September 24–25, 2010
Leipzig

8th Interventional MRI Symposium
The Westin Leipzig

Program

Department of Diagnostic and Interventional Radiology
University of Leipzig, Germany

Department of Radiology
Brigham and Women’s Hospital
Harvard Medical School, Boston, USA

Department of Radiology and Radiological Science
Johns Hopkins University, School of Medicine, Baltimore, USA

endorsed by the European Society for Magnetic Resonance in Medicine and Biology (ESMRMB)
and the International Society for Magnetic Resonance in Medicine (ISMRM)

In cooperation with the Academy for Continuing Medical Education in Radiology
MR Compatible Video Cameras

- application inside the bore
- infrared or visible
- monitoring of subjects
- observation of instruments and interventions
- eye-tracking, motion tracking
- hyper-scanning
- room monitoring

Also available: camera holders, light sources, etc.

MRC Systems GmbH
D-69123 Heidelberg
www.mrc-systems.de
Dear colleagues,

It is our pleasure to invite you to the 8th Interventional MRI Symposium, organized by the Department of Diagnostic and Interventional Radiology at the University of Leipzig, Germany, in cooperation with the Department of Radiology at the Brigham and Women’s Hospital, Harvard Medical School, Boston, and the Department of Radiology and Radiological Science at Johns Hopkins University in Baltimore. The meeting is endorsed by the International Society for Magnetic Resonance in Medicine (ISMRM) and the European Society for Magnetic Resonance in Medicine and Biology (ESMRMB).

Following our call for abstracts we have received numerous submissions for oral and poster presentations covering a wide range of interventional MR topics. After a peer review process by the scientific program committee, we have constructed a balanced program of 62 oral and 58 poster presentations.

The city of Leipzig has a rich heritage in music and the performing arts. Names like Johann Sebastian Bach and Felix Mendelssohn Bartholdy are inseparably linked to the city. The new Gewandhaus Concert Hall is home to the famous Gewandhaus Orchestra which is known for its excellence in classical music performance and currently conducted by Maestro Riccardo Chailly, the 19th “Gewandhauskapellmeister” since 1781. The Thomanerchor, the Boys Choir of St. Thomas’s Church, emerged over 800 years ago from church services organized by the Augustinian Canons. Its most famous choirmaster from 1723 to 1750 was Bach himself. With a history of more than 300 years, the Leipzig Opera features ballet and opera performances on an international level.

Leipzig is also linked to early developments in the field of nuclear magnetic resonance. After graduation, Felix Bloch continued his physics studies at the University of Leipzig and finished his doctoral thesis under the advice of Werner Heisenberg. Only last year, the University celebrated its 600th anniversary.

We are looking forward to seeing you in Leipzig!

F. A. Jolesz          Th. Kahn               J. S. Lewin
Thursday
September 23

Scientific Session I
General Issues
Intraoperative Thermometry

Scientific Session II
Laser/RF Cryoablation Brachytherapy

Friday
September 24

Scientific Session V
HIFU Navigation

Scientific Session VI
Biopsy Robotics Vascular

Saturday
September 25

Lunch
Lunch
Schedule

p.m.
01.00 02.00 03.00 04.00 05.00 06.00 07.30

Registration

Welcome Reception

Scientific Session III
Poster Discussion

Scientific Session IV
Cellular Therapies
Targeted Drug Delivery, Safety

Industry Symposium (Medicor/Hologic, Inc)
MR-Guided Breast Interventions

Scientific Session VII
Vascular Hybrid Systems

Scientific Session VIII
Prostate
Symposium Chairman

Thomas Kahn, Leipzig, Germany

Co-Chairs

Ferenc A. Jolesz, Boston, USA
Jonathan S. Lewin, Baltimore, USA

Faculty

Harald Busse, Leipzig, Germany
Jeffrey L. Duerk, Cleveland, USA
Wladislaw Gedroyc, London, GB
Matthias Gutberlet, Leipzig, Germany
Nobuhiko Hata, Boston, USA
Norbert Hosten, Greifswald, Germany
Steve Hushek, Milwaukee, USA
Dara L. Kraitchman, Baltimore, USA
Gabriele Krombach, Gießen, Germany
Christine Kuhl, Aachen, Germany
Michael Moche, Leipzig, Germany
Chrit Moonen, Bordeaux, France
Philippe L. Pereira, Heilbronn, Germany
Reza Razavi, London, GB
Jens Ricke, Magdeburg, Germany
Gregor Schaefers, Gelsenkirchen, Germany
Ulf Teichgräber, Berlin, Germany
Robert Turner, Leipzig, Germany
Clare M.C. Tempany, Boston, USA
Chip Truwit, Minneapolis, USA
Kemal Tuncali, Boston, USA
Frank Wacker, Baltimore, USA
Clifford Weiss, Baltimore, USA
Friday, September 24

**Session I** 08:15 a.m.–10:20 a.m.
General Issues, Intraoperative MRI, Thermometry

**Session II** 10:45 a.m.–12:50 p.m.
Laser, RF, Cryoablation, Brachytherapy

**Session III** 01:45 p.m.–03:00 p.m.
Poster Discussion Session

**Session IV** 03:30 p.m.–04:45 p.m.
Cellular Therapies, Targeted Drug Delivery, Safety
05:30 p.m.–06:30 p.m.
Industry Symposium – MR-guided Breast Interventions sponsored by Medicor / Hologic, Inc

Saturday, September 25

**Session V** 08:15 a.m.–10:10 a.m.
HIFU, Navigation

**Session VI** 10:40 a.m.–12:35 p.m.
Biopsy, Robotics, Vascular

**Session VII** 01:45 p.m.–03:25 p.m.
Vascular, Hybrid Systems

**Session VIII** 03:50 p.m.–05:05 p.m.
Prostate

**Scientific Program Objectives**
Friday, September 24 – Saturday, September 25, 2010
Upon completion of the Scientific Meeting, participants should be able to:
Identify new findings in interventional and intraoperative magnetic resonance imaging most relevant to their own fields;
Explain the impact of newly developed methods in interventional MRI;
Describe possible future trends and developments in interventional MRI and evaluate the possible impact of these trends and developments on their own clinical and scientific work in the future;
Assess the state-of-the-art in interventional MRI
Friday, September 24, 08:15–10:20 a.m.
General Issues, Intraoperative MRI, Thermometry

Moderators: J. S. Lewin (Baltimore, MD, USA)
            Th. Kahn (Leipzig, Germany)

08:15  Welcoming address
        J. Thiery, Dean of the Medical Faculty
        Th. Kahn

08:30  Anticipated Highlights of the 8th IMRI
        Symposium: What to watch for (V-01)
        J. Duerk
        Cleveland, OH, USA

08:45  MR systems for MRI-guided interventions (V-02)
        S. Hushek
        Milwaukee, WI, USA

09:00  Intraoperative MRI in Neurosurgery (V-03)
        Chip Truwit
        Minneapolis, MN, USA

09:15  Optimal design for an intraoperative MRI-guided
        neurosurgical suite (V-04)
        W. A. Hall, C. L. Truwit
        Syracuse, NY, USA; Minneapolis, MN, USA

09:25  Update on open MRI (V-05)
        U. Teichgräber
        Berlin, Germany

09:40  Laser based laparoscopic liver resection in a
        1.0 Tesla interventional open MRI (V06)
        G. Wiltberger, S. S. Chopra, U. Teichgräber,
        P. Neuhaus, S. Jonas, G. Schumacher
        Leipzig, Germany; Berlin, Germany

