



## 2006 Annual Meeting Program Committee

### Continuing Education

### Declaration of Speaker Financial Interests or Relationships

Monday, 8 May 2006

#### Hot Topics in Clinical Practice: Neuro Imaging and Body Imaging

11:00 to 13:00 ~ Room 6E

Molecular Imaging with Cell Tracking in the CNS

Automated Change Detection in Serial Imaging Studies of the Brain

Cutting-Edge Imaging of the Spine

Hot Body MRI: Beyond Anatomy Towards Tissue Function

Hot Topics in Europe: Whole Body MRI

Hot New MRA Techniques

Letterio Politi

Bradley J. Erickson

Roland Bammer

Scott B. Reeder

Thomas C. Lauenstein

Martin R. Prince

#### Body MR Problem Solving

11:00 to 13:00 ~ Room 6C

The Hepatitis C Patient: Early Diagnosis of Cirrhosis and HCC

Problem Solving with Breast MR

Donald G. Mitchell

Christiane K. Kuhl

#### SMRT and ISMRM Joint Forum: Imaging of the Mother, Fetus and Newborn

14:00 to 16:00 ~ Room 6D

Technical Aspects of Scanning the Pregnant Mother: A Technologist's Overview and Perspective ~ **No Syllabus Contribution Submitted**

Fetal MR - Including the CNS (general techniques and uses with some specific discussion of CNS)

Imaging the Neonatal Brain: Specific Pathologies - Specific Imaging Protocols

Imaging the Pediatric Patient: Specific Pathologies - Specific Imaging Protocols

Norman T. Farrar

Deborah Levine

Mary Rutherford

Pek-Lan Khong

#### Grant Writing: Opportunities, Needs and Strategies

14:00 to 16:00 ~ Room 6C

Grants - A Strategic Perspective from a Funding Agency Point of View: Requirements and Expectations

Grantsmanship: The Essentials ~ **No Syllabus Contribution Submitted**

Grants - An Outcome Perspective: Looking Back from a Scientific Publication to Grant Funding - Lessons to be Learned

Roderic I. Pettigrew

Alan Jackson

Val M. Runge

#### MR Physics for Clinicians

16:30 to 18:30 ~ Room 6C

Spin Gymnastics I

Spin Gymnastics II ~ **No Syllabus Contribution Submitted**

Donald B. Plewes

Walter Kucharczyk

## Tuesday, 9 May 2006

### Technical Advances in Body MR

#### 07:00 to 08:00 ~ Room 618-620

High Field Imaging: A Technical Perspective  
High Field Body Imaging: A Clinical Perspective

Douglas A.C. Kelley  
Robert R. Edelman

### Cardiovascular Imaging

#### 07:00 to 08:00 ~ Room 6D

Body & Peripheral MRA  
Non-Contrast MRA  
Coronary MRA

Thomas M. Grist  
Mitsue Miyazaki  
René M. Botnar

### Clinical DTI/PWI/fMRI

#### 07:00 to 08:00 ~ Room 4C-3,4

What Can Quantitative DCE T1-Weighted MR Imaging Tell Us?  
Grading, Therapy Monitoring, and Predicting Outcome of Glioma

Paul S. Tofts  
Soonmee Cha

### MR Hardware/Engineering

#### 07:00 to 08:00 ~ Room 611-612

MRI Main Field Magnets  
Shim Coil Design, Limitations and Implications

Johan A. Overweg  
Peter Jezzard

### Human MRI and MRS at High Static Magnetic Fields: The Promise, The Challenges, the Solutions

#### 07:00 to 08:00 ~ Room 615-617

Impediments to High Field MR - A Look at B0 and B1 Field Behavior  
How to Do RF at High Fields

David I Hoult  
J. Thomas Vaughan, Jr.

