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

**Postdoctoral Researcher (f/m/d)**

on the flexpool project: “Diversity and scenario modelling of molecular markers of plant pathogens in plant, litter and soil metagenomes”

Initially limited until 30 September 2021, an extension to the entire 21 months is planned and dependent upon successful renewal of DFG funding for iDiv

Working location will be 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**

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 François Buscot at the Helmholtz-Centre for Environmental Research (UFZ) in Halle, together with Anna Heintz-Buschart (UFZ/iDiv), Nico Eisenhauer (iDiv), Carlos Guerra (iDiv), and 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 01/2021, 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
Puschstraße 4, D-04103 Leipzig

Submission deadline is 14 March 2021. Selected candidates will be invited to give a short presentation and a personal interview with the project leaders.

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), for project-related questions, please contact Professor Dr. François Buscot (francois.buscot@ufz.de) and Dr. Anna Heintz-Buschart (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.