09:50  Hybrid PRF-thermometry in the myocardium (V-07)
        V. Rieke, W. Grissom, A. B. Holbrook,
        J. M. Santos, M. V. McConnell, K. Butts Pauly
        Stanford, CA, USA; Munich, Germany;
        Los Altos, CA, USA

10:00  Measurement of the temperature response of
        multiple intrinsic MR parameters using a rapid
        chemical shift imaging technique (V-08)
        B. A. Taylor, J. Yung, A. M. Elliott, J. D. Hazel, R. J.
        Stafford
        Houston, TX, USA
Session I

10:10  MRI guided cryoablation: in vivo assessment of measuring temperature adjacent to ablated tissue using the PRF method (V-09)
E. Rothgang, W. Gilson, S. Valdeig, L. Pan, A. Flammang, J. Roland, F. Wacker, B. Freicks
Erlangen, Germany; Baltimore, MD, USA; Berlin, Germany

10:20–10:45 Coffee Break

Session II

Friday, September 24, 10:45 a.m.–12:50 p.m.
Laser, RF, Cryoablation, Brachytherapy

Moderators:  N. Hosten (Greifswald, Germany)
R. Turner (Leipzig, Germany)

10:45  Continuous real-time MR thermometry in moving organs – clinical routine during laser ablation of hepatic tumors (V-10)
N. Hosten, C. Rosenberg
Greifswald, Germany

11:00  Kalman-filtered velocity navigator triggering for motion compensated PRF thermometry (V-11)
F. Maier, A. J. Krafft, J. W. Jenne, R. Dillmann, W. Semmler, M. Bock
Heidelberg, Germany; Karlsruhe, Germany

11:10  Conformal laser irradiation of intracranial tumors: a clinical application (V-12)
M. G. Torchia, G. H. Barnett, A. E. Sloan, R. Tyc
Winnipeg, MB, Canada; Cleveland, OH, USA

11:20  MR guidance and thermal monitoring of interstitial laser ablation of osteoid osteomas in an open high-field scanner (V-13)
F. Streitparth, U. Teichgräber, J. Rump, M. de Bucourt, B. Gebauer
Berlin, Germany

11:30  MR guided radiofrequency ablation (V-14)
P. L. Pereira, H. Rempp, S. Clasen, D. Schmidt, A. Boss, C. Schraml, C. D. Claussen
Heilbronn, Germany; Tübingen, Germany
11:45 Clinical experience in University Hospitals of Geneva with radiofrequency ablation of liver malignancies under magnetic resonance guidance (V-15)
Geneva, Switzerland

11:55 Visualization of ablation lesions by dynamic contrast-enhanced MRI (V-16)
Toronto, ON, Canada

12:05 Cryoablation: rational, technique and clinical applications (V-17)
K. Tuncali
Boston, MA, USA

12:20 MRI guided percutaneous cryoablation of hepatocellular carcinoma at special regions: an initial study (V-18)
B. Wu, Y. Xiao, L. Zhao, X. Zhang, J. Xu
Beijing, China; Boston, MA, USA; Langfang, China

12:30 MR image-guided percutaneous tumor cryoablation (V-19)
A. Gangi, X. Buy, H. Lang, J. Gannon,
B. Dillmann, L. Barbé, M. de Mathelin
Strasbourg, France; Donostia – San Sebastián, Spain

12:40 MR-guided liver tumor ablation employing open high-field 1.0T MRI for image guided brachytherapy (V-20)
J. Ricke, M. Seidensticker, M. Ludewig,
K. Jungnickel, M. Pech, O. Dudeck, J. Bunke,
F. Fischbach
Magdeburg, Germany; Hamburg, Germany

12:50–01:45 Lunch Break
Session III

Friday, September 24, 01:45–03:00 p.m.
Poster Discussion Session

01:45–03:00 Poster discussion with all authors present and prepared to discuss their work

03:00–03:30 Coffee Break

Session IV

Friday, September 24, 03:30–04:45 p.m.
Cellular Therapies, Targeted Drug Therapy, Safety

Moderators: D. Kraitchman (Baltimore, MD, USA)
U. Teichgräber (Berlin, Germany)

03:30 MR-guidance for cellular therapies: diabetes and islet cell transplantation (V-21)
C. Weiss, Baltimore, MD, USA

03:45 Heart, cell therapy, and how to get there (V-22)
D. L. Kraitchman
Baltimore, MD, USA

04:00 Intracerebral administration of therapeutics via MR guided convection enhanced delivery (V-23)
San Francisco, CA, USA; Irvine, CA, USA

04:10 Guiding reporter probe injections using a novel X-ray-MRI fusion tool (V-24)
Baltimore, MD, USA

04:20 MR-guided robotic drug delivery for lung disease (V-25)
P. Vartholomeos, C. Mavroidis, N. Hata
Boston, MA, USA

04:30 Safety – MR system and MR interactions of medical devices (V-26)
G. Schaefers
Gelsenkirchen, Germany

04:45–05:30 Break
Session IV

05:30–06:30 Dinner Symposium – MR-Guided Breast Interventions
Sponsored by Medicor, Kerpen, Germany / Hologic Inc, Bedford, USA

05:30 Tips, tricks and materials
Overview technical equipment for MR-guided breast intervention
M. Brown
Bedford, MA, USA

06:00 MR-guided breast intervention
C. Kuhl
Aachen, Germany

06:30 Adjourn

Satellite Seminar for MRI Technologists
MR Application and Safety (in German)
Organized by MR:comp GmbH, Gelsenkirchen, Germany
Information: www.mrcomp.com
Contact: info@mrcomp.com

Session V

Saturday, September 25, 08:15–10:10 a.m.
HIFU, Navigation

Moderators:
F. A. Jolesz (Boston, MA, USA)
C. Moonen (Bordeaux, France)

08:15 HIFU of uterine fibroids [V-27]
W. Gedroyc
London, UK

08:30 MR-guided high intensity focused ultrasound of liver and kidney [V-28]
C. Moonen
Bordeaux, France
08:45 In vivo MR acoustic radiation force imaging in the porcine liver (V-29)
A. B. Holbrook, J. M. Santos, Y. Medan, K. Butts Pauly
Stanford, CA, USA; Los Altos, CA, USA; Tirat Carmel, Israel

08:55 Evaluation of vessel-based focal point tracking for focused ultrasound surgery of liver under free breathing (V-30)
D. Kokuryo, E. Kumamoto, Y. Takao, T. Kashiwa, K. Kuroda
Chiba, Japan; Kobe, Japan; Kanagawa, Japan

09:05 MR-guided focused ultrasound: acoustic radiation force imaging simultaneous with PRFS thermal monitoring at 3T using a fast GRE-EPI sequence (V-31)
Geneva, Switzerland; Erlangen, Germany

09:15 Navigation techniques for MR-guided interventions (V-32)
H. Busse, N. Garnov, G. Thörmer, T. Kahn, M. Moche
Leipzig, Germany

09:30 Real-time scan plane selection with a novel hand-held device for needle guidance (V-33)
M. J. Riffe, S. R Yutzy, D. A. Nakamoto, D. P. Hsu, J. L. Sunshine, C. A. Flak, V. Gulani, J. L. Duerk, M. A. Griswold
Cleveland, OH, USA; Pittsburgh, PA, USA

09:40 Multi-Touch enabled real-time MRI interventions (V-34)
A. B. Holbrook, J. M. Santos, K. Butts Pauly
Stanford, CA, USA; Los Altos, CA, USA

