

The Max Planck Institute for Biophysical Chemistry is one of the largest institutes of the Max Planck Society for the Advancement of Science and conducts basic research to advance knowledge and benefit society. Innovative projects and interdisciplinary cooperation characterize research within the Max Planck Society.

The research group *Ubiquitin Signaling Specificity* (Sonja Lorenz) invites applications for a position as

Postdoc (f/m/div.) – Structural and functional analyses of ubiquitin ligase complexes –

Our lab aims to understand **how ubiquitin** – a single, small protein – **achieves specificity in regulating virtually all aspects of eukaryotic cell biology**. A major key lies in the action of ubiquitin ligases, the most diversified class of enzymes of the ubiquitination machinery. The immense potential of ubiquitin ligases as therapeutic targets is illustrated by the clinical efficacy of thalidomide and derivatives in the treatment of hematologic malignancies. However, progress towards manipulating ubiquitin ligases rationally has been impeded largely by our insufficient understanding of their structural underpinnings and functional integration into cellular pathways.

Our lab has establied dedicated tools to capture dynamic macromolecular complexes of ubiquitination enzymes and decipher the molecular basis of their specificities in substrate recognition and ubiquitin linkage formation. We combine chemical-biological, biochemical, cell biological, and structural approaches with a particular focus on exploiting the power of **cryoelectron microscopy** to resolve large macromolecular assemblies.

We have a fully funded postdoc position available for a talented individual to explore critical ubiquitin ligase complexes in infectious disease or tumor biology.

Your profile

- You have a PhD or equivalent degree in a relevant subject area, such as structural biology, biochemistry or biophysics.
- You have a proven track record and experience in cryo-EM and recombinant protein preparation, ideally using the baculovirus expression system.
- Additional experience in X-ray crystallography would be beneficial.
- You are curiosity-driven and passionate about science, and not afraid of tackling challenging protein complexes.
- You are self-motivated and independent, and enjoy being part of an international and multidisciplinary work environment.

About us

We are an independent research group at the Max Planck Institute for Biophysical Chemistry, one of Germany's premier research campuses with leading-edge infracture in all fields of structural and cell biology. We are a highly international and interdisciplinary team, funded by the Max Planck Society and the German Research foundation. The historic city of Goettingen, located in the center of Germany, offers great outdoor and cultural opportunities, a bustling student scene, and an impressive scientific heritage.

Position details

The position should be filled as soon as possible, but the exact start date is flexible. The position is initially for 2 years with the possibility of extension. Payment and benefits are based on the TVöD guidelines.

The Max Planck Society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from such qualified individuals.

Application

Please submit your application including cover letter (explaining background and motivation), CV, transcripts, and publication record by e-mail as a single PDF file to

ausschreibung04-21@mpibpc.mpg.de

Max Planck Institute for Biophysical Chemistry Research Group *"Ubiquitin Signaling Specificity"* Sonja Lorenz Am Fassberg 11 37077 Göttingen Germany

Web: <u>www.mpibpc.mpg.de/lorenz</u> Twitter: SLorenzLab

