

The Crop Functional Genomics group of Frank Hochholdinger at the University of Bonn offers a

PhD POSITION IN PLANT GENOMICS

Three years, 65% TV-L E13

Goal of this DFG-funded project is to understand the genetic and molecular basis of the systemic modulation of maize (*Zea mays* L.) root system architecture by seminal roots to better adapt to drought.

Your tasks

- Collect phenotypic data from maize roots and run GWAS
- Generate, analyze and interpret large-scale RNA-seq data
- Validate candidate genes by mutants from our in-house mutant repository (BonnMu)
- Phenotypic, molecular and genetic characterization of mutants and genes
- Prepare scientific publications

Your profile

- MSc in Plant Science, Bioinformatics, Plant Breeding or a related field
- Background in: bioinformatics and/or biostatistics and/or quantitative genetics
- Knowledge in scientific coding (e.g. UNIX, R, perl or python)
- Very good command of the English language (oral and written).

We offer

- Stimulating interdisciplinary work environment
- Active collaborations and exchange with national and international partners
- Technical assistance in your project by our technical staff and student workers
- The salary will be according to German civil service pay scale (TV-L E13, 65%) and includes social security benefits

Applications including the CV, a motivation letter and contact details of two references should be submitted as a [single pdf](#) file in English to:

sekretariat-cfg@uni-bonn.de (subject line: "PhD position in plant genomics")

Review of applications will start by

May 5, 2025

Application will be open until the position is filled.

The University of Bonn is an equal opportunity employer. The University of Bonn is committed to increasing the proportion of women in science and thus explicitly invites qualified female scientists to apply for this position. Preference will be given to disabled candidates with essentially the same qualifications.

For further information, see www.cfg.uni-bonn.de or contact Prof. Dr. Frank Hochholdinger (hochholdinger@uni-bonn.de).

Literature:

Yu P et al. (2024) Seedling root system adaptation to water availability during maize domestication and global expansion. *Nat Genet* 56: 1245-1256.

Marcon C et al. (2020) BonnMu: a sequence-indexed resource of transposon induced maize mutations for functional genomics studies. *Plant Physiol* 184: 620-631.