



The **Rheinische Friedrich-Wilhelms-Universität Bonn** is an international research university that offers a wide range of degree programs. With 200 years of history, about 35,000 students, over 6.000 employees, and an excellent domestic and international reputation, Bonn University is among Germany's leading universities.

For the next possible date, limited for the project duration of 36 months, the Professorship of Plant Breeding at the Institute of Crop Science and Resource Conservation of the University of Bonn is looking for a

## Research associate (65%)

for the research project "SmartBeans – with prebreeding approaches in dry field bean *Phaseolus vulgaris* L. var. *nanus* from a genetic resource to contemporary food" (funded by BMEL).

Beans, and in particular the common bean *Phaseolus vulgaris* L., represent the most important grain legume for direct human consumption worldwide. They are a major source of highly valuable plant protein and micronutrients and they contribute to sustainable improvements to the environment due to their biological nitrogen fixation and their effects on the soil. But in Germany they are not produced.

In a smart breeding approach, basic principles are to be developed for breeding high-yielding *Phaseolus* bean varieties providing edible dry beans with high nutritional value and simplified preparation. A collection of plant genetic resources will be characterized with respect to plant performance, yield and food value. Genetic information from genome sequencing will be used to identify new marker associations to the utilization-relevant, yield-, nutritional and morphological traits, and to identify candidate genes for selected traits. Tested Alternative processing methods to be tested should exemplify together with selected suitable genotypes the simple and rapid preparation of bean dishes that are beneficial to health and are easily digestible, thus strengthening regional value chains and increasing the supply of protein from domestic crop production.

Your responsibilities:

- You will coordinate and organize the field trials for plant phenotyping and the laboratory trials for bean phenotyping. In the field, you will actively participate in the scorings, measurements and samplings as well as in the aerial flights with the UAVs and in the analysis of the aerial images. You will compile, statistically analyze and document the experimental data from plant and bean phenotyping as well as from bean chemotyping of the project partner Thünen. In this phenotyping work package, you will be supported by an LTA.
- In the genotyping work package, you will process the genotyping data, perform genome-wide association studies to identify QTLs and selected candidate genes, and document all genomic data.
- As part of the project management, you will conduct trial visits and project meetings with trial technicians and project partners, prepare project reports, result presentations at scientific meetings, and publications in scientific journals.

Your qualifications:

- Completed scientific university studies in the field of agricultural sciences or comparable fields of study with close relation to plant breeding, and experience in practical experimental work,
- pronounced interest in scientific work and in modern plant breeding issues and working methods as well as the desire to do a PhD,
- preferably, knowledge and practical experience with biostatistical and quantitative genetic analyses,
- good knowledge of spoken and written English and preferably also German as well as teamwork and communication skills, as we work in an international and interdisciplinary team,
- driver's license, so that you can visit the experimental sites independently,

- independent, committed working style as well as organizational skills, since you will be managing a scientific research project.

We offer:

- a varied and challenging position with one of the biggest employers in the region,
- opportunity to pursue a PhD,
- participation in the university-wide pension system (VBL)
- access to the extensive university sports program
- an excellent transport infrastructure with the opportunity to obtain a discounted employee ticket for public transportation (VRS) or to use assigned, affordable parking
- a salary based on the 13 TV-L scale.

The University of Bonn is committed to diversity and equal opportunity. It is certified as a family-friendly university. It aims to increase the proportion of women in areas where women are under-represented and to promote their careers in particular. It therefore urges women with relevant qualifications to apply. Applications will be handled in accordance with the Landesgleichstellungsgesetz (State Equality Act). Applications from suitable individuals with a certified serious disability and those of equal status are particularly welcome.

If you are interested in (filling) this position, please send your **complete application documents** by **26.03.2023** to [plantbreeding@uni-bonn.de](mailto:plantbreeding@uni-bonn.de) **with the application code 10/23/3.202**. Before sending your application, please combine and convert all of your documents into one PDF file. For further information please contact Dr. Henrik Schumann ([h.schumann@uni-bonn.de](mailto:h.schumann@uni-bonn.de)).

The University of Bonn does not cover travel expenses.