 a.m. - 4:00 p.m.</td>
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<tr>
<td>Sunday, February 9</td>
<td>8:00 a.m. - 12:00 p.m.</td>
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### Pre-Conference Workshop: Introduction to Cardiovascular MR

**Thursday, February 6, 2003**

<table>
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<tr>
<th>Time</th>
<th>Session</th>
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<tr>
<td>8:00 AM–8:10 AM</td>
<td><strong>WELCOME</strong>&lt;br&gt;Charles B. Higgins, MD&lt;br&gt;Victor Ferrari, MD</td>
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</table>
| 8:10 AM–9:30 AM | **HOW-TO SESSIONS I: CMR TECHNOLOGY AND TECHNIQUES**<br>**Parallel A**<br>Great Hall North<br>**Moderator:** Christine H. Lorenz, PhD<br>8:10 AM–8:30 AM | Pertinent Physics for CMR<br>David Firmin, PhD<br>8:30 AM–8:50 AM | How to Set Up and Run a CMR Study<br>Walter J. Rogers, PhD<br>8:50 AM–9:10 AM | Contrast and Resolution of CMR Images; Standard and Fast Techniques<br>Frederick Epstein, PhD<br>9:10 AM–9:30 AM | CMR Sequences and Physiology<br>Christine H. Lorenz, PhD<br>9:30 AM–10:00 AM | **Parallel B**<br>Great Hall Center<br>**Moderator:** Victor Ferrari, MD<br>8:10 AM–8:30 AM | Pertinent Physiology for CMR<br>Frank Rademakers, MD<br>8:30 AM–8:50 AM | How to Set Up and Run a CMR Study<br>Walter J. Rogers, PhD<br>8:50 AM–9:10 AM | Contrast and Resolution of CMR Images; Standard and Fast Techniques<br>Frederick Epstein, PhD<br>9:10 AM–9:30 AM | CMR Sequences and Physiology<br>Christine H. Lorenz, PhD<br>9:30 AM–10:00 AM | **BREAK**<br>10:00 AM–11:30 AM | **HOW-TO SESSIONS II: CMR APPLICATIONS**<br>**GREAT HALL NORTH/CENTER**<br>**Moderator:** André Duerrinckx, MD, PhD<br>10:00 AM–10:20 AM | How to do Stress Function Imaging (Dobutamine, etc.)<br>Penelope R. Sensky, MD<br>10:20 AM–10:40 AM | How to do Stress Perfusion Imaging<br>Joerg Barkhausen, MD<br>10:40 AM–11:00 AM | How to do Coronary Imaging<br>Michael V. McConnell, MD, MSEE<br>11:00 AM–11:20 AM | MR Angiography: Vascular Imaging and Flow<br>Paul Finn, MD<br>11:20 AM–11:40 AM | Panel Discussion<br>11:40 AM–1:00 PM | **LUNCH (ON YOUR OWN)**

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**Society for Cardiovascular Magnetic Resonance**
# Program Agenda

## 1:00 PM–3:40 PM
**How-To Sessions III: Clinical Referrals for CMR**

**Moderator:**
Norbert Wilke, MD

<table>
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<tr>
<th>Time</th>
<th>Session</th>
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<tr>
<td>1:00 PM–1:20 PM</td>
<td>Thoracic Aortic Disease</td>
<td>Rossella Fattori, MD</td>
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<td>1:20 PM–1:40 PM</td>
<td>Cardiac Tumors and Thrombi</td>
<td>Steven Wolff, MD, PhD</td>
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<td>1:40 PM–2:00 PM</td>
<td>Valvular Heart Disease</td>
<td>Ronald Pesock, MD</td>
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<td>2:20 PM–2:40 PM</td>
<td>Myocardial and Pericardial Disease</td>
<td>Guillem Pons-Llado, MD</td>
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<td>2:40 PM–3:00 PM</td>
<td>Arrhythmogenic Right Ventricular Dysplasia</td>
<td>Lawrence Boxt, MD</td>
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<td>3:00 PM–3:20 PM</td>
<td>Congenital Heart Disease</td>
<td>Arno Roest, MD, PhD</td>
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<td>3:20 PM–3:40 PM</td>
<td>Ischemic Heart Disease and Viability</td>
<td>Joao Lima, MD</td>
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<td>4:00 PM–5:30 PM</td>
<td>Case Interpretations—Panel</td>
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<td><strong>Moderators:</strong></td>
<td><strong>Discussants:</strong></td>
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<td>Victor Ferrari, MD</td>
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<td>Norbert Wilke, MD</td>
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<td>Christopher M. Kramer, MD</td>
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<td>Albert von Rossum, MD</td>
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## 5:30 PM–6:15 PM
**How-To Session IV: How to Start a CMR Practice**

