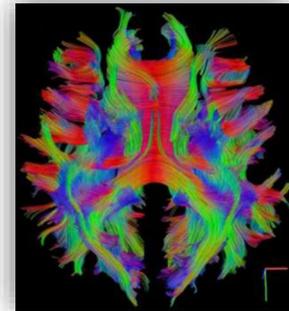
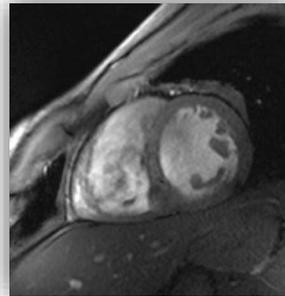




The [Department of Cardiovascular Imaging of the Comprehensive Heart Failure Center](#) develops, deploys, and performs research on a variety of biomedical imaging technologies, in particular ultra-high-field MRI of the heart and organs interacting with the heart (e.g brain). Imaging research is supported by an RF-lab for MRI hardware developments, high-performance computational cardiology and using of artificial intelligence methods for imaging data processing.

We operate the **Siemens Magnetom Terra 7T** MRI system with parallel transmit and multi-nuclei-imaging support. The Bruker Pharmascan 70/16 MRI 7T system is available for the pre-clinical studies. By special organizational measures full translational imaging workflow, i.e. from mouse over pigs to humans (and back), is available. Further in-house experimental imaging modalities are small animal PET and SPECT/CT as well as ultrasound. Other clinical imaging modalities (3T MRI, PET/CT, US, etc.) are available through close local collaborations with other departments of Würzburg University and University Clinics.



We seek a **post-doctoral scientist** for working on cutting-edge cardiovascular 7T MRI methods. The work will be performed in close collaboration with the other projects of the Comprehensive Research Center entitled “*Cardo-Immune-Interfaces*” (SFB1525). The focus of the research project is establishment of **<sup>19</sup>F-labeled cell MRI** in the at 7T. The ideal candidate would be an enthusiastic, visionary and collaboration-oriented scientist with an intrinsic scientific motivation. Experience with Siemens IDEA pulse sequence programming is essential (ideally, using pTX systems). Basic knowledge on in-house development and optimization of RF-arrays for 7T MRI would be helpful. The main activities will focus on:

- Development, adaptation, optimization and deployment MRI pulse sequences for cardiac <sup>19</sup>F MRI
- Assistance in optimization of the in-house designed <sup>19</sup>F/<sup>1</sup>H RF-arrays for 7T MRI optimized for the large animals
- Establishing and performing scientific large animal MRI studies with <sup>19</sup>F labeled cells in collaboration with the other CRC projects.

Contributions to acquisition of third party funding, supervision of PhD and/or MD doctoral students, close collaboration with the members of CRC of *Cardo-Immune-Interfaces*, medical doctors, veterinarians and further scientists will be expected. We offer a full-time post-doctoral position with market conform wages according to German payment grade table (TVL-E13) in a large, multidisciplinary research center in the heart of Europe. Disabled applicants will be considered preferentially in case of equivalent qualifications.

Applicants should submit their application documents (motivation letter, full CV including certificates, names and addresses of two references) till **20.02.2022** in a single PDF file via the following contact persons: Prof. Laura Schreiber ([Schreiber\\_L@ukw.de](mailto:Schreiber_L@ukw.de)) and Dr. Maxim Terekhov ([Terekhov\\_M@ukw.de](mailto:Terekhov_M@ukw.de)).