

May we introduce ourselves?

We, Hochschule Geisenheim University, are a university of the state of Hesse with around 1,800 students and 550 employees. Our range of degree programs and research projects in plant sciences, landscape, food and beverages is unique in Germany. As we strive to create strategies for a sustainable and livable future, we are a driver for social transformations needed to meet future demands in terms of climate, landscape and food.

Are you looking for a challenging and varied job in a great team characterized by a personal atmosphere? Would you like to work in an innovative environment with a 150-year tradition of sustainability? Then start shaping the future with us as

Researcher / Postdoc in Digital Phenotyping in Horticultural Crops (m/f/d)

at the Professorship for Horticultural Crop Breeding

Where? Geisenheim in the cultural region of the Rheingau (50 km west of Frankfurt/Main)

When? As soon as possible

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

The focus of this exciting postdoc position is the development, implementation and use of **modern "digital phenotyping" tools**, as well as approaches for **automated processing of sensor data** in order to generate, evaluate and analyze extensive phenotypic data sets for horticultural crops such as grapevine and apple. These data will be used to study the genetic architectures of important agronomic traits and will also support the optimization of breeding selection of improved germplasm. This postdoc position will also generate new insights into important plant physiological processes and help to define new proxy traits that can be measured at high-throughput in order to accurately identify breeding germplasm with improved genetic merit for important traits such as drought tolerance and disease resistance early on in the breeding cycle.

The position is part of the new **LOEWE-Start-Professorship for Breeding of Horticultural Crops** 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 and glasshouses, an investment budget for new equipment and tools, dedicated support by technical staff, as well as laboratory and bioinformatics infrastructure.

Your profile - our requirements.

- University degree (MSc or university diploma) in a relevant field, e.g. agricultural sciences, horticultural sciences, information technology, digital engineering or comparable field with relevance for "digital phenotyping" for plant breeding
- Excellent knowledge on the generation, processing and interpretation of complex phenotypic data sets generated with sensors and optical metrology tools

- Profound knowledge of UAV-based remote sensing methods for field phenotyping, as well as experience in processing and use of data from these platforms to address plant breeding-relevant research questions is expected
- Sound knowledge of methods for automated processing of complex data from various sensors/measurement technology, e.g. multi-/hyperspectral sensors is required
- Experience in agronomic field testing and statistical analyses of data from field trials required
- Proficiency in coding and/or programming languages and/or software for data analyses using high-performance computing systems is expected
- Strong affinity for and excellent knowledge of new technologies and tools for “Digital Phenotyping” is expected
- Experience in building automated data processing pipelines, e.g. incorporating machine learning algorithms, is an advantage
- Strong interest in presenting and publishing results in national and international scientific journals, as well as practical journals, and for the public and funding bodies
- Experience in epigenetics/epigenomics in plants is a plus
- Experience in leading small teams e.g. of undergraduate and PhD students and technical staff is an advantage
- Fluency in English, both written and spoken, is expected
- Willingness to travel to field stations (driving license class B) is desired

Our benefits – your chance.

- *Job 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
- *Significance* responsible task in a practical project to secure the future of viticulture in Germany and abroad in an interdisciplinary motivated team.
- *Prospects* - personal, needs-oriented support through extensive training and further education opportunities
- *Flexibility* - individual working time models (work-life balance), mobile work possible after initial on-the-job training, 30 days annual leave
- *Mobility* - LandesTicket Hessen 2023 and 2024 for free use of local and regional public transport within the state of Hesse
- *Feel-good factor* - a strong team spirit as part of the "Geisenheimer" family on our green campus with listed parks and buildings, coupled with the region's renowned cordiality

Sounds exciting? Then submit your application (cover letter, CV incl. publication list, research projects and interests, 3 references) as a single PDF document to bewerbung@hs-gm.de by **October 11, 2023**, quoting the **reference number 79/2023**. 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:

<p><u>Job application management</u> Aline Wenzl/ Verena Klein Tel.: +49 (0)6722 502-224/226 Email: bewerbung@hs-gm.de</p> <p>Hochschule Geisenheim University Human Resources Von-Lade-Straße 1, 65366 Geisenheim</p>	<p><u>Professorship for Horticultural Crop Breeding</u> Herr Prof. Dr. Kai Voss-Fels Tel.: +49 6722 502-126 Email: kai.voss-fels@hs-gm.de</p>
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Your profile and strengths matter. That is why we encourage all qualified candidates to apply regardless of gender, age, origin or disability.
Candidates with disabilities (as defined in § 2 Para. 2 and 3 SGB IX) are given preferential consideration if they are equally qualified.
Hochschule Geisenheim University is a certified family-friendly university committed to diversity, equal opportunities and reconciling career and family life. Therefore, applications from female candidates are particularly welcome.