International conference

*Functional MRI for renal parenchymal disease: Ready for clinical practice?*

October 26–28th 2015

Bordeaux
**Invitation**

› The technology of functional renal MRI has matured significantly over the past decade, and is currently showing great promise to impact on clinical management of patients with kidney disease, and to provide new tools to support drug development in nephrology.

› The objective of this conference is to create the foundations for an international scientific community in the field of functional renal MRI, and catalyse the setup of international collaborations addressing the key future challenges of this technology.

**Preliminary Program**

**Day 1 – 26 October 2015**

**Introduction**
› Why this meeting and why now? N. Grenier (Bordeaux, Fr)

**Nephrology perspectives**
› Epidemiology of CKD and ESRD. What do we need for prediction of renal outcome? What are the opportunities for functional MRI? C. Combe (Bordeaux, FR)
› Future clinical applications of MR in nephrology. Ph. Kalra (UK)
› The potential role of imaging biomarkers in systems biology approaches in renal medicine.
› Questions and panel discussion

**Current issues in functional renal MRI**
› Detailing renal hemodynamics and oxygenation by an integrated approach of parametric MRI and physiological measurements: insights and open questions. A. Pohlmann (Berlin, D)
› Gadolinium based contrast agent injection for renal MRI in patients with advanced renal impairment; safety considerations. S. Morcos (Sheffield, UK)
› Translation into clinical practice: the need for international collaboration. S. Sourbron (Leeds, UK)
› Questions and panel discussion

**Day 2 – 27 October 2015**

**Diffusion-weighted imaging (DWI, DTI, IVIM)**
› DWI & DTI methods. F. de Keyzer (Leuven, B)
› IVIM methods. R. Lanzman (Dusseldorf, G)
› Preclinical and clinical evidence of utility. M. Notohamiprodjo (Tuebingen, G)
› Questions and panel discussion
Dynamic contrast-enhanced MRI
- Data acquisition and analysis methods. D. Buckley (Leeds, UK)
- Preclinical evidence and validation studies. N. Grenier (Bordeaux, F)
- Impact on differential renal function measurement. M. Claudon (Nancy, Fr)
- Questions and panel discussion

BOLD imaging
- BOLD methods. M. Meier (Hannover, G)
- How bold is renal BOLD MRI: (Pre)clinical evidence, physiological interpretation and validation. T. Niendorf (Berlin, G)
- Evidence of clinical utility in transplants and native kidneys. S.C. Textor (Rochester, USA)
- Questions and panel discussion

The dirty little details
- Measuring Singl-Kindney GFR with DCE-MRI: software demo. Anita Banerji (Leeds, UK)
- Measuring the perfusion fraction with IVIM: software demo. TBC
- ASL acquisition—an interactive session. F. Nery (London, UK)

Day 3 - 28 October 2015

Arterial Spin Labelling
- ASL methods. S. Francis (Nottingham, UK)
- Preclinical validations. K. Hueper (Hannover, G)
- Evidence of clinical utility in transplants and native kidneys. I. Gordon (London, UK)
- Questions and panel discussion

Emerging technologies
- Sodium MR imaging. F Zoellner (Mannheim, G)
- MR-Elastography. R. Sinkus (London, UK)
- Quantitative susceptibility mapping and susceptibility tensor imaging of the kidney
- Questions and panel discussion

Adjourn
- Closing remarks & future meetings S. Sourbon (Leeds, UK)
Organising committee

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› Dr. Steven Sourbon  
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Information and registration

sites.google.com/site/renalmriworkshop