Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

As a University of Excellence, Universität Hamburg is one of the strongest research universities in Germany. As a flagship university in the greater Hamburg region, it nurtures innovative, cooperative contacts to partners within and outside academia. It also provides and promotes sustainable education, knowledge, and knowledge exchange locally, nationally, and internationally.

The **Department of Chemistry, Biochemistry and Molecular Biology of the Faculty MIN** invites applications for employment as:

ELECTRON MICROSCOPY SUPPORT (M/F/D)

- SALARY LEVEL 13 TV-L -

The position commences as soon as possible and is permanent. This position is also suitable for part time employment.

The Centre for Structural Systems Biology (CSSB) was created with the mission to use cutting edge technologies and methods to investigate how pathogens infect humans. Part of this mission are the CSSB Core Facilities that provide access to technology and research services for biosciences. Alongside these facilities, the multi-user facility for electron cryo-microscopy (cryoEM) has started its operation in 2017, and is positioned on the Science Campus Bahrenfeld, being also home to the Deutsches Elektronen-Synchrotron DESY. Our facility is currently the most advanced centre for cryoEM in the north of Germany housing five electron microscopes: two Titan Krios instruments equipped with phase plates, energy filters, K3 and Falcon 3 direct detectors, a Talos Arctica with a phase plate and a Falcon 3 direct detector, a Talos L120C and an Aquilos FIB cryo-SEM for preparing lamellae of thick samples, such as vitrified cells or crystals. Auxiliary equipment and nearby lab space for sample preparation and cell culture work complete the workflows. We primarily focus on single particle analysis and electron cryo-tomography. The facility is set up to handle biological samples up to German biosafety level 2.

YOUR RESPONSIBILITIES:

85% equipment set-up and operation, equipment maintenance, 15% user-training & assistance:

- responsible for the day-to-day running and maintenance of the electron microscopes and associated sample preparation equipment
- manage and operate the cryoEM instruments and associated equipment, this includes first-fault diagnosis, and maintenance work
- assist in improving set-ups for the different cryoEM modalities (SPA, Tomo) and the implementation of additional workflows (correlative microscopy, microED)
- work with our computing scientist to ensure a seamless interface between data collection and data processing

- establish and implement schedules for microscope hardware and software maintenance, and support alignments and performance checks, to ensure that the facility is operating at peak performance
- coordinate repairs with microscope supplier's service engineers
- work with in house engineers and other facilities
- provide instructions, assistance and consultation to faculty, students, staff members regarding the TEM equipment and optimal processes
- perform other related duties incidental to the work described above

Your responsibilities within the team can be adjusted to best fit your specific skill-set.

REQUIREMENTS:

A university degree in Science (Master, Magister, Diploma), especially physics, engineering, structural biology or any associated field. Preferably with a Ph.D.

REQUIRED SKILLS AND PERSONAL QUALITIES:

- experience in CryoEM (hardware and/or software), X-ray technology, imaging detectors, or computational work at the interface hardware/software
- experience in cryoEM & understanding the basics of electron optics and vacuum systems
- previous experience in microscope control and acquisition software packages for single particle analysis or tomography or one of the following programming interfaces/languages: Python, C++, Java, LabView, SerialEM
- good English language skills (both written and oral)
- experience with managing, analyzing, and improving complex workflows
- demonstrated record keeping and organization skills
- ability to proactively plan maintenance work and increase microscope uptime & performance
- attention to detail
- a desire to learn, and a willingness to share knowledge
- self-driven and organized

WHAT WE OFFER:

- a state-of-the art microscopy facility and flexible work environment
- a positive team culture
- to actively take part in ongoing research and method development projects of users
- opportunities to interact with our growing local cryoEM community
- to attend key microscopy conferences and workshops
- appropriate training on microscopes and other hardware where necessary

The Free and Hanseatic City of Hamburg promotes equal opportunity. As women are currently underrepresented at this salary level at Universität Hamburg according to the evaluation conducted under the Hamburg act on gender equality (Hamburgisches Gleichstellungsgesetz, HambGleiG), we encourage women to apply for this position. Equally, qualified and suitable female applicants will receive preference.

We explicitly encourage persons with an immigrant background to apply.

Equally, qualified severely disabled applicants or applicants with equivalent status will receive preference.

For further information, please contact Prof. Dr. Kay Grünewald kay.gruenewald@cssb-hamburg.de or Dr. Carolin Seuring carolin.seuring@cssb-hamburg.de. For further information on the Multi-User CryoEM-facility, please visit our website https://www.cssb-hamburg.de/facilities/cryo_em/index_eng.html.

The interviews are planned to take place in the week starting March, 23 2020.

Please send your complete application (CV, Motivation letter, letter of recommendation and certificates) **including the reference number by March 9th, 2020** to:

Universität Hamburg
Stellenausschreibungen
Reference no. 602/1
Mittelweg 177
20148 Hamburg
or via email: **Bewerbungen@uni-hamburg.de**

Please do not submit original documents as we are **not** able to return them. Any documents submitted will be destroyed after the application process has concluded.