Junior Professor (W1, tenure track W2) in Computational Subcellular Neurobiology at the Faculty of Medicine/Uniklinik RWTH Aachen

This is a tenure-track junior professorship leading to a tenured W2 position. For further information about the tenure track process, please visit www.rwth-aachen.de/tenuretrack.

We are seeking qualified applicants for teaching and research in this area as soon as possible. The professorship will be part of the Joint Research Center for Computational Biomedicine.

The applicants should simulate information integration of neurons at the subcellular level in silico. Their research should combine the simulation of neuronal excitability at the molecular level of ion channels, neuroreceptors and/or transmembranal signalling complexes with modern data evaluation techniques and analytical approaches. Signalling pathways as well as external factors should be included. These models should be used to simulate excitability under pathophysiologically relevant conditions, e.g. in the presence mutations in ion channels associated with pain, epilepsy or other neurological diseases. Simulation of pharmacological interventions should be included in physiological and pathophysiological models. A strong knowledge of the electrophysiology and cell biology of nerve cells and how to mathematically model them is desired.

Interdisciplinary scientific co-operation with other departments and clinics of the Medical School and with the research areas of the RWTH Aachen University are expected. In particular, interaction with the SinoGerman Network Aachen (SCNAachen) is required. Additionally, links to the SFB TTR 219, SFB 1382, KFO 344, KFO 5011, IRTG 2150, GRK 2375, GRK 2415, GRK 2610, PAK 961, CRC 1115, JARA, IZKF AACHEN, with the Institute of Biomedical Technologies (IBMT) and with other technical disciplines are encouraged. In addition, an active commitment in the new medical student’s curriculum of the Medical Faculty ("Modellstudienfahrt Medizin Aachen"), the master program "Biomedical Engineering", and in new course of studies Computational Life Sciences at Faculty 1 is expected.

Candidates should have a university degree and a particular ability to undertake academic work, which is generally demonstrated by an outstanding doctorate. Ability in and commitment to teaching are essential. The application should include supporting documents regarding success in teaching and a teaching portfolio. Fluent German is not required to start the position but the successful candidate will be expected to hold classes in German within the first 5 years.