Research Support Specialist, Cryo-Electron Microscopy Resource Center (CEMRC)

The Rockefeller University is the world's leading biomedical research University. Our groundbreaking discoveries in basic and clinical research are transforming medicine. We share a singular commitment to advancing science for the benefit of humanity. Our collaborative culture drives each of us to achieve a higher level, fueling the breakthroughs for which we are known.

We have an exciting opportunity to join our state-of-the-art Cryo-Electron Microscopy Resource Center (CEMRC) and provide support for single particle and tomography analysis to users of the center.

The Position

The successful candidate will provide training and support to users of the center in sample preparation, microscope operation, high-throughput data acquisition, and data analysis. The position entails a specialized focus in establishing cryo-electron tomography (cryo-ET) workflows for recently acquired instrumentation for the Center, including an Aquilos cryo-Focused Ion Beam (cryo-FIB) milling system and a Titan Krios featuring Cs correction, Volta phase plates, and a Gatan BioQuantum energy filter / K3 direct electron detector. The specialist will also assist in the technical and administrative functions of the center, including scheduling, tracking use, and supply management.

Responsibilities include:

- Establishing protocols and training users in cryo-FIB milling utilizing the center's Aquilos cryo-FIB instrument
- Establishing protocols and training users in cryo-ET tilt series data acquisition utilizing the center's Talos Arctica and 2 Titan Krios systems.
- Assisting users with image processing for tomographic reconstruction and subtomogram averaging.
- Supporting the center's ongoing efforts in single-particle cryo-EM data acquisition and image processing.
- Providing administrative and logistical support of day-to-day operations, including session scheduling, usage tracking and reporting, and materials acquisition.

Qualifications:

- Bachelor's degree in biological or physical sciences, engineering, mathematics, computer science, or related fields; Advanced degree in these fields preferred.
- A minimum of three years of training related to cry-electron microscopy image processing, which includes prior experience with cryo-electron tomography data acquisition and analysis.
- Previous experience in cryo-FIB milling and/or correlative light and electron microscope and in single particle cryo-EM data acquisition and analysis a plus
- Excellent communication, organizational and interpersonal skills

<u>Cryo-Electron Microscopy Resource Center (CEMRC)</u>

The Evelyn Gruss Lipper Cryo-Electron Microscopy Resource Center (CEMRC) provides its users with a world class environment to make advances in structural biology. The center is equipped with three high end dedicated cryo-electron microscopes. The microscopy suite was meticulously and specially designed to allow these instruments to perform beyond their specified resolutions. This center provides users with the world's most stable dedicated cryo-electron microscopes optimized for high resolution single particle analysis of proteins and protein complexes as well as high resolution cellular tomography. Users work alongside CEMRC staff until they have mastered electron microscope operation at which point they work autonomously.

How to Apply

We offer a competitive salary, comprehensive benefits, and a collaborative work environment.

Please visit the following URL and apply to job code 'IRC22949'. Please make sure to upload your resume and a cover letter.

https://www.rockefeller.edu/human-resources/staff-opportunities/

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