### New Horizons in Musculoskeletal MRI

#### 07:00 to 08:00 ~ Room 613-614

Biomechanics of Femoral Acetabular Impingement  
MR Imaging of Femoral Acetabular Impingement

Thaddeus Laird  
William E. Palmer

### Quantitative Neuro MRI

#### 07:00 to 08:00 ~ Room 602-604

Latest Advances in Arterial Spin Labeling  
Measuring Oxygen Consumption Using MRI: What Can and Cannot be Done

Eric C. Wong  
Peter C.M. van Zijl

### Unsolved Problems and Unmet Needs in MR

#### 07:00 to 08:00 ~ Room 6E

Techniques for MR Imaging Near Metallic Implants  
Prospects of Absolute B1 Calibration

Garry Gold  
Florian Wiesinger

## **Body/Cardiovascular Imaging at 3T**

### **10:30 to 12:30 ~ Room 6C**

Introduction to Body Imaging at 3T: Theoretical Advantages and Practical Challenges

Musculoskeletal Imaging at 3T

Abdominal and Pelvic Imaging at 3T

Cardiovascular Imaging at 3T

Body and Breast at 3T: Where is the Added Value Compared to 1.5T

Neil M. Rofsky

Garry E. Gold

Elizabeth M. Hecht

Stefan O. Schoenberg

Christiane K. Kuhl

## **Neuro MR Problem Solving**

### **10:30 to 12:30 ~ Room 6D**

How To Use Parallel Imaging Techniques To Improve the Efficiency of Clinical CNS Imaging Protocols

MR Angiography of the Carotids and Circle-of-Willis: Technical and Clinical Dilemmas

Meng Law

Ronald L. Wolf

## **MR Neurography for MSK Radiologists**

### **13:30 to 15:30 ~ Room 6C**

MR Neurography - Imaging Peripheral Nerves

The Role of MRI in the Diagnosis and Treatment of Peripheral Nerve

Kenneth R. Maravilla

Robert J. Spinner

## **MR Physics for Clinicians**

### **16:00 to 18:00 ~ Room 6C**

Spin Echo

Gradient Echo

Fast Spin Echo

R. Scott Hinks

Michael Markl

Joseph C. McGowan

# **Wednesday, 10 May 2006**

## **Technical Advances in Body MR**

### **07:00 to 08:00 ~ Room 618-620**

Coils, Receivers and Parallel Imaging: A Technical Perspective

Parallel Imaging: A Clinical Perspective

Charles A. McKenzie

Neil M. Rofsky

## **Cardiovascular Imaging**

### **07:00 to 08:00 ~ Room 6D**

MRA at 3.0T

Cardiac MRI at 3.0T

Cardiovascular Parallel Imaging at 3.0T

Neil M. Rofsky

J. Paul Finn

Thoralf Niendorf

## **Clinical DTI/PWI/fMRI**

### **07:00 to 08:00 ~ Room 4C-3,4**

Diffusion Tensor Imaging of Traumatic Brain Injury

Clinical Output of DTI Measurements in Multiple Sclerosis

Pratik Mukherjee

Olga Ciccarelli

## **MR Hardware/Engineering**

### **07:00 to 08:00 ~ Room 611-612**

Array Systems

Receivers System

Nicola de Zanche

Arne Reykowski

## Human MRI and MRS at High Static Magnetic Fields: The Promise, The Challenges, the Solutions

07:00 to 08:00 ~ Room 615-617

High Resolution Imaging: Why Is It Important for T<sub>1</sub> Weighted Imaging, MRA and SWI?

E. Mark Haacke

Parallel Excitation: Making SENSE of High-Field Body MRI

Yudong Zhu

## New Horizons in Musculoskeletal MRI

07:00 to 08:00 ~ Room 613-614

MRI Evaluation of Cartilage Maturation

Miika T. Nieminen

MR Imaging of Cartilage in the Pediatric Patient

Tal Laor

## Quantitative Neuro MRI

07:00 to 08:00 ~ Room 602-604

Quantification Issues in Bolus-Tracking Perfusion MRI

Matthias J.P. van Osch

Steady-State and First-Pass Contrast Agent Methods to Evaluate CBV, Vascular Morphology and Permeability

Kathleen M. Schmainda

## Unsolved Problems and Unmet Needs in MR

07:00 to 08:00 ~ Room 6E

Cytoarchitectonic MRI: Can MRI Be Used to Quantify Neural Tissue?

