

Two Faculty Appointments in Cryo-Electron Microscopy

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 funding awarded through the University of Michigan Biosciences Initiative to enhance the university's strengths in biological and biomedical research. Applications are solicited in two areas.

- Candidates with expertise in **correlative light and electron microscopy (CLEM)** are sought at the assistant professor level (tenure track) for appointment in the Department of Cell and Developmental Biology in the Medical School. We particularly seek candidates who are at the leading edge in developing new tools and techniques for integrating CLEM and cryo-ET sample preparation pipelines that will aid in answering challenging questions in cell biology.
- Candidates with expertise in **cryo-electron tomography (cryo-ET)** 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 are seeking applicants with interest and expertise in 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 Initiative seeks individuals who have a PhD, MD or other terminal degree, substantial postdoctoral research experience, and a significant publication record. Candidates will be evaluated on the basis of their superlative scientific accomplishment and scholarly promise. Successful candidates will be expected to establish a vigorous, externally funded research program, to become scientific leaders in their respective fields, and to participate in departmental and program activities including teaching at the graduate, medical, and/or undergraduate levels.

The University of Michigan Biosciences Initiative award will expand cryo-EM research through the hiring of these two faculty members plus enable facility enhancement to create a campus resource that includes: two Titan Krios microscopes each equipped with a Volta phase plate, energy filter, and K3 direct electron detector; Aquilos FIB-SEM; Leica EM Cryo CLEM light 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; and Morgagni for negative stain screening. In addition, the facility will house sample preparation equipment that includes the picoliter-dispensing Chameleon sample preparation robot from TTP Labtech in addition to two Vitrobot plunge-freezing devices. The cryo-EM facility is led by a resource director and one staff. Three additional facility staff will be hired as part of the Biosciences Initiative funding.

University of Michigan Cryo-EM: lsi.umich.edu/cryo-EM

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

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