

The research group of Prof. Dr. Bettina Warscheid is looking for a

Postdoctoral Scientist in Quantitative Proteomics and Cell Signalling

The chair for Proteomics and Biochemistry is a leading group in functional proteomics research using cutting-edge mass spectrometry technologies. Research in the Warscheid lab generally aims to better understand how intracellular signalling networks are regulated and how the proteome is organized at a subcellular level. Our group publishes in high-ranking journals (e.g. Morgenstern et al. Cell Metab 2021, Lill et al., PNAS 2020; Reimann et al., Commun Biol 2020; Topf et al., Nat Commun 2018, Morgenstern et al., 2017; Peikert et al., Nat Commun 2017; Reimann et al., Mol Cell Proteomics 2017; Wrobel et al., Nature 2015). For our research on cellular signalling and protein networks with a role in the development of human diseases, we are looking for a highly motivated and qualified new team member. He/she will be responsible for performing deep signalling studies using quantitative proteomics technologies to profile phosphorylation, thiol oxidation and ubiquitination landscapes in response to various stress conditions. Furthermore, he/she will elucidate changes in the protein nano-environment of key signalling factors.

Your tasks:

- study dynamic cell signalling networks by advanced quantitative and spatial proteomics
- perform and advance multiplexing and targeted MS technologies
- implement methods to study protein signalling nano-environments (e.g. TurboID)
- be responsible for operating state-of-the-art LC-MS systems
- perform bioinformatics and statistical analysis of MS datasets
- design and manage proteomics projects and collaborate with other leading research labs
- publish and communicate your research results and contribute to project proposals
- participate in supervision and mentoring of students

Your profile:

- PhD degree in Biology, Biochemistry, Chemistry, Physics, or a related Life Science discipline
- excellent track record with first/co-author publications in peer-reviewed journals
- hands-on experience in high-resolution LC-MS
- expert knowledge in quantitative MS and global/targeted proteomics & PTM analysis
- sound experience in biochemistry and molecular biology approaches to study cell signalling
- sound experience in bioinformatics data processing and biostatistics
- skills in common programming/script languages (Python, R)
- high degree of analytical thinking and creativity
- excellent communication, writing, and organizational skills
- highly self-motivated and enthusiastic for MS technologies

We offer:

- an interdisciplinary and highly supportive team in a friendly work environment
- state-of-the-art LC-MS instrumentation (high-resolution Orbitrap instruments)
- new labs with an excellent infrastructure for biochemistry, molecular biology and cell biology work
- a well-funded research group with a well-established and highly productive collaboration network
- an excellent scientific environment in an international and open-minded research community
- plenty of support in further education, career development, and training opportunities

The position is as of now available, initially for one year with the potential for extension for another three years. 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 motivation letter, CV, study certificates, areas of expertise and interests, list of publications, and the names and addresses of two referees as **one single PDF** file via email to Prof. Dr. Bettina Warscheid (bettina.warscheid@biologie.uni-freiburg.de).