**Moderator:**
Edward Martin, MD

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<th>Time</th>
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<th>Speakers</th>
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<td>5:30 PM–5:50 PM</td>
<td>Technologist Recruitment and Training</td>
<td>Tim Jones, MSc</td>
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<td>5:50 PM–6:15 PM</td>
<td>CMR Reimbursement</td>
<td>Steven Wolff, MD, PhD</td>
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<td>Edward Martin, MD</td>
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<td>6:15 PM–7:30 PM</td>
<td>Tutorial: Medis Teaching File Viewing and Quiz</td>
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<td>7:30 PM</td>
<td>Reception</td>
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<td><strong>Great Hall East/West</strong></td>
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Program Agenda
Sixth Annual Scientific Sessions

Friday, February 7, 2003

8:00 AM–8:15 AM  WELCOME ADDRESS  
Robert Balaban, PhD  
Charles B. Higgins, MD  

8:15 AM–10:30 AM  PLENARY SESSION I: CMR IN ISCHEMIC HEART DISEASE: STATUS 2003  

Moderators:  
Robert Balaban, PhD  
Charles B. Higgins, MD  

8:15 AM–8:40 AM  Clinical Scenarios in Ischemic Heart Disease–Potential Role of CMR  
Ernst E. Van der Wall, MD  

8:40 AM–9:00 AM  Stress Function CMR–Detection of Ischemia  
W. Gregory Hundley, MD  

9:00 AM–9:20 AM  Stress Perfusion CMR–Detection of Ischemia  
Hajime Sakuma, MD  

9:20 AM–9:40 AM  Evaluation of Myocardial Viability–Contrast Enhanced CMR  
Raymond Kim, MD, FACC  

9:40 AM–10:00 AM  Cardiac MRS–Ischemia Detection and Viability  
Stefan Neubauer, MD  

10:00 AM–10:20 AM  Coronary MR Angiography  
Warren J. Manning, MD  

10:20 AM–10:30 AM  Discussion  

10:30 AM–11:00 AM  BREAK  

11:00 AM–12:00 PM  ORAL ABSTRACTS (3 PARALLEL SESSIONS)  

BEST ORAL ABSTRACTS COMPETITION  

Moderators:  
Gerald Pohost, MD  
Albert von Rossum, MD  

11:00 AM–11:10 AM  101 - Clinical Use Of XMR In The Diagnosis And Treatment of Congenital Heart Disease  
Reza F. Razavi, MD  

11:10 AM–11:20 AM  102 - MR Delivery and Tracking of Magnetically-Labeled Mesenchymal Stem Cells in Myocardial Infarction  
Dara L. Kraitchman, VMD, PhD  

11:20 AM–11:30 AM  103 - Serial Contrast-Enhanced MRI of Myocardial Infarction in Mice Early After Reperfusion: Importance of Early Treatment in Strategies to Control Reperfusion Injury  
Brent A. French, PhD  

11:30 AM–11:40 AM  104 - Molecular Imaging of Angiogenesis Associated with Athrosclerosis In Vivo with Paramagnetic Nanoparticles at 1.5T  
Patrick M. Winter, PhD, BS  

11:40 AM–11:50 AM  105 - Relation of Myocardial Scarring to Clinical Risk Factors for Sudden Cardiac Death in Hypertrophic Cardiomyopathy  
Holko Mahrholdt, MD  

11:50 AM–12:00 PM  106 - Assessment of pulmonary vein diameters after radiofrequency catheter ablation in patients with atrial fibrillation using magnetic resonance imaging and conventional x-ray angiography  
Thorsten Dill, MD  

Society for Cardiovascular Magnetic Resonance
**Program Agenda**

**MR Measurement of Myocardial Perfusion**

**Great Hall Center**

**Moderators:**
- Zahi Fayad, PhD
- Peter Buser, MD

11:00 AM–11:10 AM  **107 - A Comparison of Dobutamine Stress Function and Stress Perfusion MRI in 260 Patients**
  James F. London

