



The Protein Bioinformatics group led by Vikram Alva at the Max Planck Institute for Developmental Biology offers an HFSP-funded

**Bioinformatics Postdoc Position in Deciphering Mechanosensing in Archaea
(m/f/d, TV-L E13, 100%)**

All cells employ intricate molecular machinery to respond to mechanical stimuli from their environment. While the molecular basis of mechanosensing in eukaryotes is vastly studied, how these molecular complexes emerged throughout prokaryotic evolution remains largely unexplored. In a cross-disciplinary HFSP-funded project, we are collaborating with Tanmay Bharat (University of Oxford and MRC-LMB, Cambridge) and Alex Bisson (Brandeis University) to study the spatio-temporal organization of (never studied) mechanosensory receptors and signals in archaea – our evolutionary sister – combining bioinformatics, cell biology, live-cell and single-molecule microscopy, and cryo-electron microscopy and tomography (cryo-EM/ET). The successful candidate will work closely with our collaborators and contribute expertise in molecular evolution, comparative genomics, analysis of protein-structure-function relationships, and development of computational resources.

Our offer

- The position is initially offered for three years and is available from January 2022
- Applications will be considered on a rolling basis
- Salary is per pay group E13 of the German collective agreement for the public sector (TVöD)
- Professional training and development opportunities
- Modern working environment and access to state-of-the-art computing infrastructure

Your profile

- Ph.D. degree in bioinformatics or related fields with a strong publication record
- Demonstrated expertise in the analysis of protein-structure-function relationships
- Strong background in Linux, programming languages (such as Python), and HPC
- Experience in comparative genomics of microbes or machine learning is a strong advantage

Your application

- Please send your detailed CV, research statement (explaining background and motivation) as well as the names and email addresses of 2 academic referees to:

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The Max Planck Institute for Developmental Biology is an interdisciplinary research institution that addresses fundamental research questions in microbial, plant, and animal biology, including the interaction between different organisms. The approaches we use range from biochemistry, cell, and developmental biology to evolutionary and ecological genetics, functional genomics, and bioinformatics.

The Max Planck Society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from such qualified individuals. The Max Planck Society seeks to increase the number of women in those areas where they are underrepresented and therefore explicitly encourages women to apply. The Max Planck Society strives for gender equality and diversity.