Overview

In vivo applications of MR continue to grow thanks to technical advancements in ultra-high field instrumentation, gradient and radio-frequency coil design, novel acquisition methods and image processing algorithms. In addition, the development of novel contrast agents and significant progress in the theory of MR in biological systems has occurred in recent years. This conference focuses on the latest developments in both MR methodology and applications, providing a unique venue for exchanging ideas and developing collaborations.

Abbreviated Program

GOING WITH THE FLOW
- cerebral blood flow • renal function •

SUSCEPTIBILITY-BASED CONTRAST: IRON & BEYOND
- resonance frequency contrast: sources & applications
- iron effects on $R_2$ and MFC • iron in the body •

ADVANCES IN DIFFUSION
- diffusion at small scales • what do experiments reveal? •

FATS & LIPIDS
- water-fat separation in MRI: methods & applications
- MRI of fat in organs, muscles and body composition: implications in obesity • watch your liver •

BREAST MRI
- MRI mammography: harm or charm? • challenges and opportunities in breast MRI technology •

NEATEST PROBES
- hyperpolarized silicon nanoparticles • good old gadolinium in new applications • what about choline? •

SNR SKYROCKETS
- inductively coupled implanted coils at high field •
- preclinical cryogenic MRI coils – SNR & $$ •

ADVANCES IN IMAGING TECHNIQUES
- robust parallel imaging & compressed sensing •
- fasting imaging techniques • travelling waves •

LESS "FLASHY" BUT STILL IMPORTANT
- MT not limited to brain • microfluidics •

Application deadline: July 1, 2012
Please apply early.
Young investigators and students are particularly encouraged to apply.
Gordon Research Conference
In Vivo Magnetic Resonance
July 29 – August 3, 2012
Chair: Greg Stanisz; Vice Chair: Penny Gowland

Speakers

Michael Bock, University of Freiburg, Freiburg, Germany
Louis Bouchard, University of California, Los Angeles, USA
David Buckley, University of Leeds, Leeds, UK
Maja Cassidy, Harvard University, Cambridge, USA
Eduard Chekmenev, Vanderbilt University, Nashville, USA
Bruce Daniel, Stanford University, Stanford, USA
Mark Does, Vanderbilt University, Nashville, USA
Holger Eggers, Philips Research, Hamburg, Germany
David Feinberg, University of California, Berkeley, USA
Daniella Goldfarb, Weizmann Institute of Science, Rehovot, Israel
Claudia Hillenbrand, St. Jude Children’s Research Hospital, Memphis, USA
Houchun Harry Hu, University of Southern California, Los Angeles, USA
Jens Jensen, Medical University of South Carolina, Charleston, USA
Werner Kaiser, Friedrich-Schiller-University Jena, Jena, Germany
Valerij Kiselev, University Hospital Freiburg, Freiburg, Germany
Michael Lustig, University of California, Berkeley, USA
Tom Mareci, University of Florida, Gainesville, USA
Daniel Marek, Bruker BioSpin AG, Fällanden, Switzerland
Laura Parkes, University of Manchester, Manchester, UK
Karin Shmueli, University College London, London, UK
Roy Taylor, Newcastle University, Newcastle upon Tyne, UK
Vasily Yarnykh, University of Washington, Seattle, USA

Discussion Leaders

Tom Dixon, General Electric, Niskayuna, USA
Joel Garbow, Washington University in St. Louis, St. Louis, USA
Penny Gowland, University of Nottingham, Nottingham, UK
Nola Hylton, University of California, San Francisco, USA
Risto Kauppinen, Bristol University, Bristol, UK
Piotr Kozlowski, University of British Columbia, Vancouver, Canada
John Kurhanewicz, University of California, San Francisco, USA
Corree Laule, University of British Columbia, Vancouver, Canada
John Schenck, General Electric Global Research, Schenectady, USA
Michael Smith, Novartis, Cambridge, USA