Julius-Maximilians-
UNIVERSITÄT
WÜRZBURG

The research group of Prof. Dr. Bettina Warscheid at the University of Würzburg is offering a

PhD position (f/m/d) in Peroxisome Biogenesis and Proteostasis

The chair for Biochemistry II (Proteomics and Bioanalytical Mass Spectrometry) is a leading group in functional proteomics research using cutting-edge mass spectrometry-based technologies. The Warscheid group employs modern biochemistry and cell biology methods in combination with quantitative proteomics technologies to study the biogenesis, organization and functions of (sub)cellular proteomes with a focus on metabolic organelles, proteostasis and signaling networks in health and disease (for publications, see*). For our research on peroxisome functions, we are looking for a highly motivated new team member. In this research line, we will elucidate large protein machineries that are essential for peroxisomal biogenesis and the consequences of peroxisomal import defects which result in severe human disorders. The project builds on our latest discovery of a new peroxisomal biogenesis factor, named PEX39 (Chen et al. (2024) https://doi.org/10.1101/2024.04.30.591961. The successful candidate will characterize peroxisomal protein import complexes and elucidate proteostasis networks elicited by peroxisomal biogenesis defects in yeast and human cells. In addition to the use of modern biochemical and molecular biology methods, he/she will perform cutting-edge integrative structural and proteomics studies using state-of-the-art instrumentation.

Your tasks:

- characterize multiprotein complexes using structural proteomics (XL-MS, native MS)
- generate site mutants, stable cell lines, CRISPR-knockouts for functional analysis
- design and conduct biochemistry and cell biology assays
- perform proteomics experiments using quantitative high-resolution mass spectrometry
- perform bioinformatics analyses and meta-analyses of MS data
- manage research tasks and collaborate with other leading research labs
- publish and communicate your research results
- participate in supervision and mentoring of students

Your profile:

- Master's degree in Biochemistry, Biology, Chemistry, or a related Life Science discipline
- experience in cell culture techniques and genetic manipulation of mammalian cells and yeast
- experience in LC-MS and proteomics is advantageous
- knowledge in data analysis, statistics, programming/script languages (Python, R) is a plus
- excellent communication, writing, and organizational skills
- self-motivated and enthusiastic for academic research in a dynamic team environment

We offer:

- an interdisciplinary, diverse and highly supportive team in a friendly work environment
- high-resolution mass spectrometry, high-resolution fluorescence microscopy, cryo-EM
- new labs with an excellent infrastructure for biochemistry, proteomics, molecular and cell biology work
- integration and training in DFG-funded research projects and a graduate school
- an excellent scientific environment and highly productive international collaboration network
- plenty of support in further education, career development, and training opportunities

The position is as of now available, initially for one year, followed by an extension for another two years. The salary is according to TV-L (65%). We are an equal opportunity employer. Applications of women are encouraged. Handicapped candidates with equivalent qualifications will be given preference. Interested candidates should send an application including a statement expressing your motivation to join our lab, an academic CV, study certificates, areas of expertise and interests, and the names and contact of two referees as **one PDF** file via email until 15.06.2024 to Prof. Bettina Warscheid (bettina.warscheid@uni-wuerzburg.de).

Please do not send any original documents per mail. For reasons of cost, documents will not be returned.

*Selected publications: Morgenstern et al. (2021) PMID: 34800366; Lill et al. (2020) PMID: 33323485; Topf et al. (2018) PMID: 29358734; Morgenstern et al. (2017) PMID: 28658629; Das et al. (2023) PMID: 36952175; Fischer et al., (2022) PMID: 36122347; Peikert et al. (2017) PMID: 28485388; Wrobel et al. (2015) PMID: 26245374

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