



In the Metabolomics and Metabolism Laboratory in the faculty of Mathematics and Natural Sciences of Heinrich Heine University Düsseldorf a posts as a

scientific employee (m/f/d)

(100,00 %, pay grade 13 TV-L)

is to be occupied starting 01.03.2023. The employment is limited until 31.12.2026. It is a qualification position in the sense of the Act of Academic Fixed-Term Contract (Wissenschaftsvertragsgesetz – WissZeitVG), which is to promote the scientific qualification of the employees.

The advertised project is integrated into CRC 1535 MibiNet “Microbial networking – from organelles to cross-kingdom communities” and the associated graduate research training group “MibiNeXt”. In addition to the HHU as the host university, CRC 1535 includes five cooperation partners, including the Research Center Jülich (FZJ), the Technical University of Aachen (RWTH), the University of Bielefeld, the University of Cologne and the Max Planck Institute for Plant Breeding Research (MPIPZ) in Cologne. Further job offers can be found on our homepage (www.sfb1535.hhu.de).

Metabolites are the key nodes of metabolic networks and can function as energy carrier, building blocks for biosynthesis and signalling molecules with regulatory functions. The homeostasis of metabolite pools and the dynamic of metabolite fluxes are essential for intracellular metabolism and also for complex interspecies microbial networking. In this CRC-Metabolomics-facility, we will provide state of the art metabolomics approaches to the research groups of the CRC, using chromatography and mass spectrometry techniques. We will enable the researchers to perform metabolomics experiments to obtain metabolic profiles, monitor intracellular and extracellular metabolite pool sizes and measure fluxes via incorporation of stable isotopes.

Your tasks:

The aim of the proposed position is to provide access to the metabolomics infrastructure unit for all research groups of the CRC to conduct state-of-the-art metabolomics experiments. To do so, the individual projects shall be advised with regard to experimental design, sample generation, sample processing and extraction strategies. The future candidate will conduct measurements on different analytical systems, performs the data analysis and organizes the project management for the CRC. The major focus will be the qualitative and quantitative analysis of primary metabolites from different biological sources. For broad coverage of the metabolome multiple complementary analytical methods (GC-MS; HPLC-MS; IC-MS) have to be used and further analytical approaches have to be developed. Therefore, the candidate will implement and develop new strategies and methods with a focus on the exometabolome, metabolic labelling with stable isotopes and the targeted analysis of special molecules with regulatory functions. Furthermore, he/she will support the laboratory with regard to system maintenance and quality control, educate and guide students in the laboratory and in the framework of the graduate school “MibiNeXt”.

Our requirements:

- A completed scientific university education (M.Sc./Diploma) and PhD in the field of Plantphysiology, Microbiology, Biochemistry or equivalent fields
- Pronounced hands-on experience with regard to measurements and maintenance of analytical systems in the field of chromatography (GC, HPLC, IC) and mass spectrometry (MS, MS/MS)
- Good knowledge and experience with regard to method development with a focus on metabolic intermediates
- Trackable record of experience with regard to design and conduct metabolomics experiments and the according data analysis
- Basic experience in (microbial) cell cultivation
- Very high motivation to collaborate with multiple cooperation partners within the CRC
- Excellent communication skills for interdisciplinary exchanges
- A spoken and written command of the English language is desirable
- Affinity to teamwork
- Good communication skills and enthusiasm are appreciated

The pay scale grouping will be, depending on the personal qualification of the applicant, up to pay grade 13 TV-L.

In principle, the employment can also take place part-time, if no compelling official reasons are opposed in an individual case.

Heinrich Heine University Düsseldorf aims at increasing the percentage of employed women. Applications from women will therefore be given preference in cases of equal aptitude, ability and professional achievements unless there are exceptional reasons for choosing another applicant. Applications from suitably qualified severely disabled persons or disabled persons regarded as being of equal status according to Book IX of the German Social Code (SGB – Soziales Gesetzbuch) are encouraged.

Your contact person in case of questions is Dr. Lilli Bismar; email: sfb1535-application@hhu.de.

Please submit your application documents (cover letter, CV and certificates, additional references or resp. contact details) citing **reference no. 106.23 – 3.1** until **16.02.2023** preferably by email to sfb1535-application@hhu.de

or in writing to:

Heinrich-Heine-Universität Düsseldorf
Faculty of Mathematics and Natural Sciences
Institute of Microbiology
Attn. Dr. Lilli Bismar
Build. 26.24.01
Universitätsstraße 1
40225 Düsseldorf



Please do not submit application materials in folders and be sure to send copies only, as documents will not be returned (they will be destroyed after the selection procedure has been completed).