Itamar Ronen

Tissue Structure through Diffusion and Transverse Relaxation Measurements

Valerij Kiselev

Unresolved Issues in Diffusion and Perfusion MRI: A Consensus from the Study Group

Derek Jones

## Cardiovascular Imaging

11:00 - 13:00 ~ Room 6E

Coronary Whole Heart MRA

Debiao Li

MRA at 3T

J. Paul Finn

Advances in Delayed Gadolinium MRI of Heart and Vessels ~ **No Syllabus Contribution Submitted**

Joao A.C. Lima

Peripheral MRA: Competing in the MDCT Era

Jörg Barkhausen

## MR Physics for Clinicians

16:30 - 18:30 ~ Room 6C

Imaging Options and Their Effects on SNR

Frank R. Korosec

Ultrafast Imaging

Marcus Alley

Field Strength Dependence in MRI-Advantages and Artifacts at 3T

Matt A. Bernstein

# Thursday, 11 May 2006

## Technical Advances in Body MR

07:00 to 08:00 ~ Room 618-620

DWI in Body Imaging

Elizabeth M. Hecht

PWI in Body Imaging

Anwar R. Padhani

## Cardiovascular Imaging

07:00 to 08:00 ~ Room 6D

MRI of Global and Regional Myocardial Function

Leon Axel, Ph.D

MRI of Myocardial Perfusion

Steven D. Wolff

MRI of Myocardial Viability

Raymond J. Kim

### **Clinical DTI/PWI/fMRI**

**07:00 to 08:00 ~ Room 4C-3,4**

Functional Connectivity  
Combining fMRI and DTI Applications

Mark J. Lowe  
Andrei I. Holodny

### **MR Hardware/Engineering**

**07:00 to 08:00 ~ Room 611-612**

Transmit Arrays Design  
RF Pulse Design for Transmit SENSE

Christopher J. Hardy  
Douglas C. Noll

### **Human MRI and MRS at High Static Magnetic Fields: The Promise, The Challenges, the Solutions**

**07:00 to 08:00 ~ Room 615-617**

Advances in Spectral Editing: MRS of Neurotransmitters  
Broadband Decoupling at High Field: Challenges and Solutions

Peter S. Allen  
Robin A. de Graaf

### **New Horizons in Musculoskeletal MRI**

**07:00 to 08:00 ~ Room 613-614**

Functional Cartilage MRI  
Overuse Injuries in Elite Athletes

Peter A. Hardy  
William B. Morrison

### **Quantitative Neuro MRI**

**07:00 to 08:00 ~ Room 602-604**

Recent Advances to Resolve Multiple Fibers Using Diffusion MRI  
Recent Advances in Fiber Tracking

Jacques-Donald Tournier  
Geoff J.M. Parker

### **Unsolved Problems and Unmet Needs in MR**

**07:00 to 08:00 ~ Room 6E**

Exclusively MRI-Based Molecular Imaging: Can Magnetic Labeling of Physiologically Important Compounds via DNP or Parahydrogen-Induced Hyperpolarization Provide a Potential Supplement or Replacement of PET  
Direct Detection of Neuromodulation  
Development of Static Tracers for Myocardial Perfusion Imaging by MRI

Joachim Bargon  
Rachel Katz-Brull  
Timothy Christian

### **Stroke Imaging**

**10:30 to 12:30 ~ Room 6C**

Neuroprotection: Biological Background and MR Implications  
The Current Status of Ongoing Clinical Trials: Beyond 3 Hours  
The Perspective of Pathophysiology - Guided Stroke Therapy  
MR Wish List for Stroke Neurologists: What Are We Missing? ~ **No Syllabus Contribution Submitted**

