The German Diabetes Center (DDZ) is the Leibniz Institute for Diabetes Research at Heinrich Heine University in Düsseldorf and funded by the Federal Ministry of Health and Ministry of Innovation, Science and Research of the State of North Rhine-Westphalia. The DDZ as an interdisciplinary institute links molecular and cell biological basic research with clinical investigation.

The DDZ aims at developing new approaches for the prevention, early detection, diagnosis and treatment of diabetes mellitus and at improving the treatment of its complications. The DDZ is a member of the German Center for Diabetes Research (DZD).

The Research Group “Metabolic Imaging” (Head: Dr. Jong-Hee Hwang) within the Institute for Clinical Diabetology at the German Diabetes Center (Director: Prof. Dr. Michael Roden) is looking for a

**Postdoc / advanced PhD Student**

We are searching for a highly motivated candidate to work in a multidisciplinary and international team. The DDZ is currently equipped with a research-dedicated 3 T Philips human MRI scanner with MR elastography and multinuclear capability, and an 11.7-T Bruker experimental MR scanner operated on ParaVision® 6.

The major collaborating group, Prof. Roden and his team focus on investigating the role of energy metabolism in insulin resistance and diabetes mellitus (e.g. Hernández EÁ et al, J Clin Invest 2017; Koliaki C et al, Cell Metab, 2015; Szendrödi J et al, PNAS, 2014).

The Metabolic Imaging group focuses on developing MR methods for assessing content, composition and/or kinetic properties of lipid, high energy phosphates and glycogen in the liver and muscle, and neurometabolites in relation with diabetes and other metabolic alterations (e.g. Laufs A et al, Mag Reson Med 2014, Bierwagen A, NMR Biomed 2015; Livingstone et al MAGMA 2014; Hwang et al (review) 2015 Exp Mol Med)

**A successful applicant will be responsible for and contribute to:**

- Development of novel MRI and multinuclear MRS methods (H-1, P-31, C-13, and F-19,) for metabolism in vivo in various organs of humans and animal models.
- Compilation of operating protocols for radiographers in Metabolic Imaging group
- Post-acquisition processing
- Writing publications and grants

**We expect:**

- PhD degree/proof of finalized PhD thesis in Biomedical Engineering, Physics, Medical Physics, Chemistry or related science and engineering
- Excellent scientific writing and communication skills in English
- Team player who also can work independently
- Skills of writing pulse sequences for Philips and/or Bruker platform is a plus.

The position is to be awarded starting as soon as possible. The initial contract runs for 2 years with an option of prolongation. The salary is based on qualification and experience according to TV-L.

Females are encouraged to apply, and in the case of equal qualification, handicapped persons will be given preference. The DDZ is committed to family-friendly working conditions and equal gender policy. Since May 2011, the DDZ is a “Career and Family” audit-acknowledged Center.

Please submit your application in English (by e-mail) with the relevant documents (cover letter, CV, university certificates and names, addresses and numbers of two referees) to: personalwirtschaft@ddz.uni-duesseldorf.de. For further information please contact Dr. Jong-Hee Hwang on tel. +49 (0)211 3382-228.