09:50 Real-time MR imaging with automatic instrument tracking from arbitrary camera positions (V-35)
N. Garnov, G. Thörmer, J. Otto, T. Kahn, M. Moche, H. Busse
Leipzig, Germany

10:00 Preliminary experience with real-time multiplanar bSSFP sequence for MR-guided intervention (V-36)
R. J. Stafford, L. Pan, K. Ahrar
Houston, TX, USA; Baltimore, MD, USA

10:10–10:40 Coffee Break
Saturday, September 25, 10:40–12:35 a.m.
Biopsy, Robotics, Vascular

Moderators: G. Krombach (Gießen, Germany)
H. Busse (Leipzig, Germany)

10:40 Update on MR-guided biopsies (V-37)
M. Moche
Leipzig, Germany

10:55 Biopsy of liver lesions with MR fluoroscopy using
an high field open MRI scanner (V-38)
F. Fischbach, J. Bunke, M. Thormann,
M. Ludewig, G. Gaffke, K. Jungnickel, J. Ricke
Magdeburg, Germany; Hamburg, Germany

11:05 MR-guided percutaneous retrograde drilling of
osteochondritis dissecans of the knee (V-39)
R. Ojala, P. Kerimaa, M. Lakovaara, P. Hyvönen,
J. Korhonen, P. Lehenkari, O. Tervonen,
R. Blanco Sequeiros
Oulu, Finland

11:15 Evaluation of a gradient based needle tracking
system for MR-guided interventions: phantom
study and in-vivo evaluations (V-40)
S. Valdeig, B. Fetics, L. Pan, M. Philip,
C. R. Weiss, E. Nevo, D. L. Kraitchman,
F. K. Wacker
Baltimore, MD, USA

11:25 Diagnostic accuracy, usability, and workflow
of a navigation solution for MR-guided simulated
biopsies outside the bore (V-41)
T. Riedel, N. Garnov, G. Thörmer, T. Kahn,
M. Moche, H. Busse
Leipzig, Germany

11:35 Introduction of a new device for MR guided
bone biopsies (V-42)
M. Maybody, J. Kleimeyer, A. Winkel,
S. B. Solomon
New York, NY, USA; Schwerin, Germany

11:45 Robotics (V-43)
N. Hata
Boston, MA, USA
**Session VI**

12:00  Vascular applications (V-44)  
G. Krombach  
Gießen, Germany

12:15  Developing guidelines for successfully interleaving active tracking of catheters with steady-state imaging sequences (V-45)  
E. K. Brodsky, O. Unal, W. F. Block  
Madison, WI, USA

12:25  Percutaneous portal vein access based on electromagnetic field needle tracking navigation and MR-DynaCT fusion (V-46)  
T. Ehtiti, F. Wacker, S. Valdeig, D. L. Kraitchman, C. Weiss  
Baltimore, MD, USA

12:35–01:45  Lunch Break

**Session VII**

**Saturday, September 25, 01:45–03:25 p.m.**  
**Vascular, Hybrid Systems**

**Moderators:** R. Razavi (London, UK)  
M. Gutberlet (Leipzig, Germany)

01:45  Cardiac applications (V-47)  
R. Razavi  
London, UK

02:00  Initial evaluation of a novel MREP RF ablation catheter (V-48)  
Hamburg, Germany; London, UK

02:10  Towards real-time MR-guided transarterial aortic valve implantation (TAVI): in vivo evaluation in swine (V-49)  
Erlangen, Germany; Essen, Germany; Vancouver, BC, Canada
Session VII

02:20  TrueFISP based catheter tracking using a transmit array system (V-50)
H. Celik, I. D. Mahcicek, E. Atalar
Ankara, Turkey

02:30  Real-time MRI at high spatial and temporal resolution (V-51)
S. Zhang, M. Viecker, D. Voit, J. Frahm
Göttingen, Germany

02:40  Real-time intravascular-coil based MRI endoscopy at 3T (V-52)
P. A. Bottomley, S. Sathyaramayana, M. Schär, D. L. Kratchman
Baltimore, MD USA; Cleveland, OH, USA; Bangalore, India

02:50  Augmented reality based MR image guided navigation system for flexible endoscope (V-53)
H. Haque, S. Marikawa, S. Naka, Y. Kurumi, H. Murayama, T. Tani, T. Tetsuji
Tokyo, Japan; Ohtsu, Japan

03:00  Hybrid C-arm/iMRI systems: Valuable contribution or unnecessary overkill (V-54)
F. Wacker
Baltimore, MD, USA

03:15  Simultaneous ultrasound/iMRI motion monitoring in the abdomen (V-55)
Geneva, Switzerland; Basel, Switzerland; Zurich, Switzerland

03:25–03:50  Coffee Break

Saturday, September 25, 03:50–05:05 p.m.
Prostate

Moderators:  J. Ricke (Magdeburg, Germany)
F. Wacker (Baltimore, MD, USA)

03:50  Prostate MR guided interventions (V-56)
C. Tempany
Boston, MA, USA
Session VIII

04:05  Role of 3D imaging with SPACE in MR guided prostate biopsy. Sequence strategies (V-57)
M. Garmer, S. Mateiescu, M. Busch, D. H. W. Grönemeyer
Bochum, Germany

04:15  Clinical feasibility and initial results of targeted prostate biopsy in a wide-bore 3-Tesla MRI (V-58)
K. Tuncali, N. Hata, J. Tokuda, A. Fedorov,
F. M. Fennelly, D. Kacher, I. Iordachita, S. Oguro,
S. Song, Y. Tang, C. M. C. Tempary
Boston, MA, USA; Baltimore, MD, USA

04:25  Improved prostate-cancer staging with an integrated endorectal/tracking coil assembly (V-59)
L. Qin, E. J. Schmidt, W. S. Hage, J. Santos,
C. Tempary-Afzal, K. Butts-Pauly, C. L. Dumoulin
Boston, MA, USA; Stanford, CA, USA;
Cincinnati, OH, USA

04:35  Initial experience using 3.0T MRI guided laser ablation for a prostate cancer recurrence in the post-surgical prostate bed (V-60)
D. A. Woodrum, L. A. Mynderse, A. Kawashima,
H. Bjarnason, M. R. Callstrom
Rochester, MN, USA

04:45  Preliminary experience with a supine MR guided transrectal needle guidance system for prostate cancer targeted radiotherapy (V-61)
C. Ménard, D. Iupati, J. Thoms, M. Haider, A. Bayley,
P. Chung, J. Abed, A. Simeonov, J. Publicover,
W. Foltz, C. Elliott, D. Gallop, A. Krieger,
M. Milosevic, P. Warde, R. Bristow
Toronto, ON, Canada

04:55  Online guidance of tumor targeted brachytherapy using histologically referenced MRI (V-62)
D. Iupati, M. Haider, P. Chung, J. Abed, A. Simeonov,
J. Publicover, J. Lee, K. Brock, W. Foltz, G. O’Leary,
C. Elliott, A. Krieger, D. Gallop, M. Milosevic,
R. Bristow, G. Morton, P. Warde, C. Ménard
Toronto, ON, Canada

05:05  Poster Awards and Conclusions
F. A. Jolesz, J. S. Lewin, Th. Kahn

05:15  Adjourn
Besuchen Sie unser Dinner Symposium am Freitag, den 24.09.2010 um 17.30 Uhr