Michael Chopp  
Howard A. Rowley  
Arno Villringer  
Jeffrey Saver

### **Cardiac Problem Solving: Imaging the Coronary Arteries in 2006 - CT vs. MRCA**

**16:30 - 18:30 ~ Room 6D**

Can CT Be Reliably Used for Plaque Characterization and Vessel Wall Imaging?  
Advanced MR Coronary Imaging at 3T: Promise or Perils?  
CT vs. MRCA: A Radiologist's Perspective  
Head-to-Head Comparison of CT and MRCA

Zahi A. Fayad  
Debiao Li, PhD  
Konstantin Nikolaou  
Bernhard Gerber

**Vascular Problem Solving and Case Presentation**

**13:30 - 15:30 ~ Room 6C**

Vessels of the Neck  
Evaluation of Renal Vascular Disease  
MRA of the Run-Offs: Hands and Feet

John Huston, III  
Stefan O. Schoenberg  
James F.M. Meaney

**MR Physics for Clinicians**

**16:30 - 18:30 ~ Room 6C**

Diffusion MRI  
MR Angiography  
Cardiac MRI

Konstantinos Arfanakis  
Jean H. Brittain  
Oliver Wieben

**Friday, 12 May 2006**

**Technical Advances in Body MR**

**07:00 to 08:00 ~ Room 618-620**

Body MR Spectroscopy  
Fat-Water Imaging

John Kurhanewicz  
Scott B. Reeder

**Cardiovascular Imaging**

**07:00 to 08:00 ~ Room 6D**

Arrhythmogenic Conditions  
Other Cardiomyopathies

David A. Bluemke  
Jeanette Schulz-Menger

**Clinical DTI/PWI/fMRI**

**07:00 to 08:00 ~ Room 4C-3,4**

Diffusion MRI in the Fetus and Newborn  
Measuring Brain Perfusion in the Pediatric Brain

Andrea Righini  
Michela Tosetti

**MR Hardware/Engineering**

**07:00 to 08:00 ~ Room 611-612**

ESR  
Hyperpolarized C13

David J. Lurie  
J. Stefan Petersson

**Human MRI and MRS at High Static Magnetic Fields: The Promise, The Challenges, the Solutions**

**07:00 to 08:00 ~ Room 615-617**

Getting BOLDer with High Field fMRI  
Static Magnetic Fields: Bioeffects, Regulation and Management

Xiaoping P. Hu  
Penny Anne Gowland

**New Horizons in Musculoskeletal MRI**

**07:00 to 08:00 ~ Room 613-614**

MRI Techniques for Stem Cell Trafficking  
Stem Cell Research Opportunities in the Musculoskeletal System

Erik M. Shapiro  
Jeff W.M. Bulte

## Quantitative Neuro MRI

07:00 to 08:00 ~ Room 602-604

Voxel-Based Analyses

Techniques for Measuring Brain Deformation

Gareth J. Barker

Derek L.G. Hill

## Unsolved Problems and Unmet Needs in MR

07:00 to 08:00 ~ Room 6E

Need for a Non-Commercial Open-Source MR Simulator

Does The Principle Of Reciprocity Hold At High Field MR?

Ralf Loeffler

Jinghua Wang

## Therapy Assessment

10:30 to 12:30 ~ Room 6E

The Needs and Opportunities of Imaging as Bio- or Surrogate Markers - A Strategic Perspective

Goals for Assessment of Response - A Clinical and Cooperative Trial Structure ~ **No Syllabus Contribution Submitted**

Integrating MR Response Information within Trials: A Quality Assurance Perspective

Using MR to assess Therapeutic Response - An Investigator's Perspective

Daniel C. Sullivan

Lawrence H. Schwartz

T.J. Fitzgerald

Johannes T. Heverhagen