

The **European Institute for Molecular Imaging**, University Hospital of Münster, Germany offers a position, limited to 3 years with the possibility of extension, a

Postdoctoral Researcher (gn*) in PET/MR Motion Correction (physics, engineering, imaging)

Ref. 05081

Salary according to TV-L E13
Full-Time

(*gn=gender neutral)

We are looking for a postdoctoral scientist to develop and characterize PET/MR motion correction approaches for clinical PET/MRI. The applicant will work on experimental clinical PET/MR protocols (using MR coil fingerprints navigation) for PET motion correction in close collaboration with international research partners. Besides evaluations on patient data, a specific focus will be on simulation and validation of motion correction techniques using a dedicated in-house developed anthropomorphic thorax phantom that is capable to mimick respiratory and cardiac motion (see DOI: 10.1088/1361-6560/aaa201). The human thorax phantom should be further developed to allow most realistic motion simulations within a clinical PET/MR.

The European Institute for Molecular Imaging (EIMI) is a central scientific institution at the University of Münster. Faculties involved comprise Medicine, Chemistry and Pharmacy, Mathematics and Computer Science, and Physics. The EIMI holds various preclinical imaging devices and techniques (PET, SPECT, CT, MRI, OI, PA) and has access to high-end clinical imaging devices (e.g. Siemens Biograph mCT PET/CT, Siemens Biograph mMR PET/MR) through a close collaboration with the Department of Nuclear Medicine, University Hospital of Münster.

The qualified candidate should have a Doctoral (Ph.D.) degree in physics, engineering, imaging or a related scientific discipline. The candidate should be well organized and able to work independently, but should also be a team player. Experience in MR or PET imaging will be required for the present position. Applicants with experience in MR-based motion estimation or PET motion correction will be given preference. Experience in phantom development and programming skills (Matlab, C, python, etc.) are a plus.

We are an international group, so good written and oral communication skills in English are required. The ideal candidate will be interested in developing her/his own research profile including the ability to acquire independent third party funding. We also offer support with obtaining a postdoctoral lecture qualification (Habilitation).

For any questions, feel free to contact **Prof. Dr. Klaus Schäfers** at [schafkl\(at\)uni-muenster\(dot\)de](mailto:schafkl@uni-muenster.de).

Please send your application including a CV, a letter describing your motivation to work with us and 2 recommendation letters until **09.09.2020** to **Personalgewinnung des Universitätsklinikums Münster, Bewerbermanagement, Domagkstraße 5, 48149 Münster** or via **e-mail to [Bewerbung\(at\)ukmuenster\(dot\)de](mailto:Bewerbung@ukmuenster.de)**.

Applications of women are specifically invited. In the case of similar qualifications, competence, and specific achievements, women will be considered on preferential terms within the framework of the legal possibilities. Handicapped candidates with equivalent qualifications will be given preference.

The **University Hospital of Münster** is one of the leading hospitals in Germany. Such a position cannot be achieved by size and medical successes alone. The individual commitment counts above all. We need your commitment so that even with little things we can achieve great things for our patients. There are many possibilities open for you so that you may develop with them.