



**iDiv**

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

## External Job Announcement Reg.-Nr. 4-11316/24-H

Modern, interconnected, conscious of tradition: Martin Luther University Halle-Wittenberg (MLU) is the oldest and largest university in the State of Saxony-Anhalt with a history dating back more than 500 years. Today more than 20,000 students are enrolled at the university. MLU's core research areas are in the nanosciences and biosciences, the Enlightenment, as well as in social and cultural research. The university is also home to a range of small disciplines, some of which can be found nowhere else in Germany. The university has excellent national and international ties, and works closely together with leading research institutes, industry, and more than 250 universities around the world.

The Martin Luther University Halle-Wittenberg, in cooperation with the German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig, offers the following position in Halle, commencing on 1 January 2025 or at the earliest opportunity and limited to 3 years.:

### **Doctoral Researcher (m/f/d) in the iDiv Flexpool project “Across the South American dry diagonals: Genetic exchange and connectivity between naturally isolated ranges and fragmented habitats”**

as part-time employment (65% of a full-time employment).

The salary will be up to Entgeltgruppe 13 TV-L, if the personal requirements and tasks are fulfilled. The workplace will be at MLU Halle.

#### **The project:**

The **German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig** explores how biodiversity can be recorded, how it develops in the course of evolution, how it changes, what consequences it has for the functioning of ecosystems and how it can be preserved in the long term. iDiv is jointly funded by the University of Leipzig, Martin Luther University Halle-Wittenberg, Friedrich Schiller University Jena and the Helmholtz Centre for Environmental Research GmbH - UFZ and will be continued with generous support from the federal states of Saxony-Anhalt, Thuringia and Saxony after termination of the DFG funding. More information about iDiv: [www.idiv.de](http://www.idiv.de).

#### **Research topics: Population genomics, plant ecology, biogeography**

This integrative project combines three interdisciplinary work packages (WPs) that aim to investigate the relationships between plant populations that occur in separated ranges across the so-called dry diagonals in southern South America. Our model taxa are two genera of tree ferns, *Dicksonia* and *Lophosoria*, which are represented by just one species each in our focal regions of Bolivia, Brazil and Chile. We will use ddRADseq for genomic analyses investigating isolation, gene flow and dispersal across the dry diagonals (WP1). In each range, the demography and genetic variation within populations are investigated to address the genetic and ecological fitness of each species (i.e., how well are they regenerating?) and evaluate their potential impact on local forest regeneration (WP2). Furthermore, flow cytometric measurements of the spores will be used to look for polyploid taxa that could indicate cryptic speciation (WP3). The question how mass occurrences of each species after biotope disturbances may influence the pace and direction of forest regeneration will be addressed in joint B.Sc. projects at the respective local counterpart institutions. The resulting output will be incorporated into species- and habitat-specific conservation and restoration strategies.



The project is supervised by PD Dr. Marcus Lehnert (Herbarium Halle; [https://www.botanik.uni-halle.de/herbarium/marcus\\_lehnert/](https://www.botanik.uni-halle.de/herbarium/marcus_lehnert/)). In addition, supervision and assistance will be provided by Prof. Isabell Hensen (Plant Ecology, MLU Halle), Prof. Alexandra Muellner-Riehl (Molecular Evolution and Plant Systematics & Herbarium, Leipzig University) and Dr. Walter Durka (Helmholtz Centre for Environmental Research – UFZ, Halle). The iDiv flexpool researcher will be integrated in a stimulating network facilitating excellence; he/she will become enrolled in yDiv, the Graduate school of iDiv, which includes an international qualification program, an interdisciplinary PhD advisory committee (PAC) and unique offers to meet, study and discuss with leading scientists in biodiversity research.

#### Tasks:

- Fieldwork in the Neotropics
- Analysing genomic diversity of current and historical populations of endangered plant species, applying state-of-the art next generation sequencing
- Teaching courses at MLU in accordance to LVVO (state regulation for university teaching)

#### Requirements:

- A completed scientific University degree (Diploma/M.Sc.) in a project-related field (e.g. evolutionary ecology, molecular ecology, functional trait ecology, taxonomy)
- Great interest in biodiversity research and a strong drive to do science
- High motivation to combine field and laboratory approaches
- Excellent quantitative and statistical skills in R
- Profound knowledge of English in writing and speaking
- Basic knowledge of Spanish and/or Portuguese is desirable
- Knowledge of German is an advantage, but not required

The Martin Luther University Halle-Wittenberg gives priority to applications from severely disabled candidates with equivalent qualifications. Women are particularly encouraged to apply. Applicants with a degree that was not obtained at a German higher education institution must submit a Statement of Comparability for Foreign Higher Education Qualifications from the Central Office for Foreign Education (Zentralstelle für ausländisches Bildungswesen) to prove equivalence. This Statement can also be submitted after successful completion of the hiring process.

For project-related questions, please contact Marcus Lehnert ([marcus.lehnert@botanik.uni-halle.de](mailto:marcus.lehnert@botanik.uni-halle.de)). Queries concerning the application process and the iDiv program should be directed to [flexpool@idiv.de](mailto:flexpool@idiv.de).

Please submit your full application dossier only in English with registration number 4-11316/24-H by 21.11.2024. Applications should be submitted via our iDiv application portal at <https://apply.idiv.de>. Selected candidates will be invited to a recruitment interview taking place on the last week of November 2024 (either in presence or online possible).

Applications should be in English, consisting of a single pdf file including:

- Cover letter 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 MA/BA/Diploma certificates

Application portfolios will not be returned, application costs will not be reimbursed.

This announcement is subject to possible budgetary restrictions. 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.