Curriculum vitae Prof. Dr. rer. nat. med. habil. Jürgen R. Reichenbach

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Academic1982-1988Studies of Physics, University of Karlsruhe (TH)Education1988Diploma Physics1992PhD in Physics (Dr. rer. nat.), University of Karlsruhe (TH)2001Habilitation, Venia Legendi Diagnostic Imaging, Friedrich-Schiller-University Jena

Professional 1992–1993 Post-Doc, University Montpellier II, France **Career** 1994 Research Assistant, Institute of Diagnostic

Research Assistant, Institute of Diagnostic Radiology, Heinrich

Heine University Düsseldorf

1995–1996 Research Scholarship of DFG, Mallinckrodt-Institute of Radiol-

ogy, St. Louis, USA

1997–2002 Scientific Staff Member, Institute for Diagnostic and Interven-

tional Radiology, Friedrich-Schiller-University Jena

Witte & J.R. Reichenbach) (INST 1757/18-1 FUGG).

2002–2007 Senior Assistant, Institute for Diagnostic and Interventional

Radiology, Friedrich-Schiller-University Jena

2007– Full Professor (W2), Medical Physics / Imaging, Institute for

Diagnostic and Interventional Radiology, University Hospital -

Friedrich-Schiller-University Jena

Funding (last 5 years)

DFG	2020–2022	Effects of emotion-focused vs. cognitive interventions of schema therapy on emotion regulation deficits in females suffering borderline personality disorder
Carl-Zeiss- Foundation	2019–2022	Digitization - explore the basics, use applications. A virtual workshop for digitization in the sciences; Pilot Project P8: Use and Reuse of MRI Data in Biomedical Research Environments
DFG	2017–2020	Magnetic Properties of Normal Appearing Brain White Matter in Multiple Sclerosis
DFG	2017–2020	Development of MR-based procedures and technologies for non-invasive in-vivo assessment of mechanical loading of tis- sues: Movement and straining of soft tissue structures using the knee joint as example system
DFG	2014–	Large equipment grant "High-Field Small Animal MRI" (O.W.

Publications (max. 10 most relevant)

1. A. Joerk, M. Ritter, N. Langguth, R. A. Seidel, D. Freitag, K.-H. **Herrmann**, A. Schaefgen, M. Ritter, M. Günther, C. Sommer, D. Braemer, J. Walter, C. Ewald, R. Kalff, J. R. **Reichenbach**, M.

- Westerhausen, G. Pohnert, O. W. Witte, and K. Holthoff. "Propentdyopents as Heme Degradation Intermediates Constrict Mouse Cerebral Arterioles and Are Present in the Cerebrospinal Fluid of Patients With Subarachnoid Hemorrhage". In: *Circulation research* 124.12 (2019), e101–e114. DOI: 10.1161/CIRCRESAHA.118.314160
- B. Christ, U. Dahmen, K.-H. Herrmann, M. König, J. R. Reichenbach, T. Ricken, J. Schleicher, L. O. Schwen, S. Vlaic, and N. Waschinsky. "Computational Modeling in Liver Surgery." In: Frontiers in Physiology 8 (2017), p. 906. DOI: 10.3389/fphys.2017.00906
- 3. A. Deistung, F. Schweser, and J. R. **Reichenbach**. "Overview of quantitative susceptibility mapping." In: *NMR in Biomedicine* 30.4 (2017). DOI: 10.1002/nbm.3569
- 4. K.-H. **Herrmann**, M. Krämer, and J. R. **Reichenbach**. "Time Efficient 3D Radial UTE Sampling with Fully Automatic Delay Compensation on a Clinical 3T MR Scanner." In: *PloS One* 11 (3 2016), e0150371. DOI: 10.1371/journal.pone.0150371
- 5. M. Krämer, K.-H. **Herrmann**, J. Biermann, S. Freiburger, M. Schwarzer, and J. R. **Reichenbach**. "Self-gated cardiac Cine MRI of the rat on a clinical 3T MRI system." In: *NMR in Biomedicine* 28 (2 2015), pp. 162–167. DOI: 10.1002/nbm.3234
- A. Deistung, A. Schäfer, F. Schweser, U. Biedermann, R. Turner, and J. R. Reichenbach. "Toward in vivo histology: a comparison of quantitative susceptibility mapping (QSM) with magnitude-, phase-, and R2*-imaging at ultra-high magnetic field strength". In: *Neuroimage* 65 (2013), pp. 299–314. DOI: 10.1016/j.neuroimage.2012.09.055
- 7. F. Schweser, A. Deistung, B. W. Lehr, and J. R. **Reichenbach**. "Quantitative imaging of intrinsic magnetic tissue properties using MRI signal phase: an approach to in vivo brain iron metabolism?" In: *Neuroimage* 54.4 (2011), pp. 2789–2807. DOI: 10.1016/j.neuroimage.2010.10.070
- 8. E. M. Haacke, Y. Xu, Y.-C. N. Cheng, and J. R. **Reichenbach**. "Susceptibility weighted imaging (SWI)". in: *Magn Reson Med* 52.3 (2004), pp. 612–618. DOI: 10.1002/mrm.20198
- 9. J. R. **Reichenbach**, R. Venkatesan, D. A. Yablonskiy, M. R. Thompson, S. Lai, and E. M. Haacke. "Theory and application of static field inhomogeneity effects in gradient-echo imaging". In: *J Magn Reson Imaging* 7.2 (1997), pp. 266–279. DOI: 10.1002/jmri.1880070203
- 10. J. R. **Reichenbach**, R. Venkatesan, D. J. Schillinger, D. K. Kido, and E. M. Haacke. "Small vessels in the human brain: MR venography with deoxyhemoglobin as an intrinsic contrast agent". In: *Radiology* 204.1 (1997), pp. 272–277. DOI: 10.1148/radiology.204.1.9205259