

Furtwangen University (HFU) is an innovative, constantly evolving institution, located and rooted in Germany's Black Forest region and with a strong international orientation. Our focus areas are computer sciences, technology, business, media and health sciences. We are one of the strongest research universities in Baden-Württemberg and have more than 5.000 students across our three campuses in Furtwangen, Villingen-Schwenningen and Tuttlingen as well as the research centre in Rottweil and the study centre in Freiburg.

Subject to final approval of the project and the funds, Furtwangen University is offering two positions in the Medical and Life Sciences faculty as

## Research associates (male / female / non-binary)

in applied molecular microbiology (doctoral students)

starting probably 01 June 2024 as a fixed-term contract until probably 31 May 2027.

### Your tasks will include:

Both doctoral students will work on a BMBF-funded project dealing with the development of novel sustainable strategies for domestic laundry processes. Our previous work in the field focussed on the structural composition of the microbiota in domestic washing machines (cf. DOI: 10.1007/s12268-021-1663-8). The new project aims at obtaining a more functional view of the washing machine microbiota and a deeper understanding how laundry hygiene can be improved by using novel enzymatic and probiotic strategies. The project is, amongst others, supported by Henkel AG & Co. KGaA, Düsseldorf, as industrial partner.

We are offering positions for two doctoral students, that will work closely together as a team. The project plan includes metataxonomic, metagenomic, metatranscriptomic and subsequent bioinformatic and statistical analyses of microbial communities in washing machines and on laundry samples under the influence of enzymatic and/or probiotic treatments. In addition, RNA-based stable isotope probing and nanopore sequencing technologies are to be set up for the field of laundry hygiene. The project also includes short-term stays at the industrial partners, e.g., for sampling campaigns.

Both candidates are supposed to complete a doctoral thesis based on published project work.

### We are looking for:

Candidates with a scientific university degree (Master's degree better than or equal to 2.5 in accordance with the German grading system) in microbiology, molecular biology, biochemistry, bioanalytics or related fields and the willingness to write a doctoral thesis. Experiences in modern microbiome (-omics)

research technologies (NGS), bioinformatic, programming and computer skills (R, Python, QIIME etc.) are an advantage. Good knowledge of English and German (written and spoken) are expected, too.

### We are offering:

You will find this a stimulating position with diverse tasks, working as part of a motivated and open team and enjoying the numerous benefits offered by a position within the German civil service system.

Working hours per week will be 25,675 (65 %). Employment conditions are regulated by the German TV-L regulations (max. EG13 TV-L), depending on responsibilities and qualifications of the individual candidate. The position is located at Villingen-Schwenningen campus. We do expect you to be prepared to undertake tasks at the other campuses, too, however.

Furtwangen University is an equal opportunities employer and is committed to increasing the diversity of its faculty. As we seek to increase the proportion of women lecturers and researchers, we encourage female candidates to apply. Disabled candidates with suitable qualifications are given preferential consideration.

You will find detailed information on our university online at <https://www.hs-furtwangen.de/en/>. For additional information on this position, please contact Prof. Dr. Markus Egert: phone +49.7720/307-4554 or email [markus.egert@hfu.eu](mailto:markus.egert@hfu.eu).

We look forward to your application. Please submit it via our Online Application Tool at <https://www.hs-furtwangen.de/en/job-opportunities/> no later than 21 April 2024, citing the code 2024-040-MLS-D. Please note that the application tool's interface is currently available in German only.