

## Job Vacancy

The University Hospital Essen offers first class medical services in the Ruhr metropolis. Every year, 225.000 patients are treated in 30 clinics, 27 institutes and specialized centers. The over 8.000 employees offer medical care with state-of-the art diagnostics and therapies, which meet highest international standards. Patient care is connected with basic and translational research at an internationally competitive level.

The **research group High-Field and Hybrid MR-Imaging** (Univ.-Prof. Dr. H. Quick) of the University Hospital Essen is currently seeking for the **Erwin L. Hahn Institute for Magnetic Resonance (ELH)** (UNESCO Welterbe Zeche Zollverein) a

### **Postdoc Researcher (m/f/d)**

(pay grade: E 13 TV-L full time – temporary employment)

The pay grade classification depends on the personal and collective legal requirements. The employment is provided for the duration of the third-party funded project for a 12 month limited period. An extension might be possible according to available third-party funding and the maximum employment duration as given by law regarding scientific fixed-term contracts (Wissenschaftszeitvertragsgesetz).

The **Erwin L. Hahn Institute for Magnetic Resonance Imaging (ELH)** is an interdisciplinary research centre that is located on the campus of **UNESCO World Cultural Heritage Zollverein Essen**. The institute was founded as a central institution of the University of Duisburg-Essen and the Radboud Universiteit Nijmegen (The Netherlands) in 2005. The new centrepiece of the institute is a 7-Tesla ultrahigh-field human whole-body MRI system (MAGNETOM Terra, Siemens Healthcare GmbH) that was installed in 2020. The nine PI groups at the ELH dedicate their research to the development and application of ultra-high field magnetic resonance imaging (UHF-MRI), particularly in cognitive neurosciences, clinical diagnostic imaging and metabolic imaging in other body regions.

#### **The Project:**

The EU-Project MITI "Non-ionizing Metabolic Imaging for predicting the effect of and guiding Therapeutic Interventions" aims to broaden and mature metabolic 7-Tesla human MRI (e.g.  $^1\text{H}$ ,  $^{31}\text{P}$ ,  $^{23}\text{Na}$ ) towards clinical application and validation.

#### **Your tasks:**

- programming and optimization of an MRI sequence enabling metabolic imaging on a 7-Tesla MRI system (Siemens)
- development of an experimental setting/prototype (phantom and MRI sequence) to demonstrate feasibility and for further optimization of the method
- implementation of the technique on the 7T MRI system
- provide active installation support of the technique to other project sites in the EU-MITI project

#### **Your profile:**

- Finished Dissertation (PostDoc) in physics, medical sciences, nature sciences, engineering or comparable qualification
- Background and experience with magnetic resonance, MRI, MRS, ultrahigh-field MRI, and/or metabolic MRI
- Programming skills and experience with (Siemens) MR Sequence development
- Very good communication skills and good command of English in both, oral and written form
- Good communication skills and command of German in both, oral and written form is a plus

The University Hospital Essen is an equal opportunity employer. Female scientists are particularly encouraged to apply. The participation in secondary employment depends on the

„Hochschulneben tätigkeitsverordnung“ of North-Rhine Westphalia. Disabled applicants will be preferentially considered in case of equivalent qualification. This position is also available as part-time employment (75% part-time).

Please send your complete application documents preferably as a single pdf file within 2 weeks after publication of this advertisement with reference to tender **number 1279** to [bewerbung@uk-essen.de](mailto:bewerbung@uk-essen.de) or in writing to the University Hospital Essen, Personnel Department, Hufelandstraße 55, 45147 Essen.

We use your data exclusively for application purposes in accordance with the applicable data protection regulations. Further information can be found in the privacy statement on our homepage at: [www.uk-essen.de](http://www.uk-essen.de)