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 CRYO-TOMOGRAPHY SPECIALIST (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 on the Science Campus Bahrenfeld with the mission to investigate how pathogens infect humans. Part of the CSSB strategy are five Core Facilities that provide access to technology and research services for biosciences. Amongst the facilities, the Multi-User CryoEM (MCEM) facility is strategically central to CSSB and its mission. Operating since 2017, the MCEM has developed workflows for high-resolution cellular and molecular electron cryo-microscopy and aims to become a flagship in Northern Germany that compliments and develops together with other structural biology resources on the campus. Unique to MCEM is its engagement in structured user training, and its focus on research and method development. Currently, the facility has 40 trained users serving more than 50 projects including on Coronavirus research.
CryoEM technologies supported cover all modalities from single-particle electron cryo-microscopy and cryo-tomography to cryo-CLEM, FIB milling as well as microED. More information on the instruments can be found online: https://www.cssb-hamburg.de/facilities/cryo_em/index_eng.html. We are working in close collaboration with the CSSB Advanced Light Microscopy Facility, the SAXS beamline and X-Spectrum with the mission of highest-level infrastructure provision and technology development.

YOUR RESPONSIBILITIES:

80% Research Support and User Training:

- introduce new users to the cryo-light microscope, cryo-FIB-SEM and high-end cryo TEMs
- train users with different levels of experience in the use of microscopes and auxiliary equipment relevant to molecular and cellular electron cryo-tomography and correlative light and electron microscopy
- support and develop advanced tomography data acquisition workflows with SerialEM
- act as expert hub and assist in trouble-shooting the sample preparation for cryo-tomography (cell cultures/complex specimens (organoids...)/crystals)

- work with our computing scientist to ensure a seamless interface between data collection and basic data processing of tomography and CLEM data
- We expect that you engage in collaborative research project to push the limits of cryoEM!

20% Microscope Support/Technical improvements

- support ongoing research and technology developments
- manage and operate the cryoEM instruments and associated equipment, this includes first-fault diagnosis, and maintenance work, as well as coordination of repairs with microscope supplier's service engineers
- set-up, maintenance, alignment and calibration of the electron microscopes and associated sample preparation equipment to high standards

You will also participate in the organization and teaching of courses in electron microscopy.

REQUIREMENTS:

- a university degree (Master, or equivalent) in Science in structural biology or physics, or any associated field, preferably with a Ph.D.

REQUIRED SKILLS AND PERSONAL QUALITIES:

- several years of experience in electron cryo-tomography (hardware and software), image processing and sample preparation
- basic cell biology skills
- strong motivation to work as part of a team and to train and support users
- a demonstrated publication record in tomography
- an understanding of electron optics and vacuum systems
- ability to proactively organize maintenance work
- attention to detail
- a desire to learn, and a willingness to share knowledge
- fluency in English, German (at least B1+) would be desirable

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
- 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 https://www.cssb-hamburg.de/facilities/cryo_em/index_eng.html.

The interviews are planned to take place in the last two weeks of November.

Please submit your application preferably by email **including the reference number by 20 November 2020** as a single PDF file to **Bewerbungen@uni-hamburg.de.** Else you can submit your application to:

Universität Hamburg
Stellenausschreibungen
Reference no. 602/8
Mittelweg 177
20148 Hamburg

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.