

The Cluster of Excellence „MULTISCALE BIOIMAGING: From Molecular Machines to Networks of Excitable Cells (MBExC)“ at the university of Göttingen invites applications for an

**Application specialist (all genders welcome) in  
Computational Modeling and Advanced Data Analysis**

Postdoctoral position (full time)

initially available for 2 years, permanent contract after successful evaluation, salary according to TV-L E 14.

The Cluster of Excellence "Multiscale Bioimaging: from Molecular Machines to Networks of Excitable Cells" (MBExC) is an interdisciplinary, cross-faculty research center of the University of Göttingen and pursues a novel research approach with joint efforts in modern bioimaging, in particular photonics, molecular biosciences, neuroscience and cardiovascular research. The goal of MBExC is to decipher disease relevant nanoscale functional units in neurons, sensory cells and cardiomyocytes with the long-term goal to develop innovative therapeutic strategies for disorders affecting the heart and the brain, or both. By a multiscale bioimaging approach, MBExC aims at unraveling fundamental biological principles at an increasing level of complexity from molecular, nanoscale to network and organ levels. The MBExC research program covers gene expression and regulation, protein assembly and targeting, Ca<sup>2+</sup> signaling and Ca<sup>2+</sup> triggered membrane fusion as well as the development of innovative research techniques. The job is not part-time suitable.

The application specialist shall develop mathematical, statistical and computational tools relevant to MBExC and collaborate to apply them within its research alliances. Providing state of the art techniques of modern data analysis for high dimensional and complex data tailored to the needs of experimental research groups in MBExC will be a major task. These include imaging techniques relevant to magnetic resonance imaging and super resolution microscopy and versatile methods of mathematical modeling and for the analysis of data from electrophysiology, gene expression and protein assembly. It is further expected that the candidate participates actively in the educational program of the Hertha Sponer college of MBExC by providing graduate courses at the cutting edge of Statistical and Computational Data Analysis. The scientist will be hosted within the research group of Prof. Dr. Axel Munk at the department of Mathematics and Computer Science and will benefit from existing computational and scientific infrastructure at the Institute for Mathematical Stochastics and the Felix-Bernstein Institute for Mathematical Statistics in the Biosciences.

We are looking for excellent and highly motivated applicants with a strong and well-rounded background in statistical, mathematical and computational methodology and a broad knowledge of modern methods of data analysis. A Master degree and a PhD in Mathematics or a related area is required. The ability to work in an interdisciplinary (combining molecular, structural, physiological, and theoretical approaches) and international team of researchers is expected.

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 in fields in which they are underrepresented. 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.

We look forward to receiving your application by **September 16th, 2019**. Submit your application with the usual documents via e-mail as one single PDF file to [mbexc.admin@med.uni-goettingen.de](mailto:mbexc.admin@med.uni-goettingen.de).

Further requests:

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Travel and application fees cannot be refunded or transferred.

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/hinweisdsgvo>