

PhD position

Understanding *Pseudomonas aeruginosa* pathogenicity using structural biology tools.

The candidate will investigate the structural determinants of novel pathogenicity factors in *Pseudomonas aeruginosa* using X-ray technologies, electron microscopy and microbial multi-omics data. The project will involve establishment of new research protocols, identification of novel virulence factors, resolution of 3D protein structures and large-scale data processing. The position is oriented towards talented students with background in biophysics and/or molecular microbiology, who are willing to work in the wet lab handling infectious agents. This work is a collaborative project between the groups of Prof. M. Kolbe from the Helmholtz Centre for Structural Infection (HZI/U. Hamburg) and Prof. J. Labahn from Jülich Research Center (FZJ/U. Düsseldorf) under the umbrella of the CSSB in Hamburg.

We offer:

- An exciting project in which we will aim to identify novel target proteins to combat nosocomial infections.
- A stimulating multidisciplinary research environment at the recently established Centre for Structural Systems Biology (CSSB) on the DESY campus in Hamburg.
- The possibility to participate in international workshops and conferences.

Starting date: As soon as possible. Salary follows TVöD E13 (50%)

Requirements Qualifications:

- Master/Bachelor in Physics or Life Science (biophysics, molecular microbiology, biochemistry, cell biology or a related field) obtained with the grade of distinction.
- Interest in crystallography and microbiology is a prerequisite, background in structural biology and microbiology is an advantage.
- Strong analytical skills to solve complex project-related scientific problems.
- Excellent experimental and organizational skills.
- A good command of the English language (written and spoken) is an asset.

Employer: Forschungszentrum Jülich (FZJ)

Master/Bachelor thesis projects

Also available. Please inquire.