

The Cluster of Excellence on Plant Sciences CEPLAS invites applications for

2 Academic experts (m, f, d) in Data Science (100 %, EG 14 TV-L)

at Heinrich Heine University and University of Cologne (one position each). The positions can be filled at the next possible date and will be financed till 31.12.2025. The pay scale grouping will be, depending on the personal qualification of the applicant, up to pay grade 14 TV-L.

Background

CEPLAS conducts fundamental research on complex plant traits of agronomic relevance that impact on yield and adaptation to limited resources. This knowledge underpins novel strategies for designing and breeding plants that react in a predictable way to future challenges (SMART plants).

A significant part of CEPLAS research is founded on the extraction of new knowledge from large-scale datasets (e.g. proteomics or sequencing). This entails a close interaction between theoretical groups and experimentalists, from experimental design to data analysis and planning of new experiments.

Your tasks

The two academic experts will be responsible for the implementation of common principles for the design and analysis of large-scale experiments, implementing solutions for storage and organization of the data to make it identifiable and searchable (FAIR principles of data stewardship). They will further support standard data analysis and construction of simple mathematical models. For this, they will have to communicate regularly with the university's IT support (RRZK and ZIM) to act as an interface between the researchers and the infrastructure units to ensure efficient solutions.

The academic experts will support the CEPLAS Data Management Officer (DMO) to organize experiment-specific workshops (ensure the most efficient use of resources and consequent implementation of FAIR -Findable, Accessible, Interoperable, Reusable - principle), to communicate the results to the CEPLAS community, and to implement the developed data storage and management strategies. In addition, they should contribute to teaching within the Graduate School and the CEPLAS Bachelor program.

Required skills

- PhD degree in informatics, bioinformatics, biology or a related discipline
- Experience with large biological data sets.
- Experience in data management and data analysis
- Excellent communication skills and experience in interdisciplinary communication
- Knowledge of key bioinformatics pipelines
- Experience in mathematical modelling of biological systems
- Good programming skills
- Preferably experience in database design and management
- Preferably basic systems administration skills
- High degree of self-initiative and individual responsibility
- Fluency in English, both orally and in writing
- Readiness for mobility between the four participating institutions is required

What we offer

CEPLAS creates an international, interdisciplinary research environment. We offer a comprehensive training program comprised of scientific training possibilities as well as transferable skills training, mentoring, coaching and networking with industry.

Application process

Qualified candidates should send their applications (Cover letter, curriculum vitae, short (max. 1 DIN A4 page) concept for (i) implementing FAIR principles, (ii) experimental design workshops and (iii) support structure for data analysis by indicating the number 133T19-3.1 no later than 14.08.2019 by e-mail (one single pdf-file) to office@ceplas.eu.

The application form can be downloaded from our website.

In principle, the employments can also take place part-time, if no compelling official reasons are opposed in an individual case. All participating institutions are equal opportunity employers and strive 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. Severely disabled applicants of equal merit and qualifications will be given priority.