



In the Institute of Microbiology in the faculty of Mathematics and Natural Sciences of Heinrich Heine University Düsseldorf a post as a

scientific employee (m/f/d)

(100 %, pay grade 13 TV-L)

is to be filled starting 1st July 2024. The employment is initially limited until 31.12.2026 with an option for prolongation. It is a qualification position in the sense of the Act of Academic Fixed-Term Contract (Wissenschaftszeitvertragsgesetz – Wiss-ZeitVG), which is to promote the scientific qualification of the employee.

Background:

We investigate the long-distance transport of mRNAs in the model microorganism *Ustilago maydis*. A crucial mechanism is RNA transport by endosomes shuttling along the microtubule cytoskeleton. The central mRNA transporter is Rrm4, an RNA-binding protein linked to the endosomal surface via specific adaptor proteins.

The project aims to understand the basic principles of long-distance mRNA transport, which are also valid for plants and neurons. To this end, we combine RNA biochemistry with microbial genetics and live cell observation. In particular, we aim to combine microfluidics and biosensors to understand biochemical processes in vivo better.

We offer an excellent research environment and the opportunity to integrate into our research networks, such as the Collaborative Research Center CRC1535 „Microbial Networking“, the Cluster of Excellence CEPLAS, and the Graduate School „Molecules of Infection“.

Your Responsibilities:

- Strain generation in the model microorganism *Ustilago maydis*
- In vitro RNA binding studies
- Establishment and application of biosensors and microfluidics
- Establishment and application of optogenetic tools

Our Requirements:

- A university degree and doctorate in biology or related life sciences
- A strong interest in eukaryotic model microorganisms is desirable
- Experience in eukaryotic microbiology, RNA biochemistry and fluorescence microscopy
- Excellent communication skills in written and spoken German and English and in communicating in an interdisciplinary research environment

- A high degree of initiative and responsibility
- Participation in microbiology courses is expected

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 to apply.

Your contact person in case of questions is Prof. Dr. Michael Feldbrügge; email: feldbrue@hhu.de.

Please submit your application documents (cover letter, CV and certificates, additional references, or resp. contact details) citing **reference no. 106.24-3.1** until 24.04.2024 preferably in a single PDF file by email to:

feldbrue@hhu.de

or in writing to:

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Faculty of Mathematics and Natural Sciences
Institute of Microbiology
Build. 26.24.01
Universitätsstr. 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).