

## Postdoctoral Position in Structural Biology of Archaeal Chromatin

Location: Heidelberg, Germany  
Staff Category: Postdoctoral Fellow  
Contract Duration: 3 years  
Grading: Stipend  
Closing Date: ASAP  
Reference Number: HD02403

**The Dodonova group at EMBL Heidelberg is looking for a postdoc with a structural biology background to investigate the 3D organization of archaeal chromatin. This position is funded by the ERC Starting Grant.**

The Dodonova group (<https://www.embl.org/groups/dodonova/>) aims to understand the mechanisms and evolutionary principles of genome packaging and chromatin 3D organization in Archaea using a combination of biochemistry, biophysics, and cryo electron microscopy (cryo-EM). As a top-down approach, Dodonova group employs in situ cryo-electron tomography (cryo-ET) and subtomogram averaging to characterize chromatin in near-native context inside archaeal cells. As a complementary bottom-up approach, the group investigates the structure and function of reconstituted archaeal chromatin in vitro. This integrated approach helps understand the chromatin arrangement in several groups of archaea, and sheds light on the evolutionary origins of chromatin organization.

### Your role

The successful candidate will work on a cutting-edge experimental research project in the structure-function analysis of archaeal chromatin. The project includes working with chromatin from different archaeal species, and involves a combination of biochemistry and structural biology work. Structural part of the project will involve cryo-EM single particle analysis, as well as focused ion beam milling coupled with cryo electron tomography (cryo-ET) and subtomogram averaging.

### You have

- PhD in structural biology, molecular biology, biochemistry, or related disciplines (or you are close to finishing your PhD).
- Experience in cryo-EM/cryo-ET data acquisition and processing.
- Experience in biochemistry (protein expression & purification, DNA-protein complex characterization).
- Confidence in working via command line.
- Strong interest in the research topic, high motivation and commitment.
- Ability to work independently and creatively, in an international team with a highly collaborative atmosphere.
- Excellent communication and presentation skills, fluency in English.

### You might also have

- Experience in microbiology and handling of anaerobic microorganisms.
- Basic programming skills.
- Familiarity with HPC computing.

### Why join us

EMBL is an inclusive, equal opportunity employer offering attractive conditions and benefits appropriate to an international research organisation with a very collegial and family friendly working environment. The remuneration package comprises a competitive salary, a comprehensive pension scheme, medical, educational and other social benefits, as well as financial support for relocation and installation, including your family and the availability of an excellent child care facility on campus.

### What else you need to know

We are Europe's flagship research laboratory for the life sciences – an intergovernmental organisation performing scientific research in disciplines including molecular biology, physics, chemistry and computer science. We are an international, innovative and interdisciplinary laboratory with more than 1900 employees from many nations, operating across six sites, in Heidelberg (HQ), Barcelona, Hinxton near Cambridge, Hamburg, Grenoble and Rome. Our mission is to offer vital services in training scientists, students and visitors at all levels; to develop new instruments and methods in the life sciences and actively engage in technology transfer activities, and to integrate European life science research.

EMBL is a signatory of DORA. Find out how we implement best practices in research assessment in our recruitment processes [here](#)

Please note that appointments on fixed term contracts can be renewed, depending on circumstances at the time of the review.