Julius-Maximilians-
UNIVERSITÄT
WÜRZBURG

Position Opening

The Chair of Microbiology at Julius-Maximilians-Universität Würzburg (JMU), Germany, is inviting applications for a

PhD student position

on the functional characterization of RNA-binding proteins in bacteria of the human gut microbiota

under the direction of Prof. Dr. Alexander Westermann and within the framework of the DFG Priority Programme "*Illuminating Gene Functions in the Human Gut Microbiome*" (SPP 2474)

The Westermann lab is recruiting a PhD student to work on a DFG-funded project that tackles cutting-edge research in the area of functional microbiota research. The project will focus on investigating the role and mechanisms of RNA-binding proteins (RBPs) in the anaerobic gut commensal, *Bacteroides thetaiotaomicron*. Gram-negative bacteria employ global RBPs to post-transcriptionally adapt their gene expression to changing environments. The Westermann lab has recently identified a family of RNA recognition motif (RRM)-containing proteins as the first known global RBPs in *Bacteroides* spp., with relevance for the colonization of the mammalian gut (*Rüttiger et al., Nat Commun. 2025*). The present project will investigate the cellular functions of RRM proteins in different *Bacteroidota* species. The derived insights may help to fill some of the current major gaps in our understanding of post-transcriptional gene expression control in predominant gut microbiota members and could boost ongoing endeavors to harness gut *Bacteroides* as tools and targets for microbiota-centric intervention therapies.

The position is immediately available, although the starting date is flexible and will be fixed term for aWE period of 3 years. The position is part time (65 %). Remuneration will be based on the collective agreement for the public service of German federal states (TV-L).

Qualifications:

- A qualification as Master Sc. or equivalent in molecular, cellular, or microbiology, or a related field of the life sciences
- Strong experience and interest in RNA biology and bacteriology
- Bioinformatics knowledge and experience with obligatory anaerobic bacteria are desirable
- Experience with standard molecular biology techniques
- Strong written and spoken English language communication skills
- Highly motivated and organized

What we offer:

We offer state-of-the-art infrastructure and cutting-edge technologies to promote scientific progress and interdisciplinary collaboration. We focus on a close integration of research and management and strive for excellence inside and outside the laboratory. Promoting equal opportunities and competencies for our employees and celebrating diversity are a matter of course for us. To ensure a good work-life balance, we have created a family-friendly atmosphere with flexible working hours and part-time models, a parent-child room and regular social activities.

The JMU aims to reduce the underrepresentation of women and therefore explicitly encourages qualified women to apply.

Severely handicapped applicants will be given preferential consideration in the case of broadly equal suitability, ability and professional achievements.

We look forward to receiving your complete application including a cover letter, CV, certificates, and a ½ - 1 page description of a prior research project. You are also welcome to provide reference names in your CV. Please send your application as a **single pdf document via email**, quoting the reference number **WE 6689.**

sekretariat.mikrobiologie@uni-wuerzburg.de

University of Würzburg
Department of Microbiology
Am Hubland
97074 Würzburg

For further information please contact Prof. Dr. Alexander Westermann, email: alexander.westermann@uni-wuerzburg.de.

The closing date for applications is 15.12.2025.

Further reading:

- *Nat Commun*. 2025 Jan 2;16(1):208. doi: 10.1038/s41467-024-55383-8.
- *Nat Microbiol*. 2024 Apr;9(4):1130-1144. doi: 10.1038/s41564-024-01642-9. Epub 2024 Mar 25.
- *Proc Natl Acad Sci U S A*. 2024 Feb 6;121(6):e2311323121. doi: 10.1073/pnas.2311323121. Epub 2024 Jan 31.
- *Trends Microbiol*. 2022 Feb;30(2):104-108. doi: 10.1016/j.tim.2021.11.009. Epub 2021 Dec 8.
- *Nat Rev Genet*. 2021 Jun;22(6):361-378. doi: 10.1038/s41576-021-00326-y. Epub 2021 Feb 17.
- *Biol Chem*. 2020 Sep 24;402(1):55-72. doi: 10.1515/hsz-2020-0230. Print 2020 Nov 18.