  Steven D. Wolff, MD, PhD

11:20 AM–11:30 AM  **109 - A survey of patient tolerance of MRI and SPECT myocardial perfusion studies**
  Sven Plein, MD

11:30 AM–11:40 AM  **110 - Comparison of First Pass Magnetic Resonance Perfusion and Contrast Echocardiography for the Detection of ischemia in Patients with Coronary Artery Disease**
  Nidal Al-Saadi, MD

11:40 AM–11:50 AM  **111 - A Combined Single-Session Analysis of Myocardial Perfusion during Adenosine Stress and of Wall Motion during High-Dose Dobutamine-Atropine Stress MRI Improves Diagnosis of Inducible Ischemia**
  Andreas Wahl, MD

11:50 AM–12:00 PM  **112 - Color-Encoded Semiautomatic Analysis for Multi-slice First-Pass Magnetic Resonance Perfusion: Comparison to 99m Technetium SPECT and X-Ray Angiography**
  Holger Thiele, MD

**Myocardial Tissue Characterization by MRI**

**Great Hall East**

**Moderators:**
- Christine Lorenz, PhD
- Matthias Stuber, PhD

11:00 AM–11:10 AM  **113 - Combined T2-weighted and Delayed Enhancement MRI Differentiates Acute from Chronic Myocardial Infarction**
  Hassan Abdel-Aty

11:10 AM–11:20 AM  **114 - Does Transmyocardial Laser Revascularization (TMR) Give Rise to Myocardial Fibrosis?**
  Penelope R. Sensky, MA, BS, MRCP

11:20 AM–11:30 AM  **115 - Chagas Disease is Characterized by Specific Pattern and Location of Myocardial Delayed Enhanced MRI**
  Carlos E. Rochitte, MD

11:30 AM–11:40 AM  **116 - Myocardial Hyperenhancement in Hypertrophic Cardiomyopathy: Insights From a Genotyped Population**
  James C. Moon

11:40 AM–11:50 AM  **117 - Delayed Enhanced Magnetic Resonance Imaging Detects Myocardium Injury in Acute Myocarditis**
  Marcelo Hadlich, MD

11:50 AM–12:00 PM  **118 - Cardiac Magnetic Resonance Imaging Findings In Sarcoidosis**
  Olivier Vignaux, MD, PhD

Society for Cardiovascular Magnetic Resonance
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>12:10 PM–12:40 PM</td>
<td>SCMR BUSINESS MEETING</td>
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<td>12:40 PM–1:30 PM</td>
<td>LUNCH (ON OWN)—POSTER VIEWING SESSION I—EXHIBIT HALL</td>
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<td>1:30 PM–3:00 PM</td>
<td>PARALLEL SESSIONS</td>
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<tr>
<td>A</td>
<td>Heart Failure</td>
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<td>B</td>
<td>Assessment of Contractile Function—GREAT HALL NORTH</td>
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<td>C</td>
<td>Moderated Poster Tour—GREAT HALL CENTER—EXHIBIT HALL</td>
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<tr>
<td>1:30 PM–1:45 PM</td>
<td>Ischemic Heart Disease—Joao Lima, MD—GREAT HALL NORTH</td>
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<td>1:45 PM–2:00 PM</td>
<td>MR Evaluation of Molecular Mechanisms—Rong Tian, MD, PhD—GREAT HALL NORTH</td>
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<td>2:00 PM–2:15 PM</td>
<td>Monitoring of Drug Therapy—Christopher M. Kramer, MD—GREAT HALL NORTH</td>
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<td>2:15 PM–2:30 PM</td>
<td>Monitoring Surgical Therapy—Gerald Pohost, MD—GREAT HALL NORTH</td>
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<td>2:30 PM–2:45 PM</td>
<td>Nonischemic Myocardial Disease—Matthias G. Friedrich, MD—GREAT HALL NORTH</td>
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<td>2:45 PM–3:00 PM</td>
<td>Panel Discussion—GREAT HALL NORTH</td>
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<td>3:00 PM–3:30 PM</td>
<td>BREAK—POSTER VIEWING II—GREAT HALL NORTH/CENTER</td>
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<tr>
<td>3:30 PM–5:00 PM</td>
<td>ORAL ABSTRACTS (3 PARALLEL SESSIONS)</td>
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<tr>
<td>A</td>
<td>Coronary MR Angiography</td>
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<td>Moderators</td>
<td>Guillem Pons-Llado, MD</td>
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<td>Steven Wolff, MD, PhD</td>
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<td>3:30 PM–3:40 PM</td>
<td>119 - Catheter-Based Projection Coronary MR Angiography - A Feasibility Study—Jordin D. Green, MS</td>
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<tr>
<td>3:40 PM–3:50 PM</td>
<td>120 - MR imaging at 3.0 Tesla and coronary artery stents: Ex vivo evaluation of magnetic attraction forces and heating—Alexandra Schmiedel, MD</td>
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<tr>
<td>3:50 PM–4:00 PM</td>
<td>121 - Artifact-free coronary MR angiography and coronary vessel wall imaging in vivo using a new metallic coronary MRI stent—Elmar Spaenrup</td>
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<tr>
<td>4:00 PM–4:10 PM</td>
<td>122 - Initial Experience with Spiral MR Coronary Angiography at 3T: Anatomic Coverage, Image Quality and Susceptibility Artifacts—Phillip Yang</td>
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<tr>
<td>4:10 PM–4:20 PM</td>
<td>123 - Navigator-gated coronary MRA with subject-specific acquisition windows and motion adaptive gating - comparison with a conventional acquisition sequence—Sten Plein, MD</td>
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### Program Agenda

