

Applications accepted until September 30 2021:

Postdoctoral position in Biophysical Chemistry /RNA biochemistry
in the group of Prof. Dr. Dagmar Klostermeier, University of Münster, Germany

“Sequence-encoded single-molecule imaging of RNA-protein complexes”

This project combines single-molecule microscopy with next-generation sequencing to obtain sequence-encoded information on the dynamics of protein-nucleic acid interactions on a high-throughput level. The focus will be on RNA-helicase complexes. The aim of this project is a molecular, yet transcriptome-wide understanding of the activation of helicases by RNA substrates.

The group is located at the Institute for Physical Chemistry at the University of Muenster and offers state-of-the-art molecular biology and biochemistry laboratories. A next-generation sequencer and a total internal reflection molecule microscope with fast camera detection system as well as confocal single-molecule microscopes with alternating laser excitation are available.

The successful applicant holds a doctoral degree in Biophysical Chemistry, Biochemistry, Biophysics, Chemistry, Biology, Physics, or related fields, and has a genuine interest in research, combined with experimental enthusiasm. Besides prior knowledge in molecular biology, protein and nucleic acid biochemistry, expertise in at least two of the following areas is required:

- preparation, execution and analysis of von *next-generation sequencing* experiments
- preparation, execution and analysis of single-molecule experiments
- implementation of microfluidic devices
- development of routines for project-specific data analysis (LabVIEW, MATLAB, etc.)

Experience with helicases or other RNA-binding proteins is a plus.

The official advertisement (in German) including detailed information on the position and the application is available under

https://www.uni-muenster.de/Rektorat/Stellen/ausschreibungen/st_20210608_sk6.html