Postdoctoral Position in Theoretical Biophysics at LMU Munich (m/f/x)

Application deadline: 15.04.2022



Introduction

In the <u>Sabass group at LMU Munich</u>, we take a theoretical-physics perspective to discover and characterize working principles of living systems. We combine analytical theory and computer simulations with experiments, either done in collaborations or directly in our lab. A main research topic is the stochastic micromechanics of individual cells and multicellular ensembles. Cellular micromechanics plays a ubiquitous role in biology, for example, for pathogen migration and host invasion, cancer metastasis, morphogenesis, and tissue homeostasis. Sensing- and control mechanisms are usually central. Our aim is to not only quantify regulatory processes in pathogens, but also to elucidate the governing principles, such as a tradeoff between control and emergence, optimization of performance, or robustness.

Tasks and responsibilities

We are seeking an ambitious postdoctoral researcher who has experience with modelling of stochastic processes, non-equilibrium physics, or complex biological systems. The topic of the postdoctoral project should match your own expertise and interest, but you are expected to pursue an ambitious and promising research program that falls within the broadly defined scope of the group's research activities. Examples include modelling of cellular mechanics, traction force microscopy, bacterial migration, and collective behavior of active, biological matter.

Requirements

- PhD/Doctorate in theoretical biophysics or nonequilibrium physics
- Solid publication record demonstrating productivity and expertise
- High motivation and commitment to achieving scientific excellence
- Excellent command of the English language

Benefits

The salary is payed according to TV-L with a fixed-term contract. Part-time work is possible in principle.

Our laboratory is located next to the newly inaugurated campus of the life science branch of LMU which offers excellent technical facilities and many interaction possibilities, including other groups at LMU, the Gene Center, several Max-Planck-Institutes and the Helmholtz Centre. Greater Munich is home to several world-class universities and research institutes, creating a truly inspiring intellectual atmosphere. Situated on the foothills of the Alps, Munich is consistently ranked as one of the most vibrant and enjoyable cities in the world with an exceptionally quality of life.

The University of Munich is an equal opportunity employer. Handicapped applicants will be given preference in the case of approximately equal qualifications. The university is interested in increasing the number of female faculty members and encourages women to apply.

Contact

Please send your application documents via email to: <u>b.sabass@lmu.de</u>

The application documents should contain a CV with references, a publication list, copies of certificates, and your PhD thesis.

https://www.biostatphys.vetmed.uni-muenchen.de/index.html

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