

**Reference file number
125/2018**

Leipzig, 31 May 2018

The German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig is one of four National Research Centres funded by the German Research Foundation (DFG). Its central mission is to promote theory-driven synthesis and data-driven theory in this emerging field. The concept of iDiv encompasses the detection of biodiversity, understanding its emergence, exploring its consequences for ecosystem functions and services, and developing strategies to safeguard biodiversity under global change. It is located in the city of Leipzig and it's a central institution of the Leipzig University, jointly hosted by the Martin-Luther-University Halle-Wittenberg, the Friedrich Schiller University Jena and the Helmholtz Centre for Environmental Research (UFZ). Furthermore, it gains support by the Max Planck Society, the Leibniz Association and the Free State of Saxony. More Information about iDiv: www.idiv.de.

The Evolution & Adaptation research group focuses on the interchange between (macro-) ecology and evolution, to understand the global distribution of genetic, taxonomic and functional diversity. We investigate micro-evolutionary processes to understand how these play out over macro-evolutionary time scales. Understanding these patterns and the processes underlying them is important for predicting how adaptable biodiversity is to current and future global change.

Integrated in iDiv, the Leipzig University, offers the following position in our new Evolution and Adaption Junior Research Group as soon as possible:

Doctoral Researcher

“Genomic signatures of palms with megafaunal fruits on Madagascar”

(initially limited until 30 September, 2020 (iDiv funding period), 65 % of a full-time employment)

Salary: Entgeltgruppe 13 TV-L

Background:

Madagascar harbours exceptional biodiversity, but this tropical hotspot also faces increasing threat from human activities and climate change. Plants with large, ‘megafaunal’ fruits are common across the flora of Madagascar, especially within the palm (Arecaceae) family. However, Pleistocene extinctions of large-bodied ‘megafaunal’ fruit-eating and seed-dispersing animals (such as giant lemurs) may have hindered the dispersal of taxa with megafaunal fruits. In this project we aim to investigate the micro- and macroevolutionary consequences of dispersal limitation for megafaunal-fruited palms on Madagascar, using a comparative framework. Specifically, we aim to (i) identify genomic signatures of dispersal limitation in megafaunal-fruited palm populations, (ii) reconstruct demographic history and identify historical genetic bottlenecks in these species, and (iii) evaluate whether these species may be adapting to dispersal by smaller-bodied frugivores, by evolving smaller fruits with smaller seeds. This project integrates the fields of plant evolution, phylogeography, and plant-frugivore interaction ecology. It will be in collaboration with researchers from Kew Botanical Gardens, UK (Dr. Bill Baker), Aarhus University, Denmark (Dr. Wolf Eiserhardt), the University of Amsterdam, the Netherlands (Dr. Daniel Kissling) and Botanic Garden of the Ruhr-University Bochum, Germany (Dr. Wolfgang Stuppy), among others.

Job description:

- collecting genetic samples from palm populations on Madagascar, and measuring their functional traits
- identifying Malagasy frugivore communities and their functional traits
- using novel genomic techniques (e.g. RAD sequencing) to infer connectivity, demographic history and phylogeographical patterns
- writing and publishing of scientific papers in peer-reviewed journals
- presentation of results at international conferences
- participation in iDiv's PhD training program yDiv

Requirements:

Applicants should hold a Master's or equivalent degree in a related field of research (e.g. ecology, (molecular) biology, genetics, phylogenetics, phylogeography). The successful candidate should be innovative, able to work on his or her own initiative, and willing to spend several months in the field (Madagascar). Therefore prior experience with tropical fieldwork and basic living conditions is advantageous. Furthermore, the successful candidate should have prior experience using molecular techniques, preferably with bioinformatics for large genetic/genomic datasets. An interest in acquiring additional necessary skills (e.g. programming) for handling and statistically analyzing large datasets is essential. Candidates should be team-oriented and have strong organizational skills, in order to manage this collaborative research project within an international consortium. Excellent English communication skills (speaking and writing) are required. We seek candidates with an independent mind and the ambition to publish in internationally leading journals.

Applications are accepted until **30th June 2018**.

Applications should include:

- cover letter (in English) describing motivation for the project, research interests & relevant experience
- complete curriculum vitae including names and contact details of at least two scientific references
- digital copy of masters certificate
- PDF of one publication or thesis chapter

Applications with reference file number **125/2018** are accepted via our application portal under apply.idiv.de. We prefer applications via our application portal, hard copy applications can be sent to German Centre for Integrative Biodiversity Research – iDiv; yDiv; Deutscher Platz 5e; 04103 Leipzig. For queries on the application process, please contact Dr. Nicole Sachmerda-Schulz (nicole.sachmerda-schulz@idiv.de); for research project questions, contact Dr. Renske Onstein (onsteinre@gmail.com).

Data Protection

By sending us your application documents you consent to the processing of the data contained within for the purpose of the selection process for the advertised position. You can revoke your consent at any time. The processing takes place exclusively for this selection process and is carried out on the basis of Article 6 of the GDPR (General Data Protection Regulation). This includes passing on data to the members of the selection committee, the HR office, the Commissioner for Equal Opportunities, the Representative Body for Severely Disabled Employees and the Staff Council as part of their organizational or legal responsibilities. Your data will be stored for a maximum of 6 months following completion of the selection process and subsequently deleted.

In accordance with the GDPR you have the right to receive information from the recipient of the application about your personal data, the right to correction, deletion or restriction of processing, as well as a right to object to processing.

If you have any questions, please contact the Leipzig University data protection officer (Mr Thomas Braatz, Augustusplatz 10, 04109 Leipzig, Tel.: 03419730081).

Applying via email is questionable under data protection law. The sender assumes full responsibility.

Severely disabled persons are encouraged to apply and will be given preference in the case of equal suitability.