Friedrich Schiller University Jena seeks to fill the following position at the German Centre for Integrative Biodiversity Research (iDiv) in Leipzig at the earliest possible date:

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

on the **flexpool project 4 “Identifying drivers of intra- and interspecific leaf trait variation in space and time from digitized herbarium specimen using computer vision approaches”**

initially limited until 30 September 2021, extension for 2-3 further years possible and dependent upon successful renewal of DFG funding for iDiv (evaluation in spring 2021)

65 percent of a full-time position

Salary: up to Entgeltgruppe 13 TV-L, if the personal requirements and tasks are fulfilled

The FSU Jena seeks to increase the number of women in those areas where they are underrepresented and therefore explicitly encourages women to apply. Severely disabled persons are encouraged to apply and will be given preference in the case of equal suitability.

**Background**

iDiv, the German Centre for Integrative Biodiversity Research Halle-Jena-Leipzig, invites applications to 5 doctoral researcher positions in its 4th flexpool call from October 2020 onwards (see overview in published flexpool general announcement).

To leverage plant trait information from digitized herbarium specimens, we (1) propose automated extraction of quantitative size traits by combining deep-learning-based object detection with subsequent quantification of object size, (2) explore approaches to determine ‘specific leaf area’. The data will be used to identify environmental drivers of inter- and intraspecific variation in space and time.

The project is supervised by Dr. Jens Kattge, Dr. Susanne Tautenhahn, Dr. Jitendra Gaikwad, Dr. Jörn Hentschel, Prof. Dr. Frank Hellwig, Prof. Dr. Patrick Mäder, Prof. Dr. Karsten Wesche and Prof. Dr. Christian Wirth. Place of work is MPI BGC Jena.

**Job description:**

- Combine deep-learning-based object detection with subsequent quantification of object size
- Explore approaches to determine ‘specific leaf area’ from digitized herbarium specimen
- Develop and publish dataset of leaf area and specific leaf area
- Identification of environmental drivers of inter- and intraspecific variation in space and time
- Writing and publishing scientific papers in peer-reviewed journals
- Presenting results at national and international conferences

**Requirements:**

- M.Sc. or equivalent degree in a project-related field (e.g. ecology, environmental sciences, computer sciences)
- Expertise and experience in R, Python, handling big-data, scientific computing
- Interest and ability in scientific programming
- Strong statistical skills in R
- Excellent English communication skills (spoken and written)
- Team-oriented and strong organizational skills

Kindly send your application, quoting the reference number 161/2020, via our application portal at [https://apply.idiv.de](https://apply.idiv.de). While we prefer applications via this portal, hard-copy applications may also be sent to:
Submission deadline is 10 July 2020. Selected candidates will be invited to the online joint recruitment symposium on 31 August until 1 September 2020.

All applications should include:
- 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 master 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 Dr. Jens Kattge (jkattge@bgc-jena.mpg.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.

Please note that applying via email is not entirely secure under data protection law. The sender assumes full responsibility.
Please consider our application information: http://www.uni-jena.de/stellenmarkt_hinweis.html.
Please also note the information on the collection of personal data on:
www.uni-jena.de/Universität/Stellenmarkt/Datenschutzhinweis