

Postdoctoral Researchers – Structural Biology – Nogly Lab

Three postdoctoral positions are available in the laboratory of Przemyslaw Nogly at the Jagiellonian University (Krakow, Poland) to investigate the molecular mechanisms of photoreceptor proteins. The Nogly Lab applies state-of-the-art structural biology techniques, including time-resolved serial crystallography at synchrotron and X-ray Free Electron Laser to capture proteins' structural dynamics at high spatiotemporal resolution. The structural insights are complemented by biophysical, functional and theoretical studies. The lab's current focus is to define the structural and mechanistic basis of light perception, energy conversion and signaling output in bacteria and plants. For our recent work, please see Mous et al., *Science*, (2022) "Dynamics and mechanism of a light-driven chloride pump." Ongoing research, funded by the generous Dioscuri program of the Max Planck Society and National Science Center, will reveal broader principles of how light is utilized by determining the dynamics of additional photoreceptor proteins. Experimentally derived "molecular movies" of protein in action will provide unique insights into structural transitions and a basis for studying the driving forces behind protein function.

Ph.D. in biochemistry, biophysics, structural biology, or a related field is preferred. However, candidates with a background in chemistry or physics and demonstrated interest in protein mechanisms would also be considered. We are looking for candidates with experience in protein biochemistry, crystallography, biophysical characterization or structural data processing and analysis. One of the positions can be dedicated to data analysis (without experimental work). Exciting crystallographic data is already available for processing and analysis. Inquiries and applications with CV, please send to: przemyslaw.nogly@uj.edu.pl. The review of applications will start on 03.10.2022 and will continue until the positions are filled.

The working language is English and we will assist in finding accommodation and dealing with the administration to ensure a smooth start in the beautiful city of Krakow.