

The Helmholtz Centre for Environmental Research – UFZ seeks to fill the following position in cooperation with the German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig at the earliest possible date:

**Postdoctoral Researcher (f/m/d)  
on the flexpool project 2: “Diversity and scenario modelling of molecular markers of plant pathogens  
in plant, litter and soil metagenomes”**

Planned for 2 years and initially limited until 30 September 2021, an extension to the entire 2 years is dependent upon successful renewal of DFG funding for iDiv (evaluation in spring 2021)

Working location will be UFZ Halle (Saale) with frequent travels to Leipzig

100 percent of a full-time position

Salary: *Entgeltgruppe 13 TVöD*

The UFZ is an equal opportunity employer. Female scientists are explicitly encouraged to apply for increase their share in science and research. Physically handicapped persons will be favored if they are equally qualified.

#### **Background**

iDiv invites applications to **6 postdoctoral researcher positions in its 5th flexpool call** from fall 2020 onwards (see *overview in published flexpool general announcement*). Soils host one quarter of all species on Earth, providing critical services to mankind. This project asks how soil microorganism communities respond to global change and which changes in soil functions will occur. We will generate answers by mining metagenomics data covering large environmental gradients, available in our consortium and the public domain, for molecular markers of microbial plant pathogenicity. On this basis we will model global distribution of microbial plant pathogens under climate and land-use change scenarios. We will integrate local experimental data to establish causality informing scenario modelling. The project is supervised by Prof. François Buscot at the Helmholtz-Centre for Environmental Research (UFZ) in Halle, together with Dr. Anna Heintz-Buschart (UFZ/iDiv), Prof. Nico Eisenhauer (iDiv), Dr. Carlos Guerra (iDiv), and Prof. Kirsten Küsel (Friedrich Schiller University of Jena).

#### **Your tasks:**

- Analyses of metagenomic data of soils and plant microbiomes, especially mining of molecular markers for plant pathogenicity
- Integration of molecular data with environmental and geographic data for statistical modelling of scenarios
- Meta-analyses and synthesis work based on literature data
- Writing and publishing scientific papers in peer-reviewed journals
- Presenting results at national and international conferences

#### **Requirements:**

- PhD or equivalent degree in a project-related field (e.g. microbiology, bioinformatics, molecular biology, soil sciences, ecology)
- Expertise in soil-plant interactions and experience in handling metagenomics sequencing and molecular diversity data
- Interest and ability in soil and microbial ecology, plant-microbe interactions and spatial/macroecological analyses, statistical modelling
- Skills in bioinformatics and statistics (incl. command line use, a scripting language, and R)
- Commitment to interdisciplinary research
- Excellent English communication skills (spoken and written)
- Team-oriented and strong organizational skills

Kindly send your application, quoting the reference number 01/2020, via our application portal at <https://apply.idiv.de>. While we prefer applications via this portal, hard-copy applications may also be sent to:

**German Centre for Integrative Biodiversity Research – iDiv (Halle-Jena-Leipzig)**

**Dr. Christa Genz**

**Deutscher Platz 5e, D-04103 Leipzig**

**Submission deadline is 10 September 2020.** Selected candidates will be invited to the online joint recruitment symposium on 28 September until 29 September 2020.

**All applications should include:**

- Cover letter in English describing motivation for the project, research interests and relevant experience
- complete curriculum vitae including names and contact details of at least two scientific references
- digital copy of master and PhD certificate or equivalent

Queries concerning the application process should be directed to Mrs. Christa Genz ([christa.genz@idiv.de](mailto:christa.genz@idiv.de)), for project-related questions, please contact Professor Dr. François Buscot ([francois.buscot@ufz.de](mailto:francois.buscot@ufz.de)) and Dr. Anna Heintz-Buschart ([anna.heintz-buschart@ufz.de](mailto:anna.heintz-buschart@ufz.de)).

iDiv is committed to establishing and maintaining a diverse and inclusive community that collectively supports and implements our mission to do great science. We will welcome, recruit, develop, and advance talented staff from diverse genders and backgrounds.