Suros-ATEC-Vakuumsaugbiopsie
- für MRT, Ultraschall und Stereotaxie
- schnelle und effiziente MRT-Biopsie
- kompatibel mit allen MRT-Herstellern bis 3 T

ONI 1,5 T offenes Extremitäten MRT-System
- Feldstärke 1,5 T
- 70 mT Gradienten
- Slewrate 200 T/m/s

MMS Medicor Medical Supplies GmbH
Heinrich-Hertz-Straße 6 · 50170 Kerpen · Tel.: +49 2273 9808-0 · Fax: +49 2273 9808-99 · zentrale@medicor.de

www.medicor.de
**Poster Discussion Session**

**P-01**  Efficacy of magnetic resonance image-guided liver surgery with a motorized manipulator  
Otsu, Japan; Boston, MA, USA; Tokyo, Japan

**P-02**  High field DTI data in the setting of real time intraoperative low field MRI for millimeterscale guidance – effects of mechanical tissue distortion by surgical instruments  
A. G. Filler  
Santa Monica, CA, USA

**P-03**  An optimized implantation system for MRI-guided neuro interventions: preliminary evaluation of targeting accuracy  
San Francisco, CA, USA; Irvine, CA, USA

**P-04**  Supine breast MRI: first steps towards image-aided breast-conserving surgery  
P. Siegler, C. Holloway, P. Causer, G. Sela, G. Thevathasan, D. B. Plewes  
Toronto, ON, Canada

**P-05**  Real-time multi-baseline PRF-based MR thermometry for MR-guided RF ablation procedures  
P. Wang, W. Block, O. Unal  
Madison, WI, USA

**P-06**  Fat temperature imaging based upon T1 of fatty acid species using multiple flip angle multipoint Dixon acquisitions  
Hiratsuka, Japan; Kobe, Japan; Utrecht, Netherlands; Tokyo, Japan; Isehara, Japan

**P-07**  Reference-free PRFS MR-thermometry using quasi-harmonic 2D reconstruction of the background phase  
Geneva, Switzerland; Erlangen, Germany

**P-08**  MR temperature imaging validation of a bioheat transfer model for 3D prospective planning of LIIT  
D. Fuentes, A. Elliott, J. Hazle, R. J. Stafford  
Houston, TX, USA
P-09  MR-guided trans-perineal cryoablation of locally recurrent prostate adenocarcinoma following radical retropubic prostatectomy (RRP): case series
Rochester, MN, USA

P-10  Chemical shift-compensated hybrid referenceless and multi-baseline subtraction thermometry
W. A. Grissom, V. Rieke, A. B. Holbrook, Y. Medan, K. Butts Pauly, C. Davis
Munich, Germany; Stanford, CA, USA; Tirat Carmel, Israel; Niskayuna, NY, USA

P-11  Chemically selective asymmetric spin-echo EPI phase imaging for internally referenced MR thermometry
M. N. Streicher, D. Ivanov, D. Müller, A. Pampel, A. Schäfer, R. Turner
Leipzig, Germany

P-12  Dual-echo pulse sequence for temperature mapping of intradiscal laser ablation in an 1.0T open MRI
Berlin, Germany; Hamburg, Germany

P-13  Interference-free PRF-based MR thermometry – initial experience in 34 cases of hepatic laser ablation
C. Rosenberg, A. Kickhefel, J. Roland, R. Puls, N. Hosten
Greifswald, Germany; Erlangen, Germany

P-14  Evaluation of the thermal dose concept during MR-guided RFA in a high field open system at 1.0 T
Magdeburg, Germany; Hamburg, Germany

P-15  PRFS Thermometry during radiofrequency ablation is corrupted by cavitation’s effects: observation with simultaneous US/MR imaging and first order correction
M. Violon, S. Terraz, J. Roland, E. Dumont, C. D. Becker, R. Salomir
Geneva, Switzerland; Erlangen, Germany; Pessac-Bordeaux, France
Poster Discussion Session

**P-16** Echo time optimization in multi-point Dixon technique for component separation in fat temperature imaging
M. K Lam, T. Iwabuchi, K. Saito, K. Kuroda
Hiratsuka, Japan; Utrecht, Netherlands; Kobe, Japan

**P-17** Evaluation of reference-less PRF MR thermometry using LITT patient data
Erlangen, Germany; Tübingen, Germany; Greifswald, Germany; Geneva, Switzerland

**P-18** First clinical experience with navigated RF ablations in the liver using a closed-bore 1.5T MRI
D. Seider, H. Busse, N. Garnov, G. Thörmer, S. Heinig, T. Kahn, M. Moche
Leipzig, Germany

**P-19** High-power filter for online MR treatment monitoring during RF Ablation
K. Will, K. Jungnickel, F. Fischbach, J. Ricke, G. Rose, A. Omar
Magdeburg, Germany

**P-20** Laser-induced thermotherapy (LITT) of the liver in an open 1.0 T high-field MRI system – evaluation of a novel miniaturized closed cooling circuit applicator
Berlin, Germany; Teltow, Germany

**P-21** Guidance and thermometry of laser discectomies in open high-field MRI – a cadaveric and clinical feasibility study
F. Streitparth, T. Walter, B. Schnackenburg, U. Wonneberger, M. de Bucourt, J. Rum, U. Teichgräber
Berlin, Germany; Hamburg, Germany

**P-22** MRgHIFU thermal ablations in sheep’s renal cortex: in vivo demonstration of focusing accuracy and safety considerations
Geneva, Switzerland

**P-23** Three-dimensional motion analysis for local volume of hepatic tissue under sonication based on portal tree structure
Y. Takao, M. Hayashi, D. Kokuyio, E. Kumamoto, T. Kashi, K. Kuroda
Kobe, Japan; Chiba, Japan; Hiratsuka, Japan
P-24 Histological morphology of lesions in turkey breast produced by MR-guided high-intensity focused ultrasound (MR-HIFU)
A. Neumann, M. Karul, H. Merz, J. Barkhausen, P. Hunold
Lübeck, Germany

P-25 High-resolution MRI of RF lesion temporal evolution
Toronto, ON, Canada

P-26 Choice of the sonication pattern for rapid volumetric MRgHIFU ablation under spatio-temporal control of temperature: ex vivo and in vivo experimental studies
Geneva, Switzerland

P-27 Clinical experience with navigated liver biopsies in a closed-bore 1.5T scanner
M. Moche, G. Thörmer, N. Garnov, J. Fuchs, J. Otto, S. Heinig, T. Kahn, H. Busse
Leipzig, Germany

P-28 Interactive MR guided percutaneous nephrostomy using an open high field MR-scanner
F. Fischbach, M. Porsch, M. Pech, O. Dudeck, J. Bunke, U.-B. Liehr, J. Ricke
Magdeburg, Germany; Hamburg, Germany

P-29 Passive navigation method for MR-assisted orthopedic interventions
Berlin, Germany; Nuremberg, Germany

P-30 Step lightly! – MR imaging guided steroid injection of the sacroiliac joints in children with enthesitis-related arthritis: safety, technical efficiency and anti-inflammatory effectiveness
Baltimore, MD, USA; Tubingen, Germany; Bad Bramstedt, Germany; Heilbronn, Germany

P-31 Tailored interactive sequences for continuous MR-image-guided freehand biopsies of different organs in an open system at 1.0 Tesla: preliminary results
M. de Bucourt, U. Teichgräber, F. Streitparth
Berlin, Germany
**Poster Discussion Session**

