

## STUDY GROUP SESSION

**Title:** High Field Systems & Applications *and* MR Safety Joint Session

**Day:** Monday, 24 April 2017

**Time:** 13:45 - 15:45

**Room #:** Rm 323ABC

**High Field** Chair, Peter R. Luijten, Ph.D.; Vice Chair, Thoralf Niendorf, Ph.D.; Secretary, Anke Henning, Ph.D.; Past-Chair, Mark E. Ladd, Ph.D.;  
**Study Group** Trainee Representative, Katharina Paul, Ph. D.; SMRT Representative, Wendy Strugnell, B.App.Sc.(MIT)  
**Committee:** 2017-2018 Incoming Committee : Secretary, Gregory J. Metzger, Ph.D.; Trainee Representative, Aurelien Massire, Ph.D.;  
SMRT Representative, Titti Owman, (R)(CT)(MR)FSMRT

**MR Safety** Chair, Lawrence L. Wald, Ph.D.; Vice Chair, Cornelius A. T. van den Berg, Ph.D.; Secretary, Ross D. Venook, Ph.D.;  
**Study Group** Past-Chair, Devashish Shrivastava, Ph.D.; Trainee Representative, Oliver Kraff, Ph.D.; SMRT Representative, Titti Owman, (R)(CT)(MR), FSMRT  
**Committee:** 2017-2018 Incoming Committee : Secretary, Christopher M. Collins, Ph.D.; Trainee Representative, Wyger M. Brink, Ph.D.

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13:45	Business Meeting: High Field Study Group	Peter R. Luijten, Ph.D. University Medical Center Utrecht, The Netherlands
13:50	Business Meeting: MR Safety Study Group	Lawrence L. Wald, Ph.D. A.A. Martinos Center MGH, USA
<b>In Memoriam</b>		
13:55	In Memoriam Graham Wiggins	Daniel K. Sodickson, M.D., Ph.D. New York University School of Medicine, USA
<b>Plenary Session</b>		
14:05	UHF & Biological Hazards	Oliver Speck, Ph.D. Otto-von-Guericke-University Magdeburg, Germany
14:20	How To Get An UHF Project Up & Running	Gregory J. Metzger, Ph.D. University of Minnesota, USA
<b>Rapid-Fire Poster Presentations</b>		
14:35	<i>Towards Opto-fMRS: Ultra High Field MRS Measurement of T2* Changes Due to Optogenetic Stimulation</i>	Jamie P. Near, Ph.D. McGill University, Canada
	<i>Longitudinal Study of MS lesions using Multi-contrast Ultra-High Field (7Tesla) MRI</i>	Sanjeev Chawla, Ph.D. University of Pennsylvania, USA
	<i>From Medulla to Lower Cervical Levels, a Multi-Parametric Quantitative MR Investigation Dedicated to the Diffuse Alterations of the Spinal Cord at 7T: First Insights into Amyotrophic Lateral Sclerosis</i>	Aurélien Massire, Ph.D. CRMBM UMR 7339 CNRS, France
	<i>Unified Proton &amp; Fluorine Imaging of Small &amp; Low Spin Density Samples at a Human Whole-Body 7 T MRI</i>	Christian Bruns, Dipl. Phys. Otto-von-Guericke University, Germany
	<i>Utilization of Slotted Antennas for Capturing Ideal Current Patterns at Ultra High Field</i>	Leeor Alon, Ph.D. New York University School of Medicine, USA
	<i>Human Brain Tissue Equivalent MRI Phantom for Well Defined T<sub>1</sub> &amp; T<sub>2</sub> Times At 3 &amp; 7 Tesla</i>	Michael Woletz, M.Sc. Medical University Vienna, Austria
	<i>Ultra High Field Regional Quantitative Susceptibility Mapping in Patients with Relapsing-Remitting Multiple Sclerosis: A Pilot Study</i>	Jon O. Cleary, M.D., Ph.D. University of Melbourne, Australia
	<i>Flexible &amp; Compact Hybrid Metasurfaces for Enhanced Ultra High Field In Vivo Magnetic Resonance Imaging</i>	Rita Schmidt, Ph.D. Leiden University Medical Center (LUMC), The Netherlands
	<i>Diffusion-Weighted Split-Echo RARE Imaging Free of Geometric Distortion for Renal MRI at Ultrahigh Fields</i>	Joao dos Santos Periquito, M.Sc. Max Delbrueck Center for Molecular Medicine, Germany
	<i>Contrast Deposition Within the Dentate Nucleus After Repetitive Administration: Comparison of Linear versus Macrocyclic Gadolinium Contrast Agents</i>	Eugene Huo, M.D. University of California at San Francisco, USA

	<i>In Vivo Measurements of Gadolinium Accumulation in Bone of Healthy Individuals Following Administration of Gadolinium-Based Contrast agents: A Pilot Study</i>	Michelle Lord, B.Sc. McMaster University, Canada
	<i>Comparison of Gd-DTPA-BMA versus Gd-DOTA of Gadolinium Retention in Human Bone Tissue with Renal Function</i>	Takaki Maeda, M.D. Kobe University Hospital, Japan
	<i>Real-Time Measuring of Active Medical Devices Malfunction, Rectification &amp; Induced Gradient Voltages During MRI Exam: Low-Frequency Voltage Sensor for MRI Safety Test</i>	Thérèse Barbier, M.Sc. IADI, U947, INSERM, Université de Lorraine, France
	<i>A Personalized SAR Model for Subject-Specific RF Safety</i>	Hongbae Jeong, M.Sc. FMRIB Centre, University of Oxford, UK
	<i>The Ultimate Local SAR in Realistic Body Models: Preliminary Convergence Results</i>	Bastien Guerin, Ph.D. Massachusetts General Hospital, USA
	<i>Morphing &amp; Posing of Computational Anatomical Models: Enhanced Patient-Specific MRI RF Exposure Prediction</i>	Manuel Murbach, Ph.D. IT'IS Foundation, Switzerland
	<i>Assessment of Specific Absorption Rate &amp; Energy Deposition in Over 14,000 Clinical MRI Examination at 1.5 &amp; 3 Tesla Scanners</i>	Amir Ali Rahsepar, M.D. Northwestern University, USA
	<i>RF Safety Assessment of a 32-Channel Integrated Body Coil for 7 Tesla: Thermal Dose Evaluation at High SAR Level</i>	Thomas M. Fiedler, M.Sc. German Cancer Research Center (DKFZ), Germany
	<i>Low Heating <math>B_1</math> Mapping in Parallel Transmit for Deep Brain Stimulators</i>	Clare E. McElcheran, Ph.D. Sunnybrook Health Sciences Centre
15:15	Cap On/Cap Off: What Do You Know about UHF and/or Safety	Cornelis A.T. van den Berg, Ph.D. University Medical Center Utrecht, The Netherlands
15:45	Adjournment	