

## **Cornelius J Faber, PhD**

### **University of Münster**



Cornelius Faber is Professor of Experimental Magnetic Resonance at the University of Münster, Germany, associated to the Clinic of Radiology. He works in the field of preclinical MRI, and is dedicated to the development of novel MR methods to push the limits of sensitivity and resolution. Cornelius' main interests are in neuroimaging using multimodal MRI and in molecular and cellular MRI including infection imaging. His laboratory develops and implements novel MR techniques that extend the limits of MRI in terms of spatial and temporal resolution, as well as sensitivity and specificity for physiological, structural and molecular changes in the organism. His laboratory has made major contributions to single cell tracking by MRI and pioneered the combination of functional MRI with optogenetic control and simultaneous fluorescence readout of neural activity. Novel imaging methods are being applied to a wide range of disease models, including cancer, neurological disorders and cardiovascular disease.

Cornelius is actively involved in the ESMRMB and other international imaging societies. He was a board member/treasurer of the German Chapter of ISMRM (2012/14-2017). He is currently a board member of the European Society for Molecular Imaging (ESMI, 2018-2024). For ESMRMB, he has served as a member of the Education and Workshop Committee (2018-2019) and as Treasurer (2019-2021). He was involved in the organization of the 2019-2021 Annual Meetings, and in 2020 and 2021 he chaired the organising committee for the Preclinical Day, which precedes the Annual Meetings. Cornelius has organised three ESMRMB Lectures on MR (Small Animal MR, 2012, 2014, 2017), and is regularly faculty for the ESMRMB eLearning course on Practical Physics.

Cornelius studied physics and received a PhD from the University of Bayreuth, Germany, for his work on NMR studies of lentiviral protein and RNA structures. In 2000 he joined the department of Axel Haase at the University of Würzburg, where he built up the 17.6 T high-field MRI laboratory and habilitated in experimental physics in 2007. In 2008 he accepted a call to the Medical Faculty of the University of Münster, where he has established a preclinical MRI laboratory. He was part of the recent Cluster of Excellence Cells in Motion and part of four different Collaborative Research Centres of the German Research Foundation. He has (co-)authored more than 150 scientific articles and book chapters.

Outside of work, Cornelius is a passionate cyclist and mountaineer.