

National Cryo-Electron Microscopy Facility (NCEF) Sample Information Form

The purpose of this application is to give us a general idea of what your sample looks like and what the imaging needs are. Your answers need not be comprehensive, but the more information you provide the better we can understand the project that you have in mind.

All details submitted in this form, all other communication, and data collected (if approved) will be kept confidential and are not shared with anyone outside the NCEF.

Please note that we can only accept samples at BSL1 level. No infectious material, toxins, or anything potentially dangerous can be accepted.

Please attach any relevant images or files to your email along with this document. Please send via email to nci-ncef@nih.gov

A. Contact Information

The information collected is for business purposes only and should not include any personal identifiable information. On the day of imaging we will need to contact you, so make sure to give us a contact we will be able to reach.

Principal Investigator:
Institution/ Laboratory:
Point of Contact (POC) for Imaging Session:
POC email:
POC phone:

B. Short Project Description

Note that we do not require any direct information on the project, except a one-sentence declaration of why it is relevant to cancer research. However, any additional information you provide on the scope of the research project and previous publications might help us provide better quality data.

C. Sample information

Buffer conditions:
Size of particles (kDa):
Other important information (symmetry, shape, etc.):

We require that every set of frozen grids we accept for imaging is prescreened by cryo-EM to show ice quality, particle distribution, and stability are acceptable.

Cryo-EM pre-screening images must come from the same grids made from the same plunge freezing session that you plan on sending us.

Please attach representative images of your screening, we require:

- Low Mag- **At least 1 full grid square**
- Medium Mag- **1 or 5 holes in a quantifoil**
- High Mag- **Particles should be clearly visible**

D. Imaging Conditions

If you have any thoughts or wishes for imaging conditions (pixel size, dose rate and total dose, number of frames, frame exposure time and dose, etc.) please let us know about it here. You will get a detailed checklist from us once your project is approved, and on the day of imaging we will contact you to go over the imaging conditions in detail with recommendations based on our screening of grids. However, it might be useful to know about specific requirements beforehand.

E. Data transfer

Data will be made available for download through Globus (www.globus.org).

Note:** In any publications and posters that use data provided by NCEF, we require that you include acknowledgment of, ***“This research was, in part, supported by the National Cancer Institute’s National Cryo-EM Facility at the Frederick National Laboratory for Cancer Research”.