



University of Michigan Cryo-Electron Microscopy from Cells to Atoms

The University of Michigan announces the recruitment of two faculty who apply cutting-edge methods of cryo-electron microscopy to important biological problems. The recruitments are part of the University of Michigan Biosciences Initiative to enhance the institution's strengths in biological and biomedical research. Applications are solicited in two areas.

Correlative light and electron microscopy (CLEM). Candidates are sought at the assistant professor level (tenure track) for appointment in the Department of Cell and Developmental Biology in the Medical School. We seek candidates who are at the leading edge in developing new tools and techniques for integrating the CLEM and cryo-ET sample preparation pipelines that will aid in answering challenging questions in cell biology.

Cryo-electron tomography (cryo-ET). Candidates are sought at any level for appointment in departments in the Medical School; the College of Literature, Science and the Arts; or the College of Engineering. We seek applicants with interest and expertise in working towards bringing the resolutions of single-particle cryo-EM to cellular studies so that molecular machines can be visualized in their native cellular environments through advanced image analysis and sub-tomogram averaging.

The cryo-EM facility includes: two Titan Krios microscopes each with Volta phase plate, energy filter, and K3 direct electron detector; Aquilos FIB-SEM; Leica EM Cryo CLEM microscope; Talos Arctica with K2 direct electron detector; Glacios with Falcon 3EC direct electron detector and CetaD detector for microED; Tecnai T12 with US4000 CCD detector; Morgagni for negative stain screening; picoliter-dispensing Chameleon sample preparation robot and two Vitrobot plunge-freezing devices.

Interested applicants should send a CV with full bibliography and a three-page research plan to CryoEM-BSI@umich.edu. Three letters of support should be sent by the writers to CryoEM-BSI@umich.edu. Applications will be accepted until positions are filled.

The University of Michigan is an Affirmative Action/Equal Opportunity Employer.

Contact: CryoEM-BSI@umich.edu

Website: lsi.umich.edu/cryo-EM

Learn more about the Biosciences Initiative at University of Michigan: biosciences.umich.edu

