

UAB CRYO-EM FACILITY POLICIES

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The UAB Cryo-Electron Microscopy Facility (CEMF) is a shared resource under the Institutional Research Core Program (IRCP) and the O'Neal Comprehensive Cancer Center (OCCC). We offer services, access to instrumentation, consultations, and training at all stages of cryo-EM sample preparation, data collection, and data processing. To ensure efficient, uninterrupted service and operation of the facility, it is essential that all users follow the procedures outlined below and during user training. Visit the CEMF website for the latest information: <https://www.uab.edu/cores/ircp/cryo-em/>.

Failure to follow standard procedures or instruction from CEMF personnel may result in denial of service or access to the CEMF. Principal Investigators (PIs) and their departments may be held financially responsible for damage to instrumentation due to negligence, deviation from instructions, or unauthorized use. When in doubt, always seek assistance from CEMF personnel.

ACCESS & BILLING

- All users must be registered with the CEMF in the Facility Billing System (FBS): <https://fbs.psapps.uab.edu/>. See "New Users and Training" on our website for more information. Registered users may request assisted usage (or unassisted usage following training and certification) via the FBS scheduling system.
- Keycard access to the Shelby building is required to reach the CEMF. A physical key is required to enter the CEMF if facility personnel are absent.
- A valid Oracle account number is required for UAB internal users to schedule time in the CEMF.
- The latest rates and example usage scenarios are available on our website under "Services & Pricing". These rates may change periodically without prior notice.
- Actual times for scheduled usage must be recorded in FBS. Where applicable, usage of CEMF supplies must be recorded in FBS as well. *Failure to accurately record usage of CEMF resources and supplies may result in decertification and/or denial of service.*

TRAINING

- Documented training and certification of competence by CEMF personnel are required for independent usage of CEMF equipment. To be clear: CEMF users may not certify other users.
- Users may only access equipment or carry out procedures for which they have been specifically certified. Training in specific sensitive procedures may not be made available to all users.
- Due to liability concerns, external users may not operate any equipment independently except by special arrangement.

OPERATING PROCEDURES

- The lab benches and other work areas should be cleaned and re-organized after use. Failure to do so may incur fees for personnel time spent cleaning.
- The CEMF is a BSL2 level lab. Projects involving infectious materials should be discussed with CEMF personnel beforehand. Proper procedures for disposal and disinfection of tools and lab areas must be followed.
- Written standard operating procedures for the microscopes are available in the control rooms and digitally. Do not deviate from these procedures without explicit approval from CEMF personnel.
- In the event of unexpected issues or errors, contact CEMF personnel for guidance. Emergency contact information is posted on the main door and throughout the facility.
- Inform CEMF personnel when stocks of any supplies—grids, liquid nitrogen, or even data storage capacity—run low.

DATA & SAMPLE MANAGEMENT

- For assisted usage, methodological details of sample preparation, imaging, etc. will be recorded by CEMF personnel. For unassisted usage, records of these details are the responsibility of the user.
- Sample solutions should not be stored in the CEMF long-term. Avoid submitting excessive volumes of sample solutions, and make sure to retrieve any precious samples after sample grid preparation is complete. Without special arrangement, sample solutions left in the CEMF may be discarded without notice.
- Storage space for useful sample grids (cryogenic and room temperature) is available in the CEMF upon request.
- The CEMF has limited data storage capacity. Users are responsible for supplying a storage endpoint for their data, transferring their data from microscope PCs, and for the long-term storage of data consistent with NIH or other funding agency standards. Data offloading should begin as soon as imaging is complete.
- Bulk data will be offloaded to the UAB Cheaha supercomputer for distribution.

ACKNOWLEDGEMENT

- Please remember to acknowledge the core in your publications with the following statement: “[Electron microscopy was carried out in] the UAB Cryo-EM Facility, supported by the Institutional Research Core Program and O’Neal Comprehensive Cancer Center (NIH grant P30 CA013148), with additional funding from NIH grant S10 OD024978.” Alter the bracketed text and expand abbreviations as needed.
- Please acknowledge CEMF personnel who assist with your work (e.g. “We are grateful to Dr. James Kizziah for assisting with the data collection” or similar) and if their involvement is extensive, consider co-authorship.

PROCEDURE FOR RESOLVING CONFLICTS

- Disputes and disagreements between a user and the facility director or facility personnel will be referred to the CEMF advisory committee for arbitration. Committee members who are

directly involved in the dispute will be recused. The user, PI, and CEMF director agree that decisions made by the committee will be final and binding.