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<tr>
<td>4:20 PM–4:30 PM</td>
<td>124 - Contrast-enhanced MR Imaging of Coronary Arteries with Gadomer-17 Jörg Barkhausen, MD</td>
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<td>4:30 PM–4:40 PM</td>
<td>125 - Free-Breathing Non-Gated Coronary MRA Using a Patient-Calibrated Complex 3D Motion Model Kay Nebnik, PhD</td>
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<tr>
<td>4:40 PM–4:50 PM</td>
<td>126 - Whole Heart Coronary MR Angiography Using a Magnetization Prepared SSFP Sequence Oliver M. Weber, PhD</td>
</tr>
<tr>
<td>4:50 PM–5:00 PM</td>
<td>127 - Fast black-blood imaging of carotid arteries using multi-slice double inversion-recovery Vasily L. Yarnykh, PhD</td>
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### Delayed Enhancement MRI: A New Gold Standard for Assessment of Myocardial Viability?

**Moderators:**
- Eike Nagel, MD
- Lawrence Boxt, MD

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<tr>
<td>3:30 PM–3:40 PM</td>
<td>128 - Assessment of Myocardial Viability in Patients With Left Ventricular Dysfunction Using Contrast-enhanced Magnetic Resonance Imaging: Comparison to Thallium-201 single photon emission tomography Matthias Regenfus, MD</td>
</tr>
<tr>
<td>3:40 PM–3:50 PM</td>
<td>129 - Contrast-Enhanced MRI versus PET in the Assessment of Myocardial Viability – Prediction of Functional Recovery After Revascularisation Peter Huvold, MD</td>
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<tr>
<td>3:50 PM–4:00 PM</td>
<td>130 - Peak Cardiac Troponin I Levels Correlate with Infarct Size on Contrast-Enhanced Magnetic Resonance Imaging W. Patricia Ingkanisorn, MD</td>
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<tr>
<td>4:00 PM–4:10 PM</td>
<td>131 - Influence of image acquisition timing and of contrast agent dose on the quantitative determination of non-viable myocardial tissue using delayed contrast-enhanced magnetic resonance imaging in chronic myocardial infarction Steffen E. Petersen, MD</td>
</tr>
<tr>
<td>4:10 PM–4:20 PM</td>
<td>132 - Myocardial Delayed Enhancement: Determining the Optimal Gadolinium Dose and Delay Time for Infarct Imaging Cindy R. Comeau, BS, RT (NMR)</td>
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<tr>
<td>4:20 PM–4:30 PM</td>
<td>133 - Infarct Size Identifies Patients With Substrate for Ventricular Tachycardia David Bello, MD</td>
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<tr>
<td>4:30 PM–4:40 PM</td>
<td>134 - Prognostic Significance of Unrecognized Myocardial Infarction Detected by Contrast Enhanced MRI Han W. Kim, MD</td>
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<tr>
<td>4:40 PM–4:50 PM</td>
<td>135 - Washout kinetics of Gd-DTPA differentiates acute from chronic myocardial infarction in delayed enhancement MRI Hassan Abdel-Aty</td>
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<tr>
<td>4:50 PM–5:00 PM</td>
<td>136 - Assessment of Function and Viability in Patients with Coronary Artery Disease with DENSE and Delayed Hyperenhancement Imaging Anthony H. Aletras, PhD</td>
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**Society for Cardiovascular Magnetic Resonance**
**NEW METHODS**

