

**Hier
entsteht
Zukunft!**

Foto: Oliver Dietze



Saarland University is a campus university that is internationally recognized for its strong research programmes. Fostering young academic talent and creating ideal conditions for teaching and research are a core part of the university's mission. As part of the University of the Greater Region, Saarland University enables students and staff to share and exchange knowledge and ideas between disciplines, between universities and across borders. With over 17,000 national and international students, studying more than a hundred different academic disciplines, Saarland University is a diverse and dynamic learning environment. [Saarland University is officially recognized as one of Germany's family-friendly higher-education institutions and with a combined workforce of more than 4,000 it is one of the largest employers in the region.]

The Department for Clinical Bioinformatics at the Center for Bioinformatics in Saarbrücken is inviting applications for the following position commencing at the earliest opportunity.

Academic research assistant (m/f/x)

Reference number W2910, salary in accordance with the German TV-L salary scale¹, pay grade: E13 TV- L, duration of employment: 3 years, volume of employment: 100 % of standard working time.

Workplace/Department:

The Chair for Clinical Bioinformatics, led by Prof. Dr. Andreas Keller, works at the interface of medicine, bioinformatics and computer science, and it operates across two closely connected settings. At Saarland University the group studies the molecular mechanisms of aging and neurodegeneration. It has a long track record in non-coding and microRNA biology, in non-invasive biomarkers and in the brain–blood axis, and this work increasingly draws on single-cell and spatial transcriptomics. A second branch at the Helmholtz Institute for Pharmaceutical Research Saarland (HIPS) works on microbiome and infection biology. A systemic, cross-tissue view connects the two, and machine learning and AI are central to how the group works across all of it. In practice that means single-cell and single-nucleus RNA-seq, spatial transcriptomics, immune-repertoire and non-coding RNA data. The group is on the Saarbrücken campus within the Saarland Informatics Campus, with close ties to HIPS and the PharmaScienceHub and access to the computing infrastructure and collaborations that this kind of interdisciplinary work needs.

We are looking for a candidate with a solid foundation in machine learning and AI who wants to move beyond applying existing tools towards developing and adapting their own methods, and who is interested in the biology the data comes from. You would work with the group's high-dimensional data, which spans single-cell and single-

¹ TV-L = collective agreement on remuneration of public sector employees in the German *Länder*

The pay grade assigned to an employee depends on their professional qualifications and the number of years of service. Each pay grade is further subdivided into levels. Entry-level employees with no previous experience will initially be assigned a level 1 rating. After one year at level 1 of the E10 pay grade, an employee will move up to level 2. After a further two years, the employee will move to level 3, etc.

nucleus RNA-seq, spatial transcriptomics, immune-repertoire and non-coding RNA. The task is to develop, adapt and benchmark ML and AI methods for questions that standard tools handle poorly, in the context of aging and neurodegeneration. This is methodological work, focused on models, algorithms and inference, with the biology setting the questions.

Job requirements and responsibilities:

- Develop, adapt and benchmark machine-learning and AI methods for high-dimensional biomedical data
- Turn concrete data problems into well-posed models and validate them rigorously
- Build scalable, reusable and well-documented software and tooling for the group
- Prepare and write up results and methods for scientific publication

For entry at Master level, the position can lead to a doctorate: depending on the thesis topic and supervision, doctoral registration is possible either through the Medical Faculty (Dr. rer. nat.) or the Faculty of Mathematics and Computer Science (Dr.-Ing. or Dr. rer. nat.).

Your academic qualifications:

- Completed university studies in Computer Science, Data Science, Machine Learning, Mathematics, Bioinformatics, or a related discipline (Master or PhD), with a strong, demonstrable computational track.
- Language skills (according to GER): English - C1 (e.g.: *German -C2*) (option necessary language skills)

The successful candidate will also be expected to:

- Have a solid grounding in machine learning and AI, backed by previous projects (for example a thesis, coursework or open-source work)
- Have strong scientific programming skills (C++/Python/R or similar) and write efficient, well-structured code, with a solid grasp of algorithms and data structures
- Be comfortable on UNIX-based systems and with CLI tools and GPU / distributed (HPC) computing
- Be comfortable with version control (Git) and, ideally, containers such as Docker
- Take a genuine interest in the biology and the questions behind the data
- Work independently and in a result-oriented manner within an interdisciplinary team
- Follow principles of good scientific practice, reproducible research and responsible handling of sensitive biomedical data
- Contribute to lab and consortium meetings, reports and documentation, and present results at international conferences
- Over time, support lectures and (co-)supervise students during their theses (Bachelor / Master)

What we can offer you:

- A flexible work schedule allowing you to balance work and family, among other things the possibility of teleworking
- Secure and future-oriented employment with attractive conditions
- A broad range of further education and professional development programmes (for example language courses)
- An occupational health management model with numerous attractive options, such as our university sports programme
- Supplementary pension scheme (RZVK)
- Discounted tickets on local public transport services ('Job-Ticket' of the saarVV)
- Job bike leasing (JobRad)

We look forward to receiving your **meaningful online application** (in a PDF file) by **30.09.2026** to andreas.keller@ccb.uni-saarland.de. Please include the reference number W2910 in the subject line of the e-mail.

If you have any **questions**, please contact us for assistance. Your contact:

Frau Berit Andres

berit.andres@ccb.uni-saarland.de

Pay grade classification is based on the particular details of the position held and the extent to which the applicant meets the requirements of the pay grade within the TV-L salary scale. Part-time employment is generally possible.

If you have obtained a foreign university degree, a proof of the equivalence of this degree with a German degree by the Zentralstelle für ausländisches Bildungswesen (ZAB) is needed before hiring. If necessary, please apply for this in time. You can find more information at <https://www.kmk.org/zeugnisbewertung>.

Unfortunately, neither costs for attending an interview at Saarland University nor costs for any certificate evaluation by the ZAB can be reimbursed in principle.

We welcome applications regardless of gender, nationality, ethnic and social origin, religion/belief, disability, age, and sexual orientation and identity. In accordance with its policy of increasing the proportion of women, the University actively encourages applications from women. Applications from severely disabled persons will be given preferential consideration in the event of equal suitability.

When you submit a job application to Saarland University you will be transmitting personal data. [Please refer to our privacy notice for information on how we collect and process personal data in accordance with Art. 13 of the Datenschutz-Grundverordnung](#). By submitting your application you confirm that you have taken note of the information in the Saarland University privacy notice.