National Network for Cryoelectron Tomography (CryoET)

The Transformative High-Resolution CryoEM Program

The NIH Common Fund has enabled the development of four centers that makes up the National Network for Cryoelectron Tomography (CryoET). This Network provides the biomedical research community with access to advanced instrumentation for cryoET, cryoET specimen preparation, and collection of high-resolution cryoET data as well as training in cryoET methods.

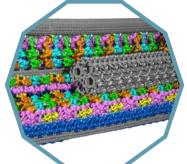
The CryoET Network

The National Network for CryoET is made up of four centers:

- <u>Midwest Center for Cryo-Electron</u>
 <u>Tomography (MCCET)</u> at the University of Wisconsin–Madison. MCCET serves as the network's hub.
- <u>CU Boulder Center for Cryo-ET (CCET)</u> at the University of Colorado.
- The National Center for <u>in situ</u>

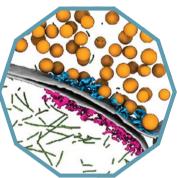
 Tomographic Ultramicroscopy (NCITU) at the New York Structural Biology Center.
- <u>Stanford-SLAC CryoET Specimen</u>
 <u>Preparation Center (SCSC)</u> at Stanford University.

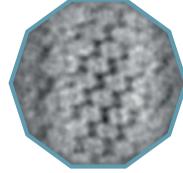
More information and applications for user access can be found on the Network's portal at cryoetportal.org.



9+2 axoneme rendering from cryoET data, courtesy Dr. Daniela Nicastro.

Synapse rendering from cryoET data. Held et al. PMID: 38923992; PMC11228483





Sub-tomogram averaging from respiratory syncytial virus matrix protein lattice. Sibert et al. PMID: 39004634; PMC11247094

Looking for Cryoelectron Microscopy Resources?

The National Centers for Cryoelectron Microscopy program and curriculum development initiatives were supported by the Common Fund from 2018 to 2024. Currently, the Centers for Cryoelectron Microscopy developed by the Common Fund program are sustained by the National Institute of General Medical Sciences (NIGMS), beginning in June 2024. <u>Additional information and updates can be found at the NIGMS website</u>. <u>Additional information about the curriculum development resources can be found at the Centers' website</u>, <u>including additional information on the Merit Badge program</u>.



