

The Faculty of Medicine at Heinrich Heine University Düsseldorf invites applications for the temporary position of a

Professorship (W1) for Cardiodiabetologic Flux Imaging

(Initially for a fixed term of 6 years with tenure track to a permanent W2 professorship)

at the Clinic of Cardiology, Pneumology and Angiology (Director: Prof. Dr. Malte Kelm).

We are looking for an individual with a strong background in imaging and/or spectroscopic MR techniques to analyze cardiometabolic changes. CARDDIAB aims to investigate metabolic dysfunction and its interrelationship with cardiovascular disease. Here, metabolic flux analyses using magnetic resonance (MR) techniques (flux imaging) offer the unique opportunity to observe metabolic processes non-invasively and in real time. The latest imaging techniques and spectroscopic methods, embedded in the specially developed architecture of the CARDDIAB building and supported by many years of expertise at the site, form the basis for in-depth cardiometabolic in vivo phenotyping (deep phenotyping). The use of the latest technologies such as ¹³C hyperpolarization and deuterium imaging as well as the seamless collaboration of experimental and clinical scientists will enable the characterization of metabolic and cardiovascular health, the analysis of interactions between these diseases and the identification of therapeutic concepts for subphenotypes. By bringing together more than 20 experimental and clinical imaging experts at the site, CARDDIAB will make a significant contribution to successful research into the cardiometabolic continuum. The focus of the advertised junior professorship will be on the further development of MR spectroscopy and MR imaging methods as well as evaluation algorithms of the data collected in order to enable simultaneous/multidimensional analyses of different tissues and time courses. These analyses will also be related to ongoing projects of the Flux-omics group in CARDDIAB. In addition, there will be close interaction with scientists from CARDDIAB, DDZ (German Diabetes Center), CARID (Cardiovascular Research Institute Düsseldorf) and the Center for Digital Medicine.

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Applicants must have a university degree in medicine (incl. license to practice medicine), natural sciences or engineering, as well as a doctorate or equivalent in the MR field. Relevant international publications in the field of MR imaging/spectroscopy, a recognizable own research profile in the field of MR research, as well as methodological accuracy of fit for the cardiovascular/metabolic research focus are expected. The acquisition of competitive third-party funding, the ability to connect to other (clinical) research areas of the faculty and the promotion of young researchers and supervision of qualification theses are desired.

A high level of commitment to academic teaching (medical or natural sciences curriculum) is also desirable.

The professorship does not include any patient care duties.

A collaboration with the research networks of the Faculty of Medicine and the University (Collaborative Research Center Transregio 259 "Aortic Diseases"; Collaborative Research

Center 1208 "Identity and Dynamics of Membrane Systems - from Molecules to Cellular Functions"; Manchot Graduate School "Molecules of Infection", Manchot Research Group "Decision Making using Artificial Intelligence Methods", Düsseldorf School of Oncology (DSO); Research Training Group 2576 "vivid - In vivo studies of the early development of type 2 diabetes", Research Training Group 2578 "Influence of genotoxins on the differentiation efficiency of murine and human stem and progenitor cells and the functionality of differentiated cell types derived from them"; Graduate school "iBrain - Interdisciplinary Graduate School for Brain Research and Translational Neuroscience"; Future for Clinician Scientists in Precision Metabolic Medicine - FUTURE-4-CSPMM, Center for Integrated Oncology (CIO-ABCD); German Consortium for Translational Cancer Research (DKTK) as well as participation in cooperative projects with the Leibniz Institute for Environmental Medical Research (IUF), the German Diabetes Center Düsseldorf (DDZ) Leibniz Center for Diabetes Research at Heinrich Heine University Düsseldorf and Forschungszentrum Jülich is expected.

Skills in personnel management, cooperation and teamwork are desirable.

Conditions for employment are, in addition to general administrative conditions in accordance with § 36 of the North Rhine-Westphalia University Act (Gesetz über die Hochschulen des Landes Nordrhein-Westfalen), an aptitude for teaching, exceptional competence in research, and additional scientific achievements.

The appointment is initially for a period of three years as a temporary civil servant. If the candidate proves his or her worth as a university lecturer, the civil servant status will be extended for a further three years in the third year. Upon appointment, it is assured that the professorship will not be advertised (tenure track) with regard to an application for the subsequent W2 professorship in a civil servant position for life or a permanent employment relationship, provided that the legal requirements of the Higher Education Act of the State of North Rhine-Westphalia are met.

Applications from women are expressly welcome. Women of equal aptitude, ability and professional competence will receive particular consideration, unless there are compelling reasons for choosing another applicant.

Heinrich Heine University lives the principle „excellence through diversity“. HHU has signed the “Charta der Vielfalt (diversity)” and successfully participated in the audit “Shaping Diversity” of the Stifterverband. HHU is certified as family-friendly and aims to promote its employees’ diversity.

Applications from suitably qualified severely disabled persons or disabled persons regarded as being of equal status according to Book IX of the German Social Legal Code (SGB – Sozial-Gesetzbuch) are encouraged.

At Heinrich Heine University Düsseldorf, appointments may also be part-time, provided there are no overriding administrative reasons in individual cases for requiring full-time employment.

Heinrich Heine University Düsseldorf offers a Dual Career Service and is a member of the Rhineland Dual Career Network (Dual Career Netzwerk Rheinland). Further information can be obtained at www.dualcareer-rheinland.de. Your contact person is Professor Nikolaj Klöcker

MD, Dean of the Faculty of Medicine at Heinrich Heine University Düsseldorf (Mail: berufungsverfahren@med.uni-duesseldorf.de)

Please direct your application with the required documents and a short research and teaching concept in digital form exclusively via the online portal of the Medical Faculty (<https://berufungsportal.uniklinik-duesseldorf.de>). The closing date for applications is June 28th 2024.