



The Cluster of Excellence on Plant Sciences CEPLAS invites applications for a

## Postdoc position in Bioinformatics and/or Genomics (100 %, EG 13 TV-L)

to be filled for three years at the Heinrich Heine University Düsseldorf, Germany.

### SMART Plants for Tomorrow's Needs

The Cluster of Excellence on Plant Sciences ([www.ceplas.eu](http://www.ceplas.eu)) is a joint unit of Heinrich Heine University Düsseldorf, University of Cologne, Max Planck Institute for Plant Breeding Research Cologne and Forschungszentrum Jülich. CEPLAS is developing innovative science-based strategies for sustainable plant production. Our aim is to mechanistically understand complex plant traits of agronomic relevance that impact on yield and adaptation to limited resources.

### What we offer

CEPLAS creates an international, interdisciplinary research environment. We offer a comprehensive training program for early career researchers tailored to your respective career level. Program components are (scientific) training, mentoring, coaching and networking with industry.

### We are looking for

talented, highly motivated applicants with a PhD degree and a strong background in bioinformatics, computational biology, genetics, quantitative biology or a related discipline.

We invite applications for the following project:

### GeneCOMPLETE

Within CEPLAS genome variation will be exploited across a wide area of species. Within this project, we will use our Mercator4 and MapMan framework

(Schwacke et al., Mol Plant 2019) for functional annotation to allow complete classification of plant genes. We have successfully applied this to individual species so far (Bolger et al., 2014 Nature Genetics; Vogel et al., Nature Communications). Within CEPLAS we will leverage the underlying protein sub-family information to directly identify plant gene sub-families in the genome, without prior gene calling to enable studying evolutionary aspects and fast full genome comparisons using machine learning and/or evolutionary approaches.

### Qualifications needed:

Programming skills. Understanding of plants, background in machine learning and/or in plant gene family evolution are a plus.

**Project leader:** Prof. Dr. Björn Usadel

### Application process

According to the applicant's personal qualification, employment will be based on EG 13 TV-L. Qualified candidates should send their application (cover letter, curriculum vitae, contact info of two references, PhD certificate if already issued) by indicating the project title by e-mail (one single pdf-file) to [office@ceplas.de](mailto:office@ceplas.de). Applications are accepted until the position is filled.

In principle, the employment can also take place part-time, if no compelling official reasons are opposed in an individual case. The Heinrich Heine University Düsseldorf is an equal opportunity employer and strives for gender equality and diversity. Applications from individuals with backgrounds that are underrepresented in MINT disciplines are expressly welcome. Women with comparable qualifications will receive particular consideration. Applications from suitably qualified severely disabled persons or people of equivalent status according to Book IX of the German Social Legal Code (SGB – Soziales Gesetzbuch) are encouraged to apply. Severely disabled applicants of equal merit and qualifications will be given priority.