



Mission of NCCAT

The mission of NCCAT is twofold: to provide nationwide access to advanced cryogenic electron microscopy (cryoEM) technical capabilities, and to assist users in the development of cryoEM skills needed for independent research. NCCAT will provide access to state-of-the-art equipment, including high-end microscopes and direct detectors, as well as specimen preparation robots, screening microscopes and all the other ancillary equipment required to solve structures to the highest possible resolution using cryoEM methods.

Types of access

Early access to NCCAT in will primarily provide access to high-end cryoEM instrumentation. As NCCAT scales up operations other access categories will be brought online. This initial cycle will support single particle cryoEM data collection on one of our existing Titan Krios instruments using a Gatan K2 direct-electron detector. Applicants should have pre-screened cryoEM samples with pre-processing results (representative micrograph, 2D class averages, and initial reconstruction if available) from the same batch of grids to be submitted for data collection at NCCAT.

User Review Committee Process

General User Proposals (GUPs) will be scored in the following categories: (i) scientific impact; (ii) scientific feasibility; (iii) technical feasibility; (iv) NCCAT resources requested (including number of Krios sessions); (v) geographical demographics. The User Review Committee (URC) will score these aspects on a scale of 1 (excellent) – 5 (poor) and also have the option to provide additional comments. If there is not enough information on which to base a review the proposal will receive a score of NR (no review).

This guide is to assist with the application process and should not be submitted as an application. All applications must be submitted through our online system.

NCCAT GUP Proposal Application

Fields marked with an * are required

User information fields.

First Name *
Middle Initial
Last Name *
Email *
Phone
Lab Name *
Institution/University *
Address *
City *
US States *
Zip
Country *

Fields marked with an * are required

Proposal fields.

Be concise. The combined text in all the fields should roughly fit on 1 page with Arial 11pt font.

Project Name *

Title

Abstract *

500 words or less

Scientific Impact *

Scientific and technological importance.

Scientific Feasibility *

Fit as a cryoEM project.

Technical Feasibility *

Ability to be completed within a defined amount of resources/time.

Resources Requested *

Appropriate amount of NCCAT resources requested for the proposal.

Geographic/Demographics *

Resources available at home institution and geographical proximity to similar resources requested.

Supplementary Information *

*The proposal may have up to 1 page of data and figures for supporting material.
All attachments should be in pdf format.*

All key personnel named in the application should upload a NIH biographical sketch.

Standard NIH Biosketch form

OMB No. 0925-0001 and 0925-0002 (Rev. 09/17 Approved Through 03/31/2020)

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME:

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE:

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	Completion Date MM/YYYY	FIELD OF STUDY

A. Personal Statement

B. Positions and Honors

C. Contributions to Science

D. Additional Information: Research Support and/or Scholastic Performance