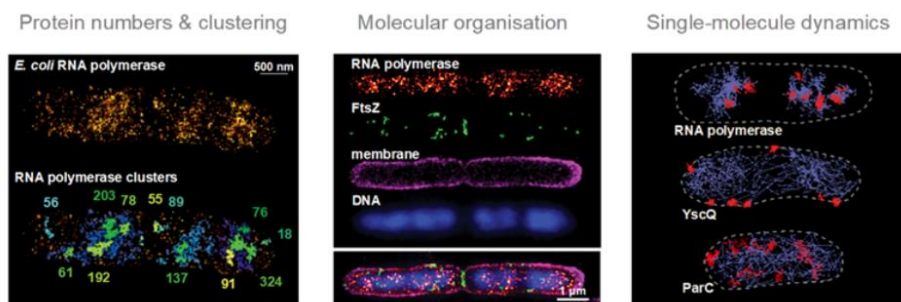


## PhD/Postdoc position in archaeal single-molecule microbiology at the University of Bonn

Are you looking for a trans-disciplinary PhD position combining the emerging fields of archaeal microbiology and single-molecule biophysics? Do you have background in microbiology, biochemistry, biophysics, or applied optics?

We offer a PhD position on archaeal DNA repair visualisation in our multi-disciplinary lab which combines biological, physical, and computational research. Prospective Postdoc candidates with an excellent scientific match to the project are also very welcome to apply.



Single-Molecule Microbiology work of our group

We are looking for a creative, motivated and result-driven candidate to study *in vivo* DNA repair in archaea, mainly via single-molecule microscopy. Archaea often grow under extreme conditions, and are thus naturally evolved with highly efficient and novel DNA repair mechanisms. However, the *in vivo* dynamics and characteristics of these important mechanisms are not yet understood. We are interested in researching these pathways and visualising DNA repair real-time in archaea via advanced microscopy techniques. The candidate will obtain and extend expertise in novel archaeal biology techniques, advanced fluorescence microscopy, single-molecule methods and quantitative data analysis. We offer a great deal of freedom in the exact project work, and are interested in more technical-focused as well as biological-focused candidates.

### Our group

We are a diverse group of international biologists, chemists, computer scientists, and physicists, located at the Institute of Microbiology and Biotechnology at the University of Bonn. The University of Bonn holds the title of a "University of Excellence". Its research profile is grouped into six Transdisciplinary Research Areas (TRAs), each centered on a Cluster of Excellence. The TRAs focus on key scientific, technological and societal challenges and are spaces for exploration and innovation, bringing together areas of excellence and emerging fields. The city of Bonn is the former capital of Germany and is located on the banks of the Rhine, on the border between Eifel and Siebengebirge. It is known as the birthplace of Ludwig van Beethoven and the famous Haribo gummy bears, and is home to many national and international institutions, such as the UN.

### Candidate requirements

The candidate should have a Master's degree (or PhD in the case of applying for a Postdoc position) in an area relevant to the subject, such as microbiology, biophysics, molecular biology, systems biology, or biotechnology. The candidate should have experience in microbiological methods (not necessarily archaea) and some fluorescence methods, e.g. microscopy or spectroscopy. Further

background in archaeal research and/or quantitative data analysis are a strong plus. If the candidate has limited experience in data analysis methods, they should have the aptitude to adopt advanced analysis and modelling methods in a timely and detailed manner. The candidate should have a high degree of independence and should be capable of good time- and project-management. As our group members come from diverse scientific backgrounds, it is essential that the candidate actively engages in our trans-disciplinary discussions and has a genuine interest in the other disciplines.

### **How to apply**

Please apply by email to [endesfelder@uni-bonn.de](mailto:endesfelder@uni-bonn.de). Applicants should provide a CV, a brief one-page statement of research interests, and contact details of two references, preferably in one single pdf. We will begin the review of applicants immediately and continue until the position is filled.