**Moderators:**
Stefan Neubauer, MD
Hajime Sakuma, MD

3:30 PM–3:40 PM  137 - An MR Method for Real Time Bicycle Exercise Stress Testing: Response of Right Ventricle to Peak Exercise In Adult Congenital Heart Disease
Amr G. El-Shafei, MD

3:40 PM–3:50 PM  138 - In-vivo Quantitation of High-Speed Flow Jets in a Single Breath Hold
Krishna S. Nayak, PhD

3:50 PM–4:00 PM  139 - A novel method of estimating pulmonary vascular resistance utilizing invasive pressure monitoring and MRI flow data
Vivek Muthurangu, MBChB(hons)

4:00 PM–4:10 PM  140 - The Hybrid Interactive Magnetic Resonance Imaging (iMRI) / X-Ray Suite is a Cardiovascular Interventional Procedure Development Tool
Kendrick A. Shunk, MD, PhD

4:10 PM–4:20 PM  141 - A Fast, TI Insensitive Infarct Imaging Technique
Yiu-Cho Chung, PhD

4:20 PM–4:30 PM  142 - Simulations for Optimization of Design Parameters for Intravascular Imaging Microcoil Construction
Eddy Y. Wong

4:30 PM–4:40 PM  143 - Relaxation Rate Kinetics in Blood, Normal Myocardium, and Infarct Tissue as a Function of Time After Contrast Injection
Puneet Sharma

4:40 PM–4:50 PM  144 - Qp/Qs In Atrial Septal Defects By Cardiac Magnetic Resonance Imaging Is Comparable to Qp/Qs By Cardiac Catheterization
Uzma Iqbal

4:50 PM–5:00 PM  145 - Quantitative Assessment of Atrial Septal Defect Closure Using a Hybrid XMR System
Simon Schalla, MD

5:10 PM–6:30 PM  **CASE INTERPRETATION: READ WITH EXPERTS**

**Moderators:**
Norbert Wilke, MD
Jan Bogaert, MD
Guillem Pons-Llado, MD

5:10 PM–5:50 PM  **Panel:**
Jan Bogaert, MD
David Bluemke, MD, PhD
Francesc Carreras, MD
Peter Buser, MD

6:30 PM–8:00 PM  **USER MEETINGS**
<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Location</th>
<th>Moderators</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM–9:30 AM</td>
<td>Plenary Session II: Innovations in CMR</td>
<td>Great Hall North/Center</td>
<td>E. Fleck, MD, G. Pohost</td>
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<tr>
<td>8:00 AM–8:15 AM</td>
<td>Real Time Imaging and Catheter Tracking</td>
<td></td>
<td>E. McVeigh, PhD</td>
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<tr>
<td>8:15 AM–8:30 AM</td>
<td>Interventional MRI–Coronary Stents</td>
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<td>A. Bücker, MD</td>
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<tr>
<td>8:30 AM–8:45 AM</td>
<td>Interventional MRI–Congenital Heart Disease</td>
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<td>C. B. Higgins, MD</td>
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<tr>
<td>8:45 AM–9:00 AM</td>
<td>Gene Therapy Delivery and Monitoring</td>
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<td>N. Wilke, MD</td>
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<tr>
<td>9:00 AM–9:15 AM</td>
<td>High Field CMR</td>
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<td>M. Stuber, PhD</td>
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<tr>
<td>9:15 AM–9:30 AM</td>
<td>Panel Discussion</td>
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<tr>
<td>9:30 AM–10:30 AM</td>
<td>Platinum Sponsor Presentations</td>
<td></td>
<td>S. Siemens, P. Philips, G. Electric</td>
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<tr>
<td>10:30 AM–11:00 AM</td>
<td>Break–Poster Viewing III</td>
<td>Exhibit Hall</td>
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<tr>
<td>11:00 AM–12:00 PM</td>
<td>Oral Abstracts (3 Parallel Sessions)</td>
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**Analysis of Cardiac Structure and Function by MR**

