The Göttingen Campus Institute for Dynamics of Biological Networks (CIDBN) invites applications for a position of

Postdoctoral Researcher in Computational Biophysics (all genders welcome)

The position will be full-time (currently 39.8 hours/week), German pay grade 13 TV-L, starting as soon as possible. The CIDBN Department “Physics of Biological Systems”, headed by Prof. Fred Wolf, offers a fixed-term contract until June 30, 2025 with the perspective of an extension commensurate with building a competitive track record at the frontier of computational biophysics and neural circuit theory.

Information is processed in brain circuits through the coordinated action of large-scale circuits of neurons and synapses. Ultimately, it is the nano-scale molecular architecture of neuronal synapses that can make or break the power of neural circuit computation. Progress in a broad suite of nanoscopy techniques is currently uncovering the molecular-level design of synapses subserving functions such as working memory or sensory coding. The spatio-temporal operation of these nano-machines and the efficiency of their design, however, remain to be understood and are core research aims of the Göttingen Collaborative Research Centre (CRC) 1286 “Quantitative Synaptology”.

We are inviting applications from theoretical biophysicists, molecular systems biologists, or computational scientists with an ambition to pioneer computational studies of synaptic functional design. We offer a stimulating environment of theoretical neuroscientists, neural data-scientists, and cutting-edge experimentalists associated with CRC 1286. In addition, the institute provides dedicated support for high-performance computing. We are dedicated to supporting the growth of original research personalities at the frontier of computational science and neural circuit theory. The successful applicant will hold an excellent PhD in physics, applied mathematics, computer science, or equivalent, and have a strong interest in high-performance computing in neuroscience or cellular systems biology. We expect excellent analytical and coding skills, interest in working in a transdisciplinary team as well as excellence in scientific writing and reasoning. Experience in non-equilibrium statistical physics, stochastic dynamics, membrane biophysics, ion-channel and biochemical kinetics, buffered Ca-diffusion, and Ca-exocytosis coupling would be advantageous.

The Göttingen Campus is a leading center of neuroscience in Europe hosting numerous internationally renowned research institutions, including the University, the University Medical Center, two life science Max Planck Institutes, the European Neuroscience Institute, the German Primate Center, and the Bernstein Center for Computational Neuroscience Göttingen. The CIDBN is a newly founded transdisciplinary institute whose mission is to foster frontier research at the border of the exact and biological sciences. The University of Göttingen is an equal opportunities employer and places particular emphasis on fostering career opportunities for women. Qualified women are therefore strongly encouraged to apply. The university has committed itself to being a family-friendly institution and supports their employees in balancing work and family life. The mission of the University is to employ a greater number of severely disabled persons. Applications from severely disabled persons with equivalent qualifications will be given preference.

Please send your e-mail application in one single PDF-document, including a letter of motivation, your curriculum vitae with a list of publications, copies of your certificates and contact information of two references preferably by October 22, 2023 to cidbn@uni-goettingen.de (subject: Postdoc CIDBN).

Georg-August-Universität Göttingen
Göttingen Campus Institute for Dynamics of Biological Networks
Heinrich-Düker-Weg 12, 37073 Göttingen.

If you have any questions, please contact Prof. Fred Wolf via e-mail: fred.wolf@ds.mpg.de.

Please note:
With submission of your application, you accept the processing of your applicant data in terms of data-protection law. Further information on the legal basis and data usage is provided in the Hinweisblatt zur Datenschutzgrundverordnung (DSGVO) https://www.uni-goettingen.de/hinweisblattgvo