

The laboratory of **Living Matter and Biophysics (LIMBI), Institute of Materials Science and Nanotechnology (UNAM), Bilkent University, Ankara, Turkey** invites applications for a full-time **postdoctoral scholar** to perform simulations on cellular and biological processes. UNAM, National Nanotechnology Research Center and Institute of Materials Science and Nanotechnology is the first ranked national lab in Turkey in the field of nanotechnology and material sciences located in Bilkent University, Ankara. The laboratory of Living matter and biophysics, established since January 2021, has recently received the **European Molecular Biology organisation (EMBO) installation grant**. The successful applicant will enjoy a competitive salary, subsidized furnished housing in university campus as well as prominent opportunities such as travelling, conference participation provided by **EMBO**. Our group is also closely collaborating with Max Planck society in Germany and has started the first Max Planck Partner group in Bilkent university. We have access to domestic international HPC resources to perform our simulations.

Project description:

Living cells and cellular organelles are protected by lipid membranes that separates the cell interior from the surrounding cytoplasm and lets the cell communicate with its environment. Many cellular organelles regulate their functions and perform their tasks by remodelling their shape, a process which is mainly induced by biomolecules such as protein. Several biological and cellular processes such as cell migration and cell adhesion depend on membrane shape transformation induced by proteins and active cytoskeletal filaments. The postdoctoral scholar will use computer simulations of coarse-grained vesicles to understand cell migration and adhesions modulated by proteins and active particles. Applicants holding a PhD in different scientific backgrounds including engineering, physics, chemistry, in particular with a theoretical and computational attitude, having following skills are encouraged to apply.

Qualifications:

- Reasonable knowledge of a programming language such as C, Fortran, Julia, Python, Matlab, and etc. Being familiar with C is a plus.
- Interest and passion for computer programming and code development
- Preliminary knowledge of Molecular Dynamics and Monte Carlo simulations is an asset
- Good communication skills of spoken and written English

Salary: The salary is competitive to European standard and is negotiable depending on the applicant's qualification.

Planned start date: As soon as possible

Application deadline: The position is open till filled

Duration: Initially planned for 2 years with possible extensions up to 5 years

Full applications should include a curriculum vitae including publication list, a 1-page letter of motivation, list of references and should be emailed as a single PDF file to bahrami@unam.bilkent.edu.tr. For further info please visit:

<http://amir.unam.bilkent.edu.tr/positions/>