

The **University of Bonn** is an international research university offering a broad range of subjects. With a 200-year history, some 31,500 students, more than 6,000 employees and an outstanding reputation in Germany and abroad, the University of Bonn is one of the leading universities in Germany and has been awarded the status of a University of Excellence.

The Crop Science Group within the Institute of Crop Science and Research Conservation (INRES) at the University of Bonn is offering a

PhD position (f/m/d)

within the cluster of excellence PhenoRob part-time with a workload of 65% for a period of up to 4 in accordance with § 2 (1) WissZeitVG. The Cluster of Excellence “PhenoRob: Robotics and Phenotyping for Sustainable Crop Production” (<http://www.phenorob.de/>) is developing novel ways for growing crops and managing fields. PhenoRob aims at reducing the environmental footprint of crop production, to maintain the quality of soil and arable land, and to analyze different pathways to improve the adoption of new technologies. The PhD candidate will work within the Core Project 6 “Fusing Information from Sensing and Modeling across spatio-temporal scales” and will be responsible for developing landscape scale models to predict the impact of crop diseases on production.

Within the context of the DFG Cluster of Excellence PhenoRob, we are offering a PhD on the topic “Global assessment of smart farming potential”, focusing on the diffusion and impact of smart farming innovations.

Your tasks:

- Conceptualizing, implementing and testing a novel crop disease model for integration into the crop growth modelling framework SIMPLACE,
- Contributing to field experiments to detect crop diseases based on UAV imagery and machine learning approaches for model calibration and validation,
- Supervising graduate and/or under-graduate students on topics related to crop growth modelling, crop disease modelling, or similar approaches,
- Publishing results in peer reviewed journals and presenting at conferences,
- Cooperation with other projects within PhenoRob.

Your profile:

- An excellent MSc degree in agricultural sciences or related disciplines, preferably with a focus on crop diseases, and interest in conducting innovative research on digital agriculture and food security,
- Preferable experience and skills,
 - developing and/or applying crop growth and/or crop disease models,
 - spatial data analysis with GIS,
 - experience with programming languages (e.g., Python, R),
- Machine learning and/or GPU computing would be an additional asset,
- Willingness to travel occasionally within Germany for field measurements.

We offer:

- Active participation in the international research hub The Cluster of Excellence “PhenoRob”,
- An open, supportive, and stimulating work environment promoting interdisciplinary research,
- The opportunity of conducting innovative research in the domain of digital agriculture,
- Remuneration in accordance with TV-L pay grade 13.

The University of Bonn is committed to diversity and equal opportunity. It is certified as a family-friendly university. The University of Bonn seeks to increase female representation in staffing areas where women are underrepresented and provide special career support. It thus expressly encourages qualified women to apply. Applications will be handled in accordance with the NRW State Gender Equality Act (*Landesgleichstellungsgesetz, LGG NRW*). Applications from qualified candidates with a certified severe disability or from those of equal status are especially welcome.

The position will be mainly located at the University of Bonn but may require visits to the Research Center of Agricultural Landscape Research (ZALF) Müncheberg near Berlin and to the Institute for Sugar Beet Research in Göttingen for experimental work and/or collaborative project work.

Ideal starting date of the position is March 2026. Applications (CV including diploma certificates/transcripts, statement of motivation, list of publications if available, address for one reference) should be sent until **15 January 2026** to Dr. Marcel Meyer and Prof. Dr. Frank Ewert (Email: mmeyer2@uni-bonn.de; wiss.direktor@zalf.de) quoting the **reference number 2025/259** with all documents in one PDF file. For further information concerning our research group you can visit our website at http://www.lap.uni-bonn.de/home?set_language=en.