<table>
<thead>
<tr>
<th>Time</th>
<th>Abstract Title</th>
<th>Authors</th>
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</thead>
<tbody>
<tr>
<td>11:00 AM–11:10 AM</td>
<td>A Comparative Study of Left Ventricular Mass between Cardiac MR and 2-D Echo in Hypertensive Subjects</td>
<td>Khaled Al-Fakih, MBBS</td>
</tr>
<tr>
<td>11:10 AM–11:20 AM</td>
<td>Assessment of Myocardial Architecture and Remodeling Process in Myocardial Infarction Using Diffusion Tensor MR</td>
<td>Jing-Ting Wu, MD</td>
</tr>
<tr>
<td>11:30 AM–11:40 AM</td>
<td>Gender Differences in Myocardial Contraction Fraction, a Volumetric Measure of Myocardial Performance</td>
<td>Michael L. Chuang</td>
</tr>
<tr>
<td>11:40 AM–11:50 AM</td>
<td>Safety and Feasibility of High-Dose Dobutamine-Atropine Stress MRI for Diagnosis of Myocardial Ischemia: Experience in 1000 Consecutive Cases</td>
<td>Andreas Wahl, MD</td>
</tr>
</tbody>
</table>
11:50 AM–12:00 PM 151 - An MR Derived Aorto-Ventricular Coupling Index is More Predictive of Cardiac Death Than EF: An NHLBI Sponsored Women’s Ischemia Syndrome Evaluation (WISE) Study
Mark Doyle, PhD

**VASCULAR MR**

**Moderators:**
David Firmin, PhD
Elliot McVeigh, PhD

11:00 AM–11:10 AM 152 - Dynamic 3d MR Angiography for the Assessment of Parenchymal Perfusion in Pulmonary Embolism and Pulmonary Circulation Disorders
Alexander Kluge, MD

11:10 AM–11:20 AM 153 - Towards Rapid High Resolution Endovascular MRI
Claudia M. Hillenbrand, PhD

11:20 AM–11:30 AM 154 - Combined Transesophageal and Surface MRI Plaque Volume is the Most Reproducible Index of Aortic Atherosclerosis
Henning Steen, MD

Mathias Goyen, MD

11:40 AM–11:50 AM 156 - A Switchable Multi-Coil Array Optimized for Endovascular Procedures and High Resolution Vessel Wall Imaging
Claudia M. Hillenbrand, PhD

11:50 AM–12:00 PM 157 - Intravascular Catheter Tracking with Adaptive Image Parameters
Daniel R. Elgort, MS, BS

**CARDIOVASCULAR MR: EXPERIMENTAL ANIMAL STUDIES**

**Moderators:**
Leon Axel, MD, PhD
Jens Bremerich, MD

11:00 AM–11:10 AM 158 - Real-Time MRI-Guided Endograft Delivery in a Porcine Model of Abdominal Aortic Aneurysm
Venkatesh K. Raman, MD

11:10 AM–11:20 AM 159 - Picomolar Concentrations of Targeted UltraParamagnetic Nanoparticles Detect Microscopic Pathology
Anne M. Morawski, BS

11:20 AM–11:30 AM 160 - Macrophage Targeted MRI Contrast Agents: Effect of Time, Dose and Biochemical Environment
Walter J. Rogers, PhD

11:30 AM–11:40 AM 161 - Improved Adjacent Region Function Mediates Benefits of AT2-R Overexpression Post-MI
Christina M. Booe, MD

11:40 AM–11:50 AM 162 - Serial InVivoMagnetic Resonance Imaging of Magnetically Labeled Stem and Progenitor Cells using Micron Scale Iron Oxide Particles
Jonathan M. Hill, MD

11:50 AM–12:00 PM 163 - Precise Targeting of Endomyocardial Injection of Stem Cells to Porcine Myocardial Infarction using Real-time Magnetic Resonance Imaging
Alexander J. Dick

