

## **What to expect from cryo-EM (national service centers)**

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Advances in cryo-electron microscopy (cryo-EM) imaging technology and data processing have resulted in the recent growth of single particle structures, which extend to near-atomic resolution. To broaden biomedical scientists' access to cryo-EM the NIH Common Fund's Transformative High Resolution Cryo-Electron Microscopy program has created three national service centers to provide access to the technology and the development of training curricula to build a skilled workforce. The mission of the NCCAT (National Center for Cryo-EM Access and Training) service center is twofold: to provide nationwide access to advanced cryo-EM technical capabilities, and to assist users in the development of cryo-EM skills needed for independent research. NCCAT provides access to state-of-the-art equipment required to solve structures to the highest possible resolution using cryo-EM methods. By implementing the most current best practices users are able to optimize different experimental parameters on-the-fly, thereby allowing reconstructions to be determined from images collected in a single day. Our objective is to enable biomedical researchers from all fields to make use of these cryo-EM techniques and methodologies in their research programs.