P-32  Imaging speed for MR guided punctures  
J. C. Rump, M. Jonczyk, C. J. Seebauer, F. Stetparth,  
F. V. Güttler, U. K. M. Teichgräber  
Berlin, Germany

P-33  Localization accuracy and performance of cordless MR-visible markers for 3T imaging  
G. Thörmer, N. Garnov, J. Otto, J. Haase, T. Kahn,  
M. Moche, H. Busse  
Leipzig, Germany

P-34  Phase only cross-correlation tracking of a passive marker for MR-guided interventions  
R. J. Stafford, F. Maier, A. J. Krafft, M. Bock, A. Winkel, K. Ahrar  
Houston, TX, USA; Heidelberg, Germany;  
Schwerin, Germany

P-35  Advanced scan-geometry planning for MREP interventions  
P. Koken, R. Haltbuiizen, J. Smink, S. Krueger, S. Weiss,  
A. J. Wiethoff, T. Schaeffter  
Hamburg, Germany; Best, Netherlands; London, UK

P-36  MRI guided kyphoplasty – a new interventional approach  
R. Schilling, F. Wichlas, J. Rump, U. Teichgräber  
Berlin, Germany

P-37  Online scan control using a standard footswitch during interventional MRI in a high field open system at 1.0 T  
M. Ludewig, K. Will, J. Smink, K. Jungnickel, J. Bunke,  
A. Omar, J. Ricke, F. Fischbach  
Magdeburg, Germany; Hamburg, Germany;  
Best, Netherlands

P-38  Construction of a MR compatible arthroscopic system and its clinical application  
C. J. Seebauer, H. J. Bail, J. C. Rump, F. Güttler,  
U. Teichgräber  
Berlin, Germany; Nuremberg, Germany

P-39  Communication in intraoperative MRI: a low-cost wireless multiuser solution  
F. V. Güttler, J. Rump, P. Krauß, C. Seebauer, U. Teichgräber  
Berlin, Germany
**Poster Discussion Session**

**P-40** Development of a real-time interactively controllable MRI-guided therapy platform  
L. Zhao, J. Xu, H. Liu  
Langfang, China; Boston, MA, USA

**P-41** Evaluation of accuracy and clinical feasibility of the MR-compatible image overlay  
Kingston, ON, Canada; Baltimore, MD, USA

**P-42** Toward a new approach for automatic device tracking inside a closed-bore MRI  
G. Thörner, N. Garnov, J. Haase, T. Kahn, M. Moche, H. Busse  
Leipzig, Germany

**P-43** Esophageal imaging in vivo using intraluminal RF coil for integrated MR-endoscope system  
Kobe, Japan; Osaka, Japan; Hiratsuka, Japan

**P-44** Microsystems technology fabrication process for resonant iMRI markers  
K. Will, S. Schimpf, A. Brose, F. Fischbach, J. Ricke, B. Schmidt, G. Rose  
Magdeburg, Germany

**P-45** Development of a visualization software for MR-endoscope tracked by a magnetic field sensor  
S. Aizawa, M. Matsumoto, Y. Matsuoka, K. Kuroda, E. Kumamoto  
Kobe, Japan; Hiratsuka, Japan

**P-46** Image-based correction of tracking sensor measurements for fusion display in MR-endoscope  
M. Matsumoto, S. Aizawa, Y. Matsuoka, E. Kumamoto, K. Kagayaki, T. Kaibara  
Kobe, Japan; Hiratsuka, Japan

**P-47** XIP Software for XFM (X-ray fused with MRI)  
E. Özdal, A. Yazıcı, C. Oztürk  
Istanbul, Turkey
P-48 Automatic scan plane adjustment in intraoperative MRI: let the image follow the instrument – preliminary results
F. V. Güttler, J. Rump, U. Teichgräber, C. Seebauer, P. Krauß, B. Hamm
Berlin, Germany

P-49 Physiological saline as a contrast agent for MR-guided epidural pain therapy
D. H. W. Grönemeyer, J. Becker, S. Mateiescu, M. Deli, M. Busch
Bochum, Germany

P-50 Comparison of MR imaging characteristics of a novel polymer-based bioabsorbable stent and a conventional metallic stent
S. Paul, G. S. Sandhu, P. Ehses, V. Gulani, J. L. Duerk, J. L. Sunshine, M. A. Griswold
Cleveland, OH, USA, Würzburg, Germany

P-51 Integrated system for electrophysiology and MR catheter tracking
S. O. Oduneye, A. Shmatukha, V. Verpakhovski, C. L. Dumoulin, E. Schmidt, E. Crystal, G. A. Wright
Toronto, ON, Canada; Niskayuna, NY, USA; Boston, MA, USA

P-52 Catheter tracking in MRI guided interventions using resonant circuits in an open high field MR environment: simulations and experimental measurements
J. Krug, K. Will, G. Rose
Magdeburg, Germany

P-53 Coronary sinus extraction for multimodality registration to guide transseptal puncture
F. Bourier, A. Brost, L. Yatziv, J. Homegger, N. Strobel, K. Kurzidim
Regensburg, Germany; Erlangen, Germany; Mountain View, CA, USA; Forchheim, Germany
P-54 MR imaging characteristics of stents and flow-diverters manufactured for intracranial use
A. Arat, O. Unal
Madison, WI, USA

P-55 Interventional imaging using HEFEWEIZEN
K. Dara, J. J. Derakhshan, J. L. Duerk, J. L. Sunshine,
M. A. Griswold
Cleveland, OH, USA

P-56 Procedural and technical aspects of MRI-guided prostate biopsy in a closed wide-bore 3-Tesla scanner
N. Hata, J. Tokuda, A. Fedorov, F. M. Fennessy, S. Gupta,
D. Kacher, I. Iordachita, S. Oguro, S. Song, Y. Tang,
C. M. C. Tempany, K. Tuncali
Boston, MA, USA; Baltimore, MD, USA

P-57 Dependence of tip heating on device connection
O. Lips, B. David, S. Krüger, K. M. Lüdeke, S. Weiss
Hamburg, Germany

P-58 Designing MRI-safe implantable leads
P. A. Bottomley, A. Kumar, W. A. Edelstein, J. M. Allen,
P. V. Karmarkar
Baltimore, MD, USA
Einfachheit bedeutet zuverlässige Diagnose und Behandlung für jeden Patienten.

Weitere Informationen finden Sie unter www.philips.de/healthcare.
Information for Authors

Main Lectures
Lectures on the main scientific topics will be given by invited speakers.

Oral Presentations
The scientific sessions will include oral presentations of proffered papers. Speaking time will be 10 minutes including 2 minutes discussion. The time given is a maximum and includes the way to the desk. The time will be monitored by light signals. Yellow is the last minute, red indicates exceeding the time. Please provide your Powerpoint presentation (on CD-ROM or USB memory device) to a technical staff member at the Audiovisual Desk at least two hours prior to the start of the session.

Poster Presentations
A poster exhibition will be held throughout the meeting. The posters must remain displayed from Friday, September 24, 08:00 a.m. through Saturday, September 25, 05:15 p.m. The poster discussion session is scheduled for Friday, September 24, 01:45 p.m. – 03:00 p.m. All authors of posters must be present and prepared to discuss their work during the session.

Poster Awards
To appreciate the high level of scientific exhibits three poster awards will be donated. The scientific exhibits will be judged by members of the faculty on the basis of creative thought, significance to the field, thoroughness, technical skill and clarity of presentation.

Magna cum laude: EURO 500.–  
Summa cum laude: EURO 300.–  
Cum laude: EURO 200.–

Award recipients will be announced after SESSION VIII at the “Conclusions”.

