Max Planck Unit for the Science of Pathogens

PhD student / Doktorand (f/m/d) or Post-doc (f/m/d) (Research group of Prof. Kürşad Turgay)

Prof. Kürşad Turgay, an independent research group leader at the Max Planck Unit for the Science of Pathogens (MPUSP), is seeking a PhD student or a Postdoctoral Researcher with excellent skills and knowledge in molecular biology, biochemistry and microbiology. Experience in the field of bacterial stress response and regulation or protein homeostasis would be helpful.

Prof. Turgay´s group focuses its research on bacterial stress response and protein homeostasis mostly in the Gram-positive model organism *Bacillus subtilis*. Research topics include stringent and heat shock response, the role and function of bacterial chaperone systems such as AAA+ protease systems and their adaptor proteins in protein quality control and regulatory proteolysis, as well as general cellular mechanisms allowing the adaptation of bacterial cells to different environments and stress conditions. In this project we are interested to examine the function and role of AAA+ protease complex ClpCP with its adaptor protein and protein arginine kinase McsB, to study the interplay between protein modification and protein homeostasis.

Prof. Turgay's group applies a wide range of methods and experimental approaches based on biochemistry, genetics, molecular biology, microbiology and cell biology. Therefore experience in protein purification, molecular biology, fluorescence microscopy and also with data analysis of experiments using modern sequence technologies (NGS) would be helpful. Prof. Turgay's group is fully embedded within MPUSP and benefits from access to and interactions with various research platforms providing support for state-of-the-art proteomics and genomics experiments as well as the overall infrastructure and environment for MPUSP biologists.

MPUSP is an international research institute of the Max Planck Society located in Berlin and headed by Prof. Emmanuelle Charpentier. The institute was founded in 2018 with the mission to strengthen fundamental research on pathogens causing diseases in humans. MPUSP aims to achieve a better understanding of the complexities of pathogens and their interactions with their natural environment by developing innovative approaches (www.mpusp.mpg.de). The institute offers an interactive and dynamic environment where our team of international and creative scientists are provided ongoing support to take on original research projects and answer free-minded basic biological questions. Our scientists benefit from a state-of-the-art infrastructure, integrative and custom-designed research platforms and a wide range of scientific activities. MPUSP emphasizes personal development: junior and senior scientists at MPUSP are engaged in research, but also take active part in scientific education, mentoring and teaching, and in the management and development of the institute.

We are seeking a highly motivated and talented scientist who has prior experience working with bacteria and demonstrated proficiency with some of the mentioned experimental approaches to join the team of Prof. Turgay.

Please contact Prof. Kürşad Turgay for specific questions regarding this position (turgay@mpusp.mpg.de).

Your qualification should include:

- A Master's degree (or comparable) and/or a PhD in Biochemistry, Cell Biology, Genetics, Microbiology and/or Molecular Biology or related disciplines
- Proficiency of English language (presentation and writing skills)
- Experience working abroad is considered as an advantage
- Applicants for the postdoc position should have a proven record of successful publications in highly respected international scientific journals
- Friendly disposition, confident and responsible work ethics
- Working independently and as part of an international team
- Self-motivated and enthusiastic to work in a competitive, dynamic, stimulating and interacting international scientific environment focusing on basic biological research