



At the Institute of Biochemistry in the Faculty of Mathematics and Natural Sciences of Heinrich Heine University Düsseldorf a position of a

Scientific Assistant / PhD Student (m/f)

(65 %, pay grade 13 TV-L)

is to be occupied at the earliest possible date. The employment is initially limited for a period of three years with an option for prolongation for another year. It is a qualification position in the sense of the Act of Academic Fixed-Term Contract (Wissenschaftszeitvertragsgesetz- WissZeitVG), which is to promote the scientific qualification of the employee (m/f).

In the newly founded group "Synthetic Membrane Systems" we employ membrane-reconstituted systems of varying complexities to study vital biological processes down to single-molecule level. Recent developments in synthetic membranes, such as nanodiscs, SMALPs and giant vesicles, allow us to conduct a comprehensive biochemical, biophysical and structural analysis on membrane proteins and their complexes in physiologically-relevant environments. With that we are aiming to elucidate conformational dynamics and macromolecular assembly of cellular machineries dedicated to protein folding, transport, and degradation, in native-like custom-tailored lipid membranes, as well as scrutinize roles of the lipid environment in protein functioning and regulation.

Currently, we are looking for a PhD student (m/f) to study effects of macromolecular crowding on membrane protein insertion and folding mediated by the sec translocon. Within the project we are developing de novo protein membrane systems, which mimic the complexity of biological membranes, and investigate the membrane protein biogenesis pathway that includes ribosome targeting to the sec system, functional dynamics of reconstituted sec translocons, and the protein transports/insertion reactions. The project will be further supported by collaborations with groups specialized in computational biology, single-molecule biophysics and polymer synthesis. The applicants (m/f) are expected to have a master degree in biochemistry/biophysics or related fields, with an experience in

(membrane) protein biochemistry and/or mathematical modeling of biological processes.

The salary will be, depending on the personal qualification of the applicant (m/f), up to pay grade 13 TV-L.

Heinrich Heine University Düsseldorf aims at increasing the percentage of employed women. Applications from women will therefore be given preference in cases of equal aptitude, ability and professional achievements unless there are exceptional reasons for choosing another applicant. Applications from suitably qualified severely disabled persons or disabled persons regarded as being of equal status according to Book IX of the German social Code (SGB – Soziales Gesetzbuch) are encouraged.

Your contact person in case of questions is Mr. Jun.-Prof. Dr. Alexej Kedrov, E-Mail: kedrov@hhu.de.

Please submit your application documents (CV, copies of education certificates, description of previous research experience and two references) citing **reference number 138 T 17 – 3.1** until **30.01.2018** preferably by e-mail to Kedrov@hhu.de

or in writing to:

Heinrich-Heine-Universität Düsseldorf
Faculty of Mathematics and Natural Sciences
Institut of Biochemie, Synthetic Membrane Systems
Jun.-Prof. Dr. Alexej Kedrov
Building 26.42, room 03.30
Universitätsstr. 1
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Please do not submit application materials in folders and be sure to send copies only, as documents will not be returned (they will be destroyed after the selection procedure has been completed).