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The Leibniz-Forschungsinstitut für Molekulare Pharmakologie (FMP) belongs to the Forschungsverbund Berlin e. V. (FVB). The FVB supports eight research institutes in Berlin, which are members of the Leibniz Association and financed by the Federal Republic of Germany and the federal states.

In the Junior Research Group **”Structure and mechanism of microbiome-driven diseases”** headed by **Dr. Daniel Roderer**

Two PhD positions in Cryo-EM and Structural Biology (f/m/d)

(Ref. 17/2020)

are to be filled **as soon as possible**. Salary is paid according to the German salary scheme for the public sector (TVöD Bund). Both positions are 65% positions for doctoral research, initially limited to **3 years** with the potential of extension.

Project description:

The focus of the recently established junior research group of D. Roderer is on **molecular mechanism of microbiome-driven carcinogenesis**. We aim to close the current gap of knowledge between genome analysis, microbial and cellular data and structural details of **host-microbiome interactions**, which is an important prerequisite for **structure-based drug design**. In particular, we address complexes between bacterial adhesins with human cell surface receptors by **protein biochemistry, biophysics and structural biology, especially cryo-EM**. In addition, we apply screening methods (**Crispr-Cas9, mass spectrometry**) to identify adhesins and receptors that are suitable as drug targets.

Requirements:

We are looking for ambitious, highly motivated, and talented graduate students who are enthusiastic to perform research in an outstanding and vibrant scientific environment. The applicants should be meticulous in their work, team players, and have the wish to excel in science. The working language is English, knowledge of the German language is not required. A master degree in Biochemistry, Biophysics, Physics or a related subject with excellent grades is required, as well as profound experience in protein biochemistry or electron microscopy. Previous experience in structural biology (cryo-EM and/or X-ray crystallography) is advantageous.

Are you interested?

For further information, please contact Daniel Roderer (roderer@fmp-berlin.de). Please also see selected recent publications: Roderer D. et al., Nat Comm 11 (2694), 2020; Roderer D. et al., PNAS 116 (45), 2019; Roderer D. et al., Nat Comm 10 (5263), 2019; Gatsogiannis C. et al., Nature 563 (209-213), 2018.

In 2013 the FMP has been awarded the certificate of the audit “Beruf und Familie” as family-friendly employer. We offer equal opportunities regardless of gender, age, ethnic origin or religion. We welcome applications of disabled candidates who will be given preference in case of equal qualification.

How to apply: On the FMP homepage please go to [“Stellenangebote/Jobs“](#) and click on this advertisement and then on the button [“Online bewerben“](#). Please combine all application documents (motivation letter, CV, grade reports from high school diploma, bachelor & master degree, statement of research experience and interests and the contact details of two to three references) into one pdf document and submit them latest until **November 20th, 2020**.

We are looking forward to your application!