Conference Language
All lectures and presentations will be in English.

Abstracts
Every participant will receive a Symposium Syllabus containing all abstracts.
**General Information**

**Conference Date**
September 24–25, 2010

**Venue**
The Westin Leipzig
Gerberstrasse 15
04105 Leipzig, Germany
Phone: ++49(0)341-988-0
Fax: ++49(0)341-988-1229
E-Mail: info@westin-leipzig.com

**Registration Fees**
including Welcome Reception and all Lunch and Coffee Breaks

- **Regular** (before September 1, 2010): EURO 250.–
- **On-site** (after September 1, 2010): EURO 300.–

**One Day Tickets**
Friday, September 24, 2010: EURO 150.–
Saturday, September 25, 2010: EURO 150.–

All symposium registrations and hotel reservations must be sent to akd congress & events. Please send the enclosed filled registration form together with the registration fee (akd congress & events is able to handle forms together with payments only).

**Congress Office**
Thursday, September 23, 2010:
04:00 p.m. – 08:30 p.m.

Friday, September 24, 2010:
07:30 a.m. – 06:00 p.m.

Saturday, September 25, 2010:
08:00 a.m. – 06:00 p.m.
Welcome Reception
Thursday, September 23, 2010 at 7:30 pm in the congress centre with dinner and entertainment. All registrants and accompanying persons are cordially invited.

For further information please contact
Jochen Fuchs
Department of Diagnostic and Interventional Radiology
Leipzig University Hospital
Liebigstr. 20
04103 Leipzig, Germany
Phone: ++49-(0)341-97-17400
Fax: ++49-(0)341-97-17409
E-Mail: interventional.mri@medizin.uni-leipzig.de

Website
www.uni-leipzig.de/radiologie

Local Organizing Committee
Harald Busse
Jochen Fuchs
Nikita Garnov
Michael Moche
Gregor Thörmer

Industrial Exhibition
In the foyer of the conference center an industrial exhibition will take place. For information please contact akd congress & events.

Congress Agency
akd congress & events
Elsterstrasse 4
04109 Leipzig
Phone: ++49-(0)341-26 82 76-34 or -35
Fax: ++49-(0)341-26 82 76-36
E-Mail: info@akd-congress.de
### Hotel Reservation

Hotel reservations will be handled by akd congress & events. Requests for accommodation should be made on the enclosed official registration form only.

<table>
<thead>
<tr>
<th>Hotel</th>
<th>Single Room</th>
<th>Double Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Westin Leipzig (congress center)</td>
<td>EURO 152,00</td>
<td>EURO 172,00</td>
</tr>
<tr>
<td>Seaside Park Hotel (10 minutes walking distance to congress center)</td>
<td>EURO 110,00</td>
<td>EURO 130,00</td>
</tr>
<tr>
<td>Holiday Inn Garden Court (5 minutes walking distance to congress center)</td>
<td>EURO 79,00</td>
<td>EURO 89,00</td>
</tr>
</tbody>
</table>

The rates are per night and include breakfast, service charge and VAT. The costs for accommodation have to be paid directly in the hotel before departure.

[Map showing distances]

**distances**
- airport – downtown: 25 min by taxi
- main train station – Westin: walking distance 6 min
Payment

Method
Please transfer the registration fee to the below mentioned bank account.

- Bank transfer to
  - Acc. no. 119778901
  - bank code 860 700 24
  - Deutsche Bank AG
  - IBAN: DE 74 860 700 240 119778901
  - BIC (SWIFT): DEUT DE DBLEG

- Check

- Credit Card (Visa, Eurocard/Mastercard, American Express)

The payment must be in EURO. Per each transfer a bank/credit card fee of EURO 16,00 will be charged.

Exception
Bank transfer within Germany.

Cancellations

Cancellation is possible in writing or by telefax only.

Symposium
For cancellation received before August 31, 2010, a fee of EURO 100,00 will be charged. No refunds will be made after September 1, 2010.

Hotel
For cancellations until August 5, 2010 the cancellation fee is EURO 50.00 per room. Later on, you will have to pay the relevant no show fee for each cancelled night (for cancellations until 8 days before arrival min. 50% of the price, up from 7 days before arrival 90% of the price).
Can a true increase in productivity be this easy?

Tim+Dot. Together they redefine productivity in MRI.

www.siemens.com/mri-productivity +49 69 797 6420

Answers for life. SIEMENS
Speakers, Poster Presenters, Moderators and Faculty Members

Aizawa, Susumu  
Graduate School of Engineering  
Kobe University  
1-1 Rokkodai-cho  
Nada-ku, Kobe 657-8501, Japan  
aizawa@stu.kobe-u.ac.jp

Arat, Anil  
Department of Radiology  
University of Wisconsin  
600 Highland Ave CSC C5/394  
Madison, WI 53792, USA  
anilarat@hotmail.com

Auboiroux, Vincent  
Radiology Department  
University Hospitals of Geneva  
1211 Genève 14, Switzerland  
vincen.auboiroux@unige.ch

Blanco Sequeiros, Roberto  
Department of Radiology  
Oulu University Hospital  
P.O.Box 50  
90029 Oulu, Finland  
roberto.blanco@oulu.fi

Block, Walter F.  
Department of Biomedical Engineering  
University of Wisconsin - Madison  
1137 WWB, 1111 Highland Avenue  
Madison, WI 53705, USA  
wfblock@wisc.edu

Bottomley, Paul A.  
Department of Radiology  
Division of MR Research  
Johns Hopkins University  
600 North Wolfe Street  
Baltimore MD 21287, USA  
pabottom@jhmi.edu

Bourrier, Felix  
Klinik für Herzrhythmusstörungen  
Krankenhaus der Barmherzigen Brüder  
Präfängeringe Straße 86  
90309 Regensburg, Germany  
felix.bourrier@std.uniregensburg.de

Busse, Harald  
Department of Diagnostic and Interventional Radiology  
Leipzig University Hospital  
Leipzig, 04103  
harald.busse@medizin.uni-leipzig.de

Celik, Haydar  
Department of Electrical and Electronics Engineering  
Bilkent University  
Ankara, Bilkent 06800, Turkey  
haydar@ee.bilkent.edu.tr

de Bucourt, Maximilian  
Department of Radiology  
Charié – University Medicine  
Charitéplatz 1  
10117 Berlin, Germany  
maximilian.debucourt@charite.de

de Mathelin, Michel  
LSIIT/IRCAD  
University of Strasbourg  
1 Place de l’Hôpital 67091 Strasbourg cedex, France  
demathelin@unistra.fr

Duerk, Jeffrey L.  
Department of Biomedical Engineering  
Case Center for Imaging Research  
Wickenden 307B  
Cleveland, OH 44106, USA  
duerk@case.edu

Ehtiati, Tina  
Center for Applied Medical Imaging  
Siemens Corporation  
601 North Caroline St.  
Baltimore, MD 21287, USA  
tina.ehtiati@siemens.com

Filler, Aaron G.  
Department of Neurosurgery  
Institute for Nerve Medicine  
2716 Ocean Park Blvd  
Santa Monica, CA 90405, USA  
afiller@nerve.md

Fischbach, Frank  
Department of Radiology  
Ottovon-Guericke University  
Leipziger Str. 44  
39120 Magdeburg, Germany  
frank.fischbach@med.ovgu.de

