

The Reckzeh lab at the *Life & Medical Science Institute* (LIMES) of the University of Bonn, part of the *Transdisciplinary Research Area Life & Health*, has an opening for a

PhD position for Nutrient Metabolism in Murine and Human Gut Organoids.

Organoids are an *in vitro* model system that recapitulate key features of the tissue it is derived from. Gut organoids can be differentiated to all cell types of the intestinal epithelium. We are interested how nutrient uptake is regulated in the intestine and how cellular adaptations to environmental changes are mediated in the gut epithelium. In mice on a high fat- high sugar diet the gut epithelium adapts its functionality (cell type ratios and function) and the epithelial surface area is enlarged. We want to understand how this is mediated molecularly. In the course of this project, the candidate will be exposed to organoid biobanking, CRISPR Cas9 genome engineering, gut-on-a-chip systems, chemical compound screens, high content screening, co-cultures with immune cells and microbiota and a variety of molecular biology techniques.

The candidate will be embedded in a highly interdisciplinary research group with chemical and biological expertise, working on the forefront of basic research and drug development using microphysiological systems (organoids). Furthermore, the candidate will be enrolled in the Immunosenescence² Graduate School BIGS. The Reckzeh lab aims to develop new drugs/tool compounds in patient-derived organoids, spanning different disease areas, *e.g.* diabetes and cancer.

The ideal candidate is highly motivated, team-oriented and interested in interdisciplinary research spanning organoid/cancer biology and chemical biology. The candidate should have a first-class academic degree in a life-science related discipline (Master's degree in biology, molecular biology, chemical biology, biomedicine or equivalent) with a strong background in cell biology and ideally first working experience with organoids, CRISPR-Cas genome engineering or metabolism-related research. Candidates should have strong communicative skills (fluent spoken and written English). Mentoring PhD candidates and a trustful and collegial atmosphere is of utmost importance in the Reckzeh lab.

We offer:

- The salary (65%) will be according to the German salary scale TV-L (EG 13)
- A "Jobticket" (subsidized public transport) is available
- Supplementary benefits in the public sector (pension plan according to VBL)

The University Bonn is one of Germany's eleven Universities of Excellence since 2019. The University is committed to diversity and equal opportunity. It is certified as a family-friendly university. Applications will be handled in accordance with the Landesgleichstellungsgesetz (State Equality Act). Applications from suitable individuals with a certified serious disability and those of equal status are particularly welcome.

Applicants should send their application documents in a single pdf file (max. 5 MB) including motivation letter, CV, scanned academic degrees, list of publications and the contact details of two references. Successful candidates will begin in **June, 2024** or later. Please send your application to

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