12:00 PM–1:30 PM **LUNCH (ON YOUR OWN)—POSTER VIEWING IV**

**GREAT HALL CENTER**

**GREAT HALL EAST**

**EXHIBIT HALL**
### Program Agenda

#### 1:30 PM–3:00 PM  PARALLEL SESSIONS

**A**  
Evolving Role of CMR Compared to Traditional Techniques  
Grand Hall North  

**Moderators:**  
Andre Duerinckx, MD, PhD  
Bob Hu, MD  

1:30 PM–1:50 PM  
Perfusion CMR vs. Nuclear Imaging  
Juerg Schweitzer, MD  

1:50 PM–2:10 PM  
Viability: CMR vs. PET  
Marcus Schweitzer, MD  

2:10 PM–2:30 PM  
Ischemia Detection: Dobutamine CMR vs. Stress Echo  
Eike Nagel, MD  

2:30 PM–2:50 PM  
Noninvasive Coronary Imaging CMR vs. CT  
Arthur Stillman, MD, PhD  

2:50 PM–3:00 PM  
Panel Discussion

**B**  
Practice Patterns—3Rs: Referrals, Reimbursement, Research  
Grand Hall Center  

Roderic I. Pettigrew, MD, PhD  
Peter Buser, MD  

1:30 PM–1:40 PM  
CMR in USA, Cardiology Practice  
Christopher M. Kramer, MD  

1:40 PM–1:50 PM  
CMR in USA, Radiology Practice  
Steven Wolff, MD, PhD  

1:50 PM–2:00 PM  
CMR in Europe, Cardiology Practice  
Eckart Fleck, MD  

2:00 PM–2:10 PM  
CMR in Europe, Radiology Practice  
Albert de Roos, MD  

2:10 PM–2:20 PM  
Multidisciplinary CMR Practice  
Scott D. Flamm, MD  

2:20 PM–2:30 PM  
CMR in Private Practice  
Edward Martin, MD  

2:30 PM–2:45 PM  
Cost Effectiveness of CMR  
Leslee Shaw, PhD  

2:45 PM–3:00 PM  
Panel Discussion

**C**  
Moderated Poster Tour  
Exhibit Hall  

Robert Bakaban, PhD

#### 3:00 PM–3:30 PM  BREAK–POSTER VIEWING V  
Exhibit Hall

#### 3:30 PM–5:10 PM  PLENARY SESSION III: CMR IN CLINICAL DECISION-MAKING  
Great Hall North/Center

**Moderators:**  
Dudley Pennell, MD  
Roderic I. Pettigrew, MD, PhD  

3:30 PM–3:50 PM  
Chest Pain Evaluation  
Andrew Arai, MD  

3:50 PM–4:10 PM  
Post-Revascularization  
Albert de Roos, MD  

4:10 PM–4:30 PM  
Valvular Heart Disease  
Samuel Wickline, MD  

4:30 PM–4:50 PM  
Arrhythmia Assessment  
David Bluemke, MD, PhD  

4:50 PM–5:10 PM  
Congenital Heart Disease  
Tal Geva, MD
5:15 PM–6:30 PM  CASE INTERPRETATION–PANEL

**Moderators:**
Frank Rademakers, MD
Martin Lipton, MD

**Discussants:**
Charles Higgins, MD
Udo Sechtem, MD
Scott D. Flamm, MD
Ronald Pesboch, MD

8:00 PM  SOCIAL EVENT / AWARD PRESENTATIONS  POOLSIDE

Best Oral Abstract
Best Poster

Sunday, February 9, 2003

9:00 AM–10:00 AM  PARALLEL SESSIONS

**A**

**Congenital Heart Disease**
Great Hall North

9:00 AM–9:15 AM  Aorta and Pulmonary Artery
Gautham P. Reddy, MD

9:15 AM–9:30 AM  Postop CHD
G. Wesley Vick, MD

9:30 AM–9:45 AM  Adult CHD
Naeem Merchant, MD, F.R.C.P.(C)

