



Conducting research for a changing society: This is what drives us at Forschungszentrum Jülich. As a member of the Helmholtz Association, we aim to tackle the grand societal challenges of our time and conduct research into the possibilities of a digitized society, a climate-friendly energy system, and a resource-efficient economy. Work together with around 7,400 employees in one of Europe's biggest research centres and help us to shape change!

Data is the new resource of the 21st century, and its availability seems boundless. If you're passionate about contributing to the establishment of a crucial segment in the data relationship life cycle for plant science, we invite you to join the Omics-/Database-based Bioinformatics division (IBG-4) at the Institute of Bio- and Geosciences at Forschungszentrum Jülich. IBG-4, led by Prof. Dr. Usadel, specializes in data integration, classical bioinformatics, Data Science, and machine learning. The research group, "Sequence-based Bioinformatics," is dedicated to analyzing plant genomes to assess their potential use in breeding strategies.

**We are looking to recruit a**

## **PhD Position – Plant Systems Biology**

### **Your Job:**

- Analysis and integration of diverse biological data from the field of plant sciences (large scale genomic, transcriptomic, proteomic, metabolomic and/or single cell data) using cutting-edge technologies e.g. Artificial Intelligence (AI)
- Development of novel tools and algorithms in the area of omics data analysis and integration
- Publications in international journals and travel to international conferences
- (Co)supervision of Bachelor and Master students

### **Your Profile:**

- Master in bioinformatics, biology or similar with experience in the relevant field
- Knowledge in programming languages (e.g. Java, Rust, C/C++) and statistical analysis using R/BioConductor/python
- Experience with the analysis and integration (data fusion) of high throughput data such as NGS, single cell data, metabolite profiling and/or plant phenotyping data
- Experience with the application of AI for data analysis and interpretation is advantageous
- Experience with plant omics data is a plus
- Good organizational skills and the ability to work independently

The job will be advertised until the position has been successfully filled. You should therefore submit your application as soon as possible. We look forward to receiving your application via our

**Online-Recruitment-System!**

**Questions about the vacancy?**

Get in touch with us by using **our contact form.**

Please note that for technical reasons we cannot accept applications via email.  
[www.fz-juelich.de](http://www.fz-juelich.de)

- Very good cooperation and communication skills and ability to work as part of a distributed team in an international and interdisciplinary environment
- Excellent communication skills in English are mandatory

**Our Offer:**

We work on the very latest issues that impact our society and are offering you the chance to actively help in shaping the change! We offer ideal conditions for you to complete your doctoral degree:

- A large research campus with green spaces, offering the best possible means for networking with colleagues and pursuing sports alongside work
- Outstanding scientific and technical infrastructure
- Creative and international team that conducts research at the frontiers of science
- The Forschungszentrum Jülich is one of the largest research centres in Europe with excellent scientific equipment, including the fastest supercomputer in Europe, is located on a green campus, and near the cultural centres of Cologne, Düsseldorf and Bonn
- A highly motivated group and an international and interdisciplinary working environment in one of the largest research institutions in Europe
- 30 days of annual leave and provision for days off between public holidays and weekends (e.g. between Christmas and New Year)
- Further development of your personal strengths, e.g. through an extensive range of training courses; a structured program of continuing education and networking opportunities specifically for doctoral researchers via JuDocS, the Jülich Center for Doctoral Researchers and Supervisors: <https://www.fz-juelich.de/en/judocs>
- Targeted services for international employees, e.g. through our International Advisory Service

The position is initially for a fixed term of 3 years. Pay in line with 65% of pay group 13 of the Collective Agreement for the Public Service (TVöD-Bund) and additionally 60 % of a monthly salary as special payment („Christmas bonus“). Pay higher than the basic pay may be possible. Further information on doctoral degrees at Forschungszentrum Jülich including our other locations is available at: [https://www.fz-juelich.de/gp/Careers\\_Docs](https://www.fz-juelich.de/gp/Careers_Docs)

In addition to exciting tasks and a collaborative working atmosphere at Jülich, we have a lot more to offer: <https://go.fzj.de/benefits>

We welcome applications from people with diverse backgrounds, e.g. in terms of age, gender, disability, sexual orientation / identity, and social, ethnic and religious origin. A diverse and inclusive working environment with equal opportunities in which everyone can realize their potential is important to us.