CEPLAS
Cluster of Excellence on Plant Sciences

The Cluster of Excellence on Plant Sciences invites applications for a

Doctoral researcher
(50-65%, pay grade 13 TV-L)

to be filled at the next possible date up to four years at the Institute for Population Genetics at Heinrich Heine University Düsseldorf. It is a qualification position in the sense of the Act of Academic Fixed-Term Contract (Wissenschaftszeitvertragsgesetz- WissZeitVG), which is to promote the scientific qualification of the employee.

SMART Plants for Tomorrow's Needs

The Cluster of Excellence on Plant Sciences 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.

The research project

The focus of the research project is to investigate how plant immunity, and metabolic and nutritional status change as a function of host age (i.e., developmental stage) and life history (annual vs. perennial), and if these time-dependent physiological changes correspond to and regulate shifts in the associated microbial community. The core of this research program rests on comparative, time-resolved investigations of both plant physiology and the associated microbial community. The microbial community will be assayed at multiple time points by next-generation sequencing (NGS). Plant growth, fruit and seed set will be quantified as proxies for host fitness/performance.

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.

Your tasks

- Plan and execute growth chamber and greenhouse experiments with plants and natural soils
- Handling and cultivation of soil microbes
- Sample and prepare biological materials for next generation sequencing
- Analyze microbiome and transcriptome data bioinformatically and statistically
- Interpret data and prepare manuscripts for publication
- Supervise master's and bachelor's student projects

Our requirements

- A completed scientific university education (M.Sc. / M.A. / Diploma / Magister) in the field of Biology
- Experience working with plants and microbes
- Experience with bioinformatic analyses of metabarcoding datasets
- Excellent communication skills in English (spoken and written)
- Documented independent scientific work
- High degree of motivation, creativity and organization

In principle, the employment can also take place part-time, if no compelling official reasons are opposed in an individual case. The pay scale grouping will be, depending on the personal qualification of the applicant, up to pay grade 13 TV-L. Heinrich Heine University Düsseldorf aims at increasing the percentage of employed women. Applications from women will therefore be given preference in cases of equal aptitude, ability and professional achievements unless there are exceptional reasons for choosing another applicant. Applications from suitably qualified severely disabled persons or disabled persons regarded as being of equal status according to Book IX of the German Social Code (SGB – Soziales Gesetzbuch) are encouraged.

Contact person in case of questions is Prof. Dr. Laura Rose; email: **Laura.Rose@hhu.de.**

Please submit your application documents (Motivation letter, CV, contact information of 2 referees) citing reference no. **109.20-3.1** by 05.05.2020 in a **single pdf** preferably by email to:

Laura.Rose@hhu.de.

or in writing to :

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