

MEETING PLACE:

Communications Center and
Berlin Ultrahigh Field Facility

Max Delbrück Center for Molecular Medicine
Robert-Rössle Strasse 10
13125 Berlin, Germany

2nd Annual Scientific Symposium

2nd Annual Scientific Symposium

REGISTRATION:

Registration deadline: 31 May, 2011

The number of participants is limited, early registration is advised.
Please register via e-mail MRsymposium@mdc-berlin.de
or please send a fax to: **+49 30 9406 49178**

Name _____

Title / function _____

Affiliation _____

Department _____

P.O. box / street _____

ZIP code _____

City _____

Country _____

Phone _____

E-mail _____

- I would like to register
 I would like to present a poster
 I would like to attend the reception at the Museum für Naturkunde, Berlin

Poster presentations: Poster presentations are most welcome. Poster prizes will be awarded to the best posters. Please submit a brief abstract of your poster (maximum 250 words) to MRsymposium@mdc-berlin.de by **May 31st 2011**.

Technical Exhibition: The symposium will be paralleled by a technical exhibition. We very warmly invite you to visit the technical exhibition.

Social Event: A reception will be held at the world famous Museum für Naturkunde featuring special guests ranging from the *Archaeopteryx* to the *Brachiosaurus*.

Please address all enquiries about the meeting to:

Ms. Michaela Langer and Ms. Timkehet Teffera
Robert-Rössle-Str. 10, D-13125 Berlin, Germany

Tel: +49 30 9406 3720 (please also try ext. 4255 or ext. 4246)

e-mail: MRsymposium@mdc-berlin.de

www: <http://www.mdc-berlin.de/BUFF>

HOW TO GET THERE:

By train:

From **Hauptbahnhof (Central Station)**. Please take S-Bahn line S5, S7 or S9 to station **Friedrichstraße**. Change at station **Friedrichstraße** to line S2 towards station **Berlin-Buch**. (direction Buch/Bernau). From there please take bus 351 directly to the venue.

By plane:

From **Tegel Airport**: Please take bus TXL to S-station **Beusselstraße**. There please change to S-Bahn line S41 to station **Gesundbrunnen**. Please change at station **Gesundbrunnen** to line S2 towards **Berlin-Buch**. (direction Buch/Bernau). From there please take bus 351 directly to the venue.

From **Schoenefeld Airport**: Please take Airport-Express-Schoenefeld to station **Friedrichstraße**. Please change at station **Friedrichstraße** to line S2 towards **Berlin-Buch**. (direction Buch/Bernau). From there please take bus 351 directly to the venue.

By car:

Please follow your navigation system using the destination:
Berlin, Robert Rössle Strasse 10

Hotel recommendations:

www.pfefferbett.de

www.hotel-zarenhof.de

www.nh-hotels.de

www.hotel4youth.com

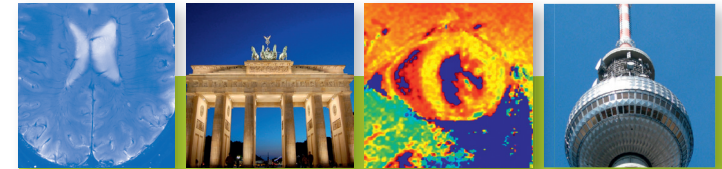
www.myershotel.de

www.ibishotel.com/de/home/index.shtml



ULTRAHIGH FIELD MAGNETIC RESONANCE:

Clinical Needs, Research Promises
and Technical Solutions



Local organizers: Thoralf Niendorf, Jeanette Schulz-Menger, Bernd Ittermann

Friday, June 24th 2011
8.50 a.m. – 8 p.m.

Max Delbrück
Communications Center
(MDC.C), Berlin

2nd Annual Scientific Symposium

PROGRAM

DEAR COLLEAGUES AND FRIENDS,

the field of Magnetic Resonance has evolved rapidly over the past quarter of a century, allowing for new applications across a broad spectrum of basic science and clinical research areas. Today, one important development which is looming on the clinical MR research horizon is the move towards ultrahigh field Magnetic Resonance (UHF MR). Inspired by this development the Berlin Ultrahigh Field Facility (B.U.F.F.) has been established at the Max-Delbrück Center for Molecular Medicine as part of the Experimental Clinical Research Center initiative. This strategic effort is devoted to foster imaging science. It holds a broad range of promises for basic MR research and clinical applications with the ultimate goal to advance the capabilities of imaging in the fields of Cardiology, Neuroscience, Molecular Medicine, Radiology and others.

