

May we introduce ourselves to you?

We, Geisenheim University, are a university of the state of Hesse with around 1,800 students and 550 employees. Our university offers a range of teaching and research in the fields of plants, landscape, food and beverages that is unique in Germany. We develop strategies for a sustainable and liveable future. In doing so, we make a meaningful contribution to social transformation that takes into account the future-oriented requirements of climate, landscape and food.

Are you looking for a challenging and varied job in a personal atmosphere characterised by collegiality? Would you like to work in an innovative environment whose tradition has been geared towards sustainability for over 150 years? Then shape the future with us as

Researcher / Postdoc in Quantitative Genetics (m/w/d)

in the Department of Plant Breeding.

Where? Geisenheim in the cultural region Rheingau near Wiesbaden

When? From the next possible date

How? Full-time (100 %, E13), 3 years fixed-term (§ 2 Abs. 2 WissZeitVG)

The focus of this project is the development and implementation of quantitative genetics and statistical approaches to support various breeding operations with a focus on horticultural crops. The outcomes of this research project will provide a basis for accelerating breeding pipelines and improve selection decisions in the Geisenheim plant breeding program.

The position is part of the new **LOEWE-Start-Professorship for Plant Breeding** of Prof. Voss-Fels, funded by the Hessian Ministry of Science and Arts, which brings together different areas of breeding research in an interdisciplinary team. Extensive resources are available for this project, including large collections of breeding material, a well-equipped field trial facility, as well as laboratory and bioinformatics infrastructure.

Your Tasks:

- Statistical modelling of phenotypic data using a mixed model framework, including but not limited to the analysis of unbalanced, multi-environment trial and repeated measure datasets.
- Analysis and manipulation of large molecular marker data sets in horticultural crops for downstream genetic analyses.
- Developing and implementing parametric and non-parametric quantitative-genetic approaches for at the haplotype and whole-genome level to support selection and breeding decisions.
- Modelling the application of predictive breeding technologies within breeding programs.
- Contributing to the supervision of BSc-, MSc- and doctoral theses.
- Develop and contribute to research grant proposals and build external collaborations.
- Documentation, data analyses, presentation, and publication of results.

Your profile - our requirements.

- PhD (or equivalent) in breeding/genetics, or related field is essential.
- Sound knowledge in theoretical and applied quantitative genetics.
- Experience with molecular techniques and approaches, particularly the use of molecular markers in genetics and breeding applications, is essential.
- Strong skills in coding and/or programming languages (e.g. R, Python, C++)
- Expert knowledge in statistical modelling using state-of-the-art software tools for the analyses of large and complex breeding data sets (e.g. ASREML) are essential.
- Knowledge and experience in crop phenotyping of and processing of HTP-data is highly desired.
- Expert knowledge and experience in commercial plant breeding is highly desirable.
- Experience with manipulating and analysing data from high-throughput genomics tools using high-performance computing environments is highly desirable.
- Proficient in the application of current quantitative-genetic methodologies in large breeding data sets is essential.
- Experience in leading small teams and developing external collaborations.
- Excellent command in spoken and written English.
- Strong team player mentality and sense of responsibility are essential.

Our offer - your opportunity.

- Security employment in the public sector with remuneration (depending on professional experience and qualifications) up to pay group 13 TV-H and a company pension scheme. Funding available for an extension for up to three years
- *Meaningfullness* responsible task in a practical project to secure the future of viticulture in and outside Germany in an interdisciplinary motivated team.
- *Prospects* personal, needs-oriented promotion through extensive training and further education opportunities; possibility of a doctorate
- Flexibility individual working time models (work-life balance), generally the possibility of mobile working after familiarisation and 30 days' holiday
- Mobility LandesTicket Hessen 2024 for free use of local and regional public transport within Hesse
- Feel-good factor a sense of belonging as "Geisenheimer" through a familiar environment on the green campus with listed parks and buildings, coupled with the warmth of the Rheingau.

Does this sound interesting for you? Then submit your application (cover letter, CV incl. publication list, research projects and interests, relevant certificates/transcripts, 3 references) as a single PDF document to bewerbung@hs-gm.de by March 27, 2024, quoting the reference number 21/2024. Applications will be shortlisted after the submission deadline. Shortlisted applicants will receive an invitation for an interview. We're looking forward to reading your application!

If you have any initial questions (also regarding the processing of your application data, see data protection information/application data), please do not hesitate to contact us:

Job application management Aline Wenzl/Verena Klein

Tel.: +49 (0)6722 502-2291/2292 E-Mail: <u>bewerbung@hs-gm.de</u>

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For us, your profile and your strengths count. That is why we welcome every person regardless of characteristics such as gender, age and origin or disability. People with disabilities (as defined in § 2 Para. 2 and 3 SGB IX) are given preferential

consideration if they are equally qualified.
Geisenheim University is a university that has been audited as "family-friendly" and is committed to diversity, equal rights for all genders and the compatibility of work and family. Therefore, we expressly encourage women with appropriate qualifications to apply.