

PhD position in preclinical MRI

Open PhD position in preclinical MRI to be filled at the Cardiovascular Imaging Group at the Heart Centre, University Hospital Bonn, Germany.

We are an interdisciplinary team consisting of physicists and physicians working on the development of novel MRI techniques to study the pathogenesis and treatment of cardiovascular diseases in animal models and in patients.

PhD position (3 years, TVL E13, 75%) for a physicist, engineer, or for candidates from fields related to MRI with interest in developing novel 4D flow acquisition techniques to diagnose cardiovascular diseases (e.g. atherosclerosis, aortic diseases).

Experience in one or more of the following fields is a requirement:

- Good programming skills (e.g. Matlab, Python, C++)
- Pulse sequence programming (Bruker)
- Image reconstruction
- Image analysis/simulations
- Field and motion correction
- Computational fluid dynamics simulations

Start date: flexible (latest January 2023)

Available Facilities:

11.7 T MRI system (Bruker Biospec with cryoprobe), mouse facility, biochemical lab, computational infrastructure for data analysis and simulations, access to human scanners (1.5T and 3.0 T).

Applications and further information:

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