Fritz, Jan  
Russell H. Morgan Department of Radiology and Radiological Science  
Johns Hopkins University School of Medicine  
601 N Caroline St  
Baltimore MD 21287, USA  
fritz@jhu.net
Speakers, Poster Presenters, Moderators and Faculty Members

Fuentes, David
Department of Imaging Physics
The University of Texas MD Anderson Cancer Center
1515 Holcombe Blvd
Houston, TX 77030, USA
tuentesd@gmail.com

Garmer, Marietta
Department of Radiology
Groenemeyer Institute for Microtherapy
Universitätstr. 142
44799 Bochum, Germany
garmer@microtherapy.de

Garnov, Nikita
Department of Diagnostic and Interventional Radiology
Leipzig University Hospital
Liebigstr. 20
04103 Leipzig, Germany
nikita.garnov@medizin.uni-leipzig.de

Gedroyc, Wladyslaw M.
Division of Clinical Sciences
Imperial College London
South Kensington Campus
London SW7 2AZ, UK
w.gedroyc@imperial.ac.uk

Grissom, William A.
Imaging Technologies Laboratory
GE Global Research
Fresno, CA 93711, USA
85748, Garching, Germany
grissom@ge.com

Griswold, Mark
Department of Radiology, Bolwell B 121
11100 Euclid Avenue
Cleveland, OH 44106, USA
mark.griswold@uhhospitals.org

Grüinemeyer, Dietrich H. W.
Groenemeyer Institute for Microtherapy
Universitätstrasse 142
44799 Bochum, Germany
dg@microtherapy.de

Güttler, Felix V.
Department of Radiology
Charité – University Medicine
Charitéplatz 1
10117 Berlin, Germany
felix.guettler@charite.de

Gutberlet, Matthias
Department of Diagnostic and Interventional Radiology
Heart center – University Leipzig
Strümpellstraße 39, 04289 Leipzig
matthias.gutberlet@herzzentrum-leipzig.de

Hall, Walter A.
Department of Neurosurgery
SUNY Upstate Medical University
750 East Adams Street
Syracuse, NY 13210, USA
halw@upstate.edu

Haque, Hasnine A.
Advanced Application Center
GE Healthcare Japan
TC-2F, 4-7-5 Aaishigakko
Hino, Tokyo 191-8503, Japan
akter_hasnine.haque@ge.com

Hata, Nobuhiro
National Center for Image Guided Therapy
Bingham and Women’s Hospital
Harvard Medical School
75 Francis Street
Boston, MA 02115, USA
hata@bwh.harvard.edu

Holbrook, Andrew B.
Radiology
Stanford University
1201 Welch Road
Stanford, CA 94304, USA
aholbrook@stanford.edu

Hosten, Norbert
Institut für Diagnostische Radiologie und Neuroradiologie
Universitätsklinikum Greifswald
Ferdinand-Sauerbruch-Str.
17475 Greifswald, Germany
hosten@uni-greifswald.de

Hushek, Steve
IVIIS Inc.
10437 West Innovation Drive
Milwaukee, WI 53226-4838, USA
shushek@imris.com

Jolesz, Ferenc A.
Department of Radiology
Bingham and Women’s Hospital
Harvard Medical School
75 Francis Street
Boston, MA 02115, USA
jolesz@bwh.harvard.edu
Jungnickel, Kerstin  
Department of Radiology  
Otto-von-Guericke-University  
Leipziger Str. 44  
39120 Magdeburg, Germany  
kerstin.jungnickel@med.ovgu.de

Kahn, Thomas  
Department of Diagnostic and Interventional Radiology  
Leipzig University Hospital  
Leipzig, 20  
04103 Leipzig, Germany  
thomas.kahn@medizin.uni-leipzig.de

Kickhefel, Antje  
MR PMU AW Oncology  
Siemens Healthcare  
Allee am Rothelheimpark 2  
91052 Erlangen, Germany  
antje.kickhefel.ext@siemens.com

Knobloch, Gesine  
Department of Radiology  
Charité – University Medicine  
Charitéplatz 1  
10117 Berlin, Germany  
gesine.knobloch@charite.de

Koken, Peter  
Philips Research Europe  
Röntgenstr. 24  
22335 Hamburg, Germany  
peter.koken@philips.com

Kokuryo, Daisuke  
Molecular Imaging Center  
National Institute of Radiological Sciences  
4-9-1 Anagawa  
Image, Chiba, 263-8555, Japan  
kokuryo@nirs.go.jp

Kraitchman, Dara L.  
Department of Radiology  
Johns Hopkins University  
600 N. Wolfe Street  
Baltimore, MD 21287, USA  
dkraitch@jhmi.edu

Lam, Mie K.  
School of Information Science and Technology  
Tokai University  
1117 Kitakaname  
Hiratsu, Kanagawa, 259-1292, Japan  
m.k.lam@students.uu.nl

Lips, Oliver  
Imaging Systems and Intervention  
Philips Research Europe  
Röntgenstr. 24  
22335 Hamburg, Germany  
oliver.lips@philips.com

Ludewig, Matthias  
Department of Radiology  
Otto-von-Guericke-University  
Leipziger Str. 44  
39120 Magdeburg, Germany  
matthias.ludewig@med.ovgu.de

Krombach, Gabriele A.  
Department of Radiology  
University Hospitals Giessen and Marburg  
– Campus Giessen  
Klinikstraße 23  
35392 Giessen, Germany  
gabriele.krombach@radol.med.uni-giessen.de

Maier, Florian  
Medical Physics in Radiology  
German Cancer Research Center  
Im Neuenheimer Feld 280  
69120 Heidelberg, Germany  
flmaier@gfz.de
Speakers, Poster Presenters, Moderators and Faculty Members

Martin, Alastair  
Department of Radiology and Biomedical Imaging  
University of California  
505 Parnassus Ave, Box 0628  
San Francisco, CA 94143, USA  
amartin@radiology.ucsf.edu

Matsumoto, Makiya  
Graduate School of Engineering  
Kobe University  
1-1 Rokkodai  
Nada, Kobe 657-8501, Japan  
matsumoto@kobe-u.ac.jp

Matsuoka, Yuichiro  
Business Development Department  
Kobe International Medical Foundation  
6-1 Minatojima-Nakamachi  
Chuo-ku, Kobe 650-0046, Japan  
matsuoka@kobeimf.or.jp

Maybody, Majid  
Section of Interventional Radiology  
Memorial Sloan-Kettering Cancer Center  
1275 York Avenue, H118A  
New York, NY 10065, USA  
maybodym@mskcc.org

Ménard, Cynthia  
Department of Radiation Oncology  
Princess Margaret Hospital  
610 University Avenue  
Toronto, M5G 2M9, ON, Canada  
cynthia.menard@rmp.uhn.on.ca

Mache, Michael  
Department of Diagnostic and Interventional Radiology  
Leipzig University Hospital  
Liebigstr. 20  
04103 Leipzig, Germany  
michael.mache@medizin.uni-leipzig.de

Moonen, Christ  
Laboratory for Molecular and Functional Imaging: from Physiology to Therapy  
UWM2331 CNRS/ University Victor Segalen Bordeaux  
146 rue Leo Saignat, Case 117  
33076 Bordeaux, France  
christ@ml.u-bordeaux2.fr

Naka, Shigeyuki  
Department of Surgery  
Shiga University of Medical Science  
Otsu, Shiga 520-2192 Japan  
naka@belle.shiga-med.ac.jp

