

The UFZ has a strong commitment to **diversity** and actively supports **equal opportunities** for all employees regardless of their origin, religion, ideology, disability, age or sexual identity. We look forward to applications from people who are open-minded and enjoy working in diverse teams.

**Your contact for any questions you may have about the job:**

Helmholtz-Zentrum für Umweltforschung GmbH - UFZ  
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04318 Leipzig  
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Please submit your application via our online portal with your cover letter, CV (please omit your photo, age, or marital status) and relevant attachments.

**Closing date for applications:**  
14.11.2021

The Helmholtz Centre for Environmental Research (UFZ) with its 1,100 employees has gained an excellent reputation as an international competence centre for environmental sciences. We are part of the largest scientific organisation in German the Helmholtz association. Our mission: Our research seeks to find a balance between social development and the long-term protection of our natural resources.

The offered PhD position is within the framework of the DFG priority programme 2125 "Deconstruction and Reconstruction of the Plant Microbiota (DECrypT)" that is coming to its second phase. DECrypT focuses on molecular mechanisms governing plant-microbe interactions and assembly of plant-associated microbiomes, and on their ecological and evolutionary relevance.

The PhD project investigates the mechanisms of interactions between a synthetic bacterial community and barley under drought stress. It focuses at the levels of bacterial and barley gene expression and measures of barley drought tolerance. Collaborating projects compare the performance of the drought tolerant barley synthetic community with other ones, and investigates how it affects symbiosis, pathogenesis and root exudation of barley. Anticipated start date of the project is February 2022.

## Department of Soil Ecology is looking for a committed doctoral candidate (f/m/x) in the field of life sciences

PhD Position (f/m/x)

Subject: A drought tolerant synthetic bacterial community for barley

Working time 65% (25,35h / week), limited to 3 years

You are responsible for the isolation of bacterial RNA and DNA from barley rhizospheres and roots, as well as the analysis of Illumina RNA sequencing and amplicon sequencing data, also in combination with data from collaborating projects. Installation and operation of agar and soil based microcosm experiments is also expected from you, as well as preparation of manuscripts and participation in training courses, workshops and conferences.

### Your profile:

- Diploma or M.Sc. in biology, biochemistry, bioinformatics, or related sciences
- Interested, to integrate information in an interdisciplinary project
- Trained in sampling and analysis of gene expression or microbiome data, in bioinformatics or biostatistics
- Experience in conducting experiments
- Practical skills with cDNA preparation, RNA sequencing and R programming are a plus
- Highly motivated candidate who is excited to work in an interdisciplinary team
- Capability to work independently
- Good written and oral communication skills in English are necessary

### We offer:

- Top level interdisciplinary research at a research centre which enjoys an excellent reputation within Germany as well as internationally
- Excellent technical facilities
- Work in inter-disciplinary and multinational teams
- Excellent links to national and international research networks
- Support and optimal training courses by our graduate school (HIGRADE)
- Remuneration in accordance with the TVöD public-sector pay grade 13 (65%)

More information about jobs at the UFZ:

[www.ufz.de/career](http://www.ufz.de/career)

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