

Hier  
entsteht  
Zukunft!



UNIVERSITÄT  
DES  
SAARLANDES

Foto: Oliver Dietze

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 Anti-infectives from Microbiota – Research direction Pharmacy is inviting applications for the following position commencing at the earliest opportunity.

## Doctoral Research Position (m/f/x)

**Reference number W2598**, salary in accordance with the German TV-L salary scale<sup>1</sup>, pay grade: E13 TV- L, duration of employment: 3 years, volume of employment: 65 % of standard working time.

### Workplace/Department:

The department MICA - Anti-Infectives from Microbiota, led by Prof. Christine Beemelmans at the Helmholtz Institute for Pharmaceutical Research Saarland (HIPS), specializes in studying symbiotic and protective microorganisms from ecologically significant microbiomes. By leveraging advanced genomic and metabolomic tools, the team aims to isolate and characterize novel natural products with anti-infective potential. Their research includes cultivating symbiotic and protective bacterial and fungal species from well-defined microbiomes under various ecomimetic and co-culture conditions. High-resolution mass spectrometry and genome mining techniques are employed to analyze and dereplicate metabolomes. The resulting natural products are further examined for anti-infective activity, with structural modifications made through cultivation and semi-synthetic methods to investigate their modes of action. We are currently seeking a motivated doctoral researcher to analyze the metabolome of encapsulated bacterial species from human and other mammalian microbiomes. In collaboration with research projects at the INM – Leibniz Institute for New Materials at the UdS, the project will investigate the metabolic state of encapsulated bacteria. This will involve evaluating the time, material, and strain-dependent secretome, including the production of bacterial antibiotics, and assessing whether specific metabolites remain encapsulated. This project will provide a foundation for characterizing living therapeutic materials and ensuring their stability throughout translational development phases.

<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.

### Job requirements and responsibilities:

- Microbial cultivation techniques (fungal or bacterial samples)
- Mass spectrometry-based analysis of microbial (co-)cultures
- High-performance chromatographic separation techniques
- HRMS/MS and NMR-based analysis of chemical structures
- Next generation sequencing data analyses
- Project coordination, data analysis and database management
- Scientific writing and presentations
- Management of analytical instruments

### Your academic qualifications:

- Completed scientific university studies in Chemistry, Pharmacy, Life Sciences, Biochemistry or a related discipline (Candidates about to obtain their degree are welcomed to apply)

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

- Hands-on experience on NMR-based structure elucidation of natural products
- Theoretical or practical knowledge on bacterial genomics
- Theoretical or practical experience in molecular cloning methods and/or transcriptomic studies
- High motivation for learning state-of-the-art metabolomic analyses tools
- High motivation for management of analytical instruments
- Language skills (according to GER): German –B2

### 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 **28.02.2025** to **christine.beemelmans@uni-saarland.de**. Please include the reference number **W2598** in the subject line of the e-mail.

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

Frau Prof. Dr. Christine Beemelmans  
Department Anti-Infectives from Microbiota  
E-mail: christine.beemelmans@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.