

PhD position (f/m/d) available in Single-Molecule Biophysics of DNA repair at the University of Würzburg, Germany

We are looking for a highly motivated PhD student with interest and experience in single-molecule biophysics, DNA repair, protein biochemistry, and protein-DNA interactions. The project will be strongly interdisciplinary and will be in close collaboration with the laboratory of Prof. Philip Tinnefeld at the LMU in Munich, Germany, building on our recent development of the novel single-molecule methodology GETvNA (graphene induced energy transfer on vertical nucleic acids, published recently in Nature Methods: <https://rdcu.be/dZyyO>). The PhD project at the University of Würzburg is more biologically oriented and will involve protein preparations and biochemical as well as biophysical characterisation of the working mechanism of the essential DNA repair protein AGT (O6-alkylguanine DNA alkyltransferase). The overall project will comprise on the one hand state of the art applications in single-molecule biophysical methodology and on the other hand medically relevant insights in DNA repair mechanism, protein-DNA interactions, and protein biochemistry. Two PhD projects (one at the University of Würzburg, one at the LMU in Munich) will be closely intertwined and will profit from a high degree of collaboration with frequent visits between the Universities.

The project duration for PhD students is 3 years. The working language is English. The PhD student will also become a member of the Graduate School of Life Sciences of the University of Würzburg.

The ideal candidate will have a background in biophysics or biochemistry (experience with single molecule experiments and data analyses would be a bonus) and possess a Master's degree, as well as good communication skills and proficiency in English language.

Submit your application including a letter of motivation, your CV, a short abstract about your master thesis, as well as contact details of your master thesis advisor and one additional reference (professor or group leader who will be able to assess your scientific strengths) by **31 December 2024** to Ingrid Tessmer (ingrid.tessmer@uni-wuerzburg.de). We will start reviewing applications immediately, but will continue to accept applications until the position is filled.