9:45 AM–10:00 AM  Complex CHD in Infants
Andrew Powell, MD

**B**

 Assessment of LV Remodeling
Great Hall Center

10:20 AM–10:40 AM  MRI Techniques
Rene Botnar, PhD

10:40 AM–11:00 AM  Experimental Results
Michael V. McConnell, MD, MSEE

11:00 AM–11:20 AM  Clinical Findings
Chun Yuan, PhD

11:20 AM–11:40 AM  Final Frontier
Zahi Fayad, PhD

11:40 AM  Panel Discussion

12:00 PM  Closing Remarks
Charles B. Higgins, MD
Guillem Pons-Llado, MD

12:10 PM  Adjournment until 2004 in Barcelona, Spain

**Society for Cardiovascular Magnetic Resonance**
Technologist Workshop

Course Organizers:
Christopher Kramer MD
Tim Jones MSc

Saturday, February 8

12:15 PM  Opening Remarks
12:30 PM–1:00 PM  Cardiac MR Safety
Frank G. Shellock, PhD
1:05 PM–1:35 PM  Overview of Cardiac 3d and 2d Anatomy
Mary Watkins, RT, MR
1:40 PM–2:10 PM  Basics of ECG Placement & Cardiac Image Planes
Jane M. Francis
2:15 PM–2:45 PM  Introduction to Cardiac MR Pulse Sequences
Frederick Epstein, PhD
2:50 PM–3:20 PM  Introduction to Blood Flow and Quantification
John P. Ridgway
3:25 PM–3:55 PM  Essentials of Contrast Agents and MRA
Todd Williams RT(R)MR
3:55 PM–4:10 PM  Break
4:10 PM–4:40 PM  Basics of Congenital Heart Disease
Naeem Merchant, MD
4:45 PM–5:15 PM  Aortic Disease
Gavin Bainbridge, DCR
5:20 PM–6:20 PM  Interactive Case Discussions Tutorials (Congenital & Nonischaemic)
Cindy Comeau, BS, RT (N) (MR)
6:30 PM  Reception

Sunday, February 9

8:00 AM–8:30 AM  Function and Stress Function
Cynthia Souder CNMT, RT-N, MR
8:35 AM–9:05 AM  Perfusion and Stress Perfusion
Tim Jones, MSc
9:10 AM–9:40 AM  Viability
James Moon
9:45 AM–10:00 AM  Break
10:00 AM–11:00 AM  Coronary Imaging
Kraig V. Kissinger
11:05 AM–12:05 PM  Interactive Case Discussions Tutorials (Ischaemic)
Mercedes Pereyra, RT
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GRADING AND SELECTION OF ABSTRACTS

Sixth Annual Scientific Sessions 2003

Responsibility for selecting abstracts rests with the Annual Scientific Sessions Committee. The committee meets at the annual sessions to set the agenda for the subsequent annual scientific meeting. Scientists from all over the world were invited to submit abstracts to the 2003 meeting. Abstract submission information was mailed to SCMR members in July 2002, and was available on the SCMR website, on August 1, 2002. Abstracts could be submitted to one of the following eight categories: Experimental MRS, Clinical MRS, Experimental MRI, New Methods, Clinical MRI - Ischemic Heart Disease; Clinical MRI - Vascular Disease; Clinical MRI - Congenital Heart Disease; Clinical MRI - Non-Ischemic Acquired heart disease. This year, we received a record number of 304 submitted abstracts from 19 countries, up from 193 the previous year (a 57% increase), clearly demonstrating worldwide expansion both of scientific interest and clinical use of CMR. Graders reviewed abstracts electronically according to scores (1-5, with 5 being the highest and 1 the lowest score), with institutions and authors anonymized. Each abstract was reviewed by at least 5 referees. Abstracts with a score above 3.4 were accepted for oral presentation at one of nine abstracts sessions, and were grouped together according to scientific theme. Abstracts scoring between 3.4 and 2 were selected for poster presentation. This year for the first time, in an effort to maximize objectivity and to facilitate judging, for the best abstract competition, the six top scoring abstracts were grouped together in an oral session. We believe that this review process has resulted in a highly attractive scientific program that should be of interest to a wide audience interested in CMR, including clinical and basic scientists as well as practicing clinicians. However, suggestions for improving the review process are always welcome. Comments and suggestions should be addressed to the Chair of the Annual Scientific Sessions Committee.

Stefan Neubauer, 2003 annual scientific sessions abstracts chairman

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All abstracts presented during these Annual Scientific Sessions can be viewed in their entirety in the Journal of Cardiovascular Magnetic Resonance, Volume 5, Number 1.
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