Realizing these opportunities, we are very delighted to announce the 2nd Annual Scientific Symposium on clinical needs, research promises and technical solutions in ultrahigh field MR. The symposium provides an overview of state-of-the-art (pre)clinical UHF MR, to discuss the clinical relevance of UHF MR, to explore future directions of UHF MR, to foster explorations into ultrahigh field MR and to initiate local, regional, national and international collaboration. The symposium is designed to attract basic scientists, clinicians with all levels of experience and expertise ranging from students interested in imaging to advanced users. The program comprises 4 sessions, all balancing technical developments and clinical applications. We are very much honored to present extraordinary speakers including MR technology leaders and distinguished clinical experts – all bridging disciplinary boundaries and stimulating the imaging community to throw further weight behind the solution of unsolved problems and unmet clinical needs. The scientific program will be paralleled by a technical exhibition and supplemented by an open day of the Berlin Ultrahigh Field facility as well as a social event.

We warmly invite you to join us for the 2nd Annual Scientific Symposium on Ultrahigh Field MR in Berlin. A visit to Berlin is always worth it. Alongside MR science, Berlin has numerous historical landmarks, highlights and cultural events to offer. For those of you who like sports, the opening game of the women's soccer world champion ship (Germany vs. Canada) is being held in Berlin on June 26th. Be Berlin.

Thoralf Niendorf MDC & Charite' **Jeanette Schulz-Menger** Charite' & Helios Klinikum **Bernd Ittermann** PTB

09.00 Refreshments
08.50 Welcome
Hans Koch, PTB, Berlin, Germany

SCIENTIFIC SESSION I

Chair: Kamil Ugurbil, Minneapolis, USA
David, G. Norris, Nijmegen, The Netherlands

Getting to the matter of the heart: Clinical needs and research promises for UHF MR in Cardiology

09.00-09.30 Unsolved Problems and Unmet Needs of Clinical Cardiovascular MR
Matthias Friedrich, Libin Center, Calgary, Canada

09.30-09.50 The Bells and Whistles of UHF MR Technology for Cardiac MR
Tommy Vaughan, CMRR, Minneapolis, USA

09.50-10.10 UHF MR: Wild Dreams of a Clinical Cardiologist
Jeanette Schulz-Menger, Charite', Berlin, Germany

10.10-10.30 Future Directions of Cardiovascular MR @ 7.0 T
Thoralf Niendorf, MDC, Berlin, Germany

SCIENTIFIC SESSION II

Chair: Daniel K. Sodickson, New York, USA
Klaas Nicolay, Eindhoven, The Netherlands

Getting to the matter of the brain: Clinical needs and research promises for UHF MR in Neuroscience

10.45-11.15 Future Directions of UHF Neuro MR: My way
Kamil Ugurbil, CMRR, Minneapolis, USA

11.15-11.35 Role and Research Promises of UHF in Neuroscience
John Dylan Haynes, Charite, Berlin, Germany

11.35-11.55 Ultrahigh Field MR at the Border Between Physics and Neuroscience
David G. Norris, MPI Nijmegen, The Netherlands

11.55-12.15 Hybrid Brain Imaging: Opportunities and Challenges of MRPET at 9.4 T
Jon N. Shah, Jülich, Germany

12.15-13.45 Lunch break: B.U.F.F.et + POSTER SESSION

SCIENTIFIC SESSION III

Chair: Jon N. Shah, Jülich, Germany
Bernhard Blümich, Aachen, Germany

Translational research: From blue sky explorations to clinical applications

13.45-14.15 Molecular MR Imaging: Hype or Hope?
Klaas Nicolay, Eindhoven, The Netherlands

14.15-14.35 Insights from Molecular Imaging of Atherosclerosis
Rene' Botnar, Kings College, London, UK

14.35-14.55 Challenges and Opportunities of Nanomolecular MR Probing in Experimental Neuroimmunology
Sonia Waiczies, MDC, Berlin, Germany

14.55-15.15 Bruker: Animal UHF MR – Mission & Vision
Tim Workina, Bruker, Ettlingen, Germany

15.15-16.15 Coffee break: B.U.F.F.et + POSTER SESSION

SCIENTIFIC SESSION IV

Chair: David, G. Norris, Nijmegen, The Netherlands
Tommy Vaughan, Minneapolis, USA

Looking at the horizon

16.15-16.45 What is next in UHF MR?
Daniel K. Sodickson, NYU, New York, USA

16.45-17.05 Lessons Learned from/for Parallel Transmission at Ultrahigh Fields
Bernd Ittermann, PTB, Berlin, Germany

17.05-17.25 Breaking the limits with low field NMR: From Ancient Egyptian Mummies through Ötzi to the Louvre
Bernhard Blümich, RWTH, Aachen, Germany

17.25-17.45 Siemens: Human UHF MR – Mission & Vision
Walter Märzendorfer, Siemens, Erlangen, Germany

18.00 Tour de Facility

20.00 Reception at the Museum für Naturkunde Berlin

