

Saarland University is a campus university with an international reputation for research excellence, particularly in computer science and in the life sciences and nanosciences. The university is also distinguished by its close ties to France and its strong European focus. Around 17,000 students, studying over one hundred different academic disciplines, are currently enrolled at Saarland University. Saarland University is officially recognized as one of Germany's family-friendly higher-education institutions and with a combined workforce of more than 4000 it is one of the largest employers in the region.

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

# Academic research assistant (m/f/x) - PhD

**Reference number W2570**, salary in accordance with the German TV-L salary scale<sup>1</sup>, pay grade: E13 TV-L, duration of employment: for 3 years, volume of employment: 100 % of standard working time.

### **Workplace/Department:**

The Department for Clinical Bioinformatics is at the forefront of integrating informatics, experimental biology, and clinical applications. Our mission is to drive innovative research that addresses critical questions in health and disease through a multidisciplinary approach.

Our research focuses on exploring the biological underpinnings of aging and neurodegenerative conditions such as Alzheimer's and Parkinson's disease and unraveling the intricate relationships between microbial communities and health within the context of the One Health Era. We conduct comprehensive analyses of metagenomic datasets to explore the functional capacities of microbiomes and their roles in various diseases and ecosystems, enhancing our understanding of their impact on health outcomes.

At the Department for Clinical Bioinformatics, we foster a collaborative and inclusive work environment that encourages creativity and innovation. Our team consists of experts from diverse fields, including bioinformatics, molecular biology, and clinical research. We prioritize professional development and offer opportunities for researchers to engage in cutting-edge projects and attend conferences. Together with its international partners and

<sup>&</sup>lt;sup>1</sup> 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.



colleagues, the Department for Clinical Bioinformatics actively pursues collaborations with researchers across different disciplines and leading field industry and offers an excellent environment of research experts as well as the necessary computing infrastructure & key resources.

We are looking for a motivated researcher with knowledge in data science for the analysis of metagenomics datasets, as well as, for the development of computational methods for microbiome research.

## Job requirements and responsibilities:

- Analyze and interpret shotgun metagenomics sequencing data from diverse platforms, including short-read (e.g., Illumina) and long-read (e.g., Oxford Nanopore, PacBio) technologies, encompassing both human and non-human ecosystems.
- Develop and implement computational methods and algorithms to advance microbiome research and set up modern database systems.

#### Your academic qualifications:

• Completed academic degree (Master) in Bioinformatics, Computer Sciences, Data Science, Al with natural sciences minor, or a related profession. The opportunity to pursue a PhD will be granted, given that all requirements are met.

#### The successful candidate will also be expected to:

- Strong knowledge on scientific programming (C++ / Python / R, or similar), modern software engineering and efficient algorithms.
- Be comfortable to work on UNIX-based operating system and the according CLI-tools.
- Strong knowledge on the principles of bioinformatics-driven data analysis, i.e., to process large data sets in a comprehensive manner as being able to draw reliable and effective conclusions.
- Broad fundamental knowledge on molecular biology, human genetics, immunology, and neurosciences.
- Previous experience in evaluating shotgun metagenomics sequencing from short-read (i.e. Illumina) or long-read platforms (i.e. Oxford Nanopore, PacBio).
- Knowledge on how to operate in the lab is not required, although a basic understanding of important wet-lab techniques is certainly advantageous.
- Work independently and result oriented
- Collaborate with clinicians
- Support lectures and occasionally teach under supervision
- Supervise students during their thesis (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)

We look forward to receiving your **meaningful online application** (in a PDF file) by **01.12.2024** to **andreas.keller@ccb.uni-saarland.de**. Please include the reference number W2570 in the subject line of the e-mail.

If you have any **questions**, please contact us for assistance. Your contact: Prof. Dr. Andreas Keller Clinical Bioinformatics andreas.keller@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 <a href="https://www.kmk.org/zeugnisbewertung">https://www.kmk.org/zeugnisbewertung</a>.

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. <u>Please refer to our privacy notice</u> 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.