Neumann, Alexander  
Clinic for Radiology and Nuclear Medicine  
University/Medical Center Schleswig-Holstein, Campus Lübeck  
Ratzeburger Allee 160  
23538 Lübeck, Germany  
alexander.neumann@uksh.de

Oduneye, Samuel  
Medical Biophysics  
University of Toronto – Sunnybrook Hospital  
2075 Bayview Avenue  
Toronto, M4N 3M5, ON, Canada  
soduneye@uhntronto.ca

Özdal, Emre  
Institute of Biomedical Engineering  
Bordoži University Kandilli Kampüsü  
34684 Cengelköy  
İstanbul, Turkey  
emre.ozdal@boun.edu.tr

Pereira Philippe L.  
Department of Radiology, MinimallyInvasive Therapies and Nuclear medicine  
SLK-Kliniken  
Am Grundbrunnen 20-26  
74078 Heilbronn, Germany  
philippe.pereira@slk-kliniken.de

Petruca, Lorena  
Radiology Department  
University Hospitals of Geneva  
Rue GabriellePerret-Gentil 4  
1211 Genève 14, Switzerland  
lorena.petruca@unige.ch

Qin, Lei  
Department of Radiology  
Brigham and Women’s Hospital  
Harvard Medical School  
221 Longwood Ave, LIRCCO10d  
Boston, MA 02115, USA  
leiqin@bwh.harvard.edu
Speakers, Poster Presenters, Moderators and Faculty Members

Stafford, Jason R.
Department of Imaging Physics
The University of Texas M. D. Anderson Cancer Center
1515 Holcombe Boulevard
Houston, TX 77030, USA
jstafford@mdanderson.org

Streicher, Markus N.
Neurophysics
Max Planck Institute for Human Cognitive and Brain Sciences
Stephanstraße 1a
04103 Leipzig, Germany
streicher@cbs.mpg.de

Streitparth, Florian
Department of Radiology
Charité – University Medicine
Charitéplatz 1
10117 Berlin, Germany
florian.streitparth@charite.de

Takao, Yoshie
Department of Computer Science and Systems Engineering
Graduate School of Engineering, Kobe University
1-1 Rokkodai
Nada, Kobe 657-8501, Japan
takao@kaede.cs.kobe-u.ac.jp

Teichgräber, Ulf
Department of Radiology
Charité – University Medicine
Charitéplatz 1
10117 Berlin, Germany
ulf.teichgraeb@charite.de

Tempany, Clare
Department of Radiology
Brigham and Women’s Hospital
Harvard Medical School
75 Francis Street
Boston, MA 02115, USA
tempany@bwh.harvard.edu

Terraz, Sylvain
Department of Radiology
University Hospitals of Geneva
Rue Gabrielle Parent/Genil 4
1211 Geneva 14, Switzerland
sylvain.terraz@hcuge.ch

Thörmer, Gregor
Department of Diagnostic and Interventional Radiology
Leipzig University Hospital
Liebigstr. 20
04103 Leipzig, Germany
gregor.thoermer@medizin.uni-leipzig.de

Truwit, Chip
Department of Radiology
Hennepin County Medical Center
University of Minnesota
701 Park Avenue
Minneapolis, MN 55415, USA
truwit@umn.edu

Tunecali, Kemal
Department of Radiology
Brigham and Women’s Hospital
Harvard Medical School
75 Francis Street
Boston, MA 02115, USA
ktuncali@partners.org

Turner, Robert
Neurophysics
Max Planck Institute for Human Cognitive and Brain Sciences
Stephanstraße 1A
04103 Leipzig, Germany
turner@cbs.mpg.de

Tyc, Richard
Monteris Medical Inc.
10078 Innovation Dr.
Winnipeg, R3T 6C2, MB, Canada
ryc@monteris.com

U-Thanual, Paweena
Department of Mechanical and Materials Engineering
Percutaneous Surgery Lab (Perk Lab), Queen’s University
Goodwin Hall, 25 Union St.
Kingston, K7L 3N6, ON, Canada
paweena.urthanual@queensu.ca

Valdeig, Steffi
Department of Radiology and Radiological Science Institution
The Johns Hopkins Hospital
600 North Wolfe Street
Baltimore, MD 21287, USA
svaldei1@jhmi.edu
<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vartholomeos, Panagiotis</td>
<td>Department of Radiology, Brigham and Women's Hospital, Harvard Medical School, Boston, MA 02115, USA</td>
</tr>
<tr>
<td>Viallon, Magalie</td>
<td>Radiology Department, University Hospitals of Geneva, Rue Gabrielle-Fenret Cernié 4, 1211 Geneva 14, Switzerland</td>
</tr>
<tr>
<td>Wacker, Frank</td>
<td>Department of Radiology, The Johns Hopkins Hospital, 600 N. Wolfe Street, Baltimore, MD 21287, USA</td>
</tr>
<tr>
<td>Wang, Peng</td>
<td>Department of Medical Physics, University of Wisconsin, 1111 Highland Avenue, Madison, WI 53703, USA</td>
</tr>
<tr>
<td>Weiss, Clifford</td>
<td>Department of Radiology, The Johns Hopkins Hospital, 600 N. Wolfe Street, Baltimore, MD 21287, USA</td>
</tr>
<tr>
<td>Weiss, Steffen</td>
<td>Imaging Systems and Intervention, Philips Research Europe, Röntgenstr. 24, 22335 Hamburg, Germany</td>
</tr>
<tr>
<td>Will, Karl</td>
<td>Department of Healthcare Telematics and Medical Engineering, Otto-von-Guericke-University of Magdeburg, P.O. Box 4120, 39016 Magdeburg, Germany</td>
</tr>
<tr>
<td>Willberger, Georg</td>
<td>Department of Visceral-, Transplantation-, Thoracic- and Vascular Surgery, Leipzig University Hospital, Liebigstr. 20, 04103 Leipzig, Germany</td>
</tr>
<tr>
<td>Wonneberger, Uta</td>
<td>Department of Radiology, Charité – University Medicine, Charitéplatz 1, 10117 Berlin, Germany</td>
</tr>
<tr>
<td>Woodrum, David A.</td>
<td>Radiology Department, Mayo Clinic, 200 First Street SW, Rochester, MN 55905, USA</td>
</tr>
<tr>
<td>Xiao, Yueyang</td>
<td>Department of Radiology, PLA General Hospital, 28 Fuxing Road, Beijing, 100853, China</td>
</tr>
<tr>
<td>Zhang, Shuo</td>
<td>Biomedizinische NMR Forschungs GmbH, am Max-Planck-Institut für biophysikalische Chemie, Am Fassberg 11, 37077 Göttingen, Germany</td>
</tr>
<tr>
<td>Zhao, Lei</td>
<td>Department of Radiology, Brigham and Women's Hospital, Harvard Medical School, 75 Francis Street, Boston, MA 02115, USA</td>
</tr>
</tbody>
</table>
Acknowledgement

The symposium is supported by unrestricted educational grants from

**PRIME SPONSORS**

**IMRIS**

**PHILIPS**

**SIEMENS**

**SPONSORS**

As per date of printing.
SurgiVision

A Leading Developer of

NEXT GENERATION

INTERVENTIONAL MRI TECHNOLOGIES

Two Platforms.
Two Total Clinical Solutions.

CLEARPOINT

A platform to enable
intra-procedural MRI-guided
stereotactic procedures
in the brain.

CLEARTRACE

A platform for
MRI-guided catheter-based
interventional procedures
in the heart.

SurgiVision intends to obtain CE approval in the future. Information for educational purposes only.