User registration and qualification

- Only qualified users are authorized to access MIT.nano facilities and use MIT.nano equipment.
- Qualified users are individuals who have completed all prerequisite <u>trainings</u>, and have been trained and qualified to use equipment by MIT.nano personnel. If these requirements have not yet been met, a user must be accompanied at all times by MIT.nano personnel. Visitors are not allowed in the cleanroom space except under special arrangement for accompaniment by MIT.nano personnel.
- Note that some safety training requires an annual refresher. It is the responsibility of
 qualified users to stay up-to-date on all training requirements to keep their access
 privileges. Card access will be deactivated if a user's training expires. The user will need
 to be requalified to regain access to MIT.nano facilities and equipment.
- All users must register and obtain an active user account in <u>MUMMS</u>, the web-based management system for user accounts and permissions.
- Training and qualification for all MIT.nano facilities and tools must be conducted by authorized MIT.nano personnel. Please note that certain activities in the MIT.nano fabrication spaces are limited to normal business hours. After-hours access on some instruments is granted once user proficiency is established and verified by authorized MIT.nano personnel. After-hours privileges can be revoked upon unappropriated use of the space.
- MIT.nano personnel in charge of the tool/instrument have final authority over granting
 user privileges. Use of a similar tool/instrument in another facility or institution is not a
 substitute for training and qualification to use the tool/instrument in MIT.nano.
- At the discretion of MIT.nano personnel, retraining and/or qualification may be required
 if a user has not used a specific facility or tool for an extended period of time dependent
 on the tool/instrument. Retraining will be required of a user who demonstrates a
 deficiency in understanding for safe operation of a tool.
- Users are permitted to only work on the materials/workflow that have been approved by MIT.nano and listed in the system under that user profile. New projects will require separate approval.

General utilization guidelines

- Users must operate MIT.nano facilities and tools in a safe and professional manner, consistent with the operating instructions provided by MIT.nano personnel.
- Equipment usage for Fab.nano and Characterize.nano are managed via the <u>CORAL</u> scheduler.

- If the facility or tool is on the CORAL.nano scheduler, advance time reservation is available and recommended for qualified users. Please do not abuse reservations—reserve only the time you need and cancel as soon as possible if the time is not needed.
- Users are prohibited from scheduling time for use by another user, even if they are members of the same research group or have the same affiliation.
- Never use a tool under someone else's name or engagement; always disengage when finished.
- A user has to be qualified for scheduling and use of the equipment.
- Users are required to enter in CORAL.nano all information requested for statistical (capability utilization) purposes and to properly engage and disengage the instrumentation.
- Users are required to record any problems or irregularities with the facility and/or tool(s) operation during their session in CORAL.nano and by notifying the appropriate MIT.nano personnel. This policy is in place to enable MIT.nano personnel to work proactively toward malfunction resolution and prevent functionality deterioration.

Characterization.nano instruments utilization guidelines

• All reservations of the metrology tools/instrument/facilities for training purposes are conducted by the authorized MIT.nano personnel.

Fab.nano tools utilization guidelines

 Reservations of the fabrication tools for training purposes is done by the user in coordination with an authorized Fab.nano staff.

Immersion Lab tools utilization guidelines

- Reservation of the Immersion Lab must be done in coordination with MIT.nano personnel.
- Equipment not owned by MIT.nano cannot be stored in the Immersion Lab.

Access and security

- All users are prohibited from giving others access to any access-controlled spaces, either by allowing "tailgating" or by lending out their access credentials.
- All users are prohibited from sharing their CORAL.nano username and/or password with others.
- MIT.nano reserves the right to deny future access to any user in the event of a willful breach of this policy.

Acknowledgements

- We encourage the acknowledgement of the MIT.nano facilities for all publications, presentations, and patents resulting from the use of MIT.nano or through assistance from MIT.nano staff.
- We encourage acknowledgement of the intellectual contribution of the MIT.nano
 personnel in the form of a personal acknowledgement of the contribution or authorship
 if the contribution is merited in accordance with MIT responsible conduct of research
 policies.
- We encourage you to report authorship and acknowledgements to MIT.nano.
- Acknowledgement can be written as the following, "This work was carried out in part through the use of MIT.nano's facilities."
- Please <u>complete this form</u> to share your publications with MIT.nano.

General safety

- Food and drink are prohibited in the MIT.nano experimental facility spaces or while
 using any MIT.nano tools/instruments (this includes gowning and pre-gowning spaces as
 well as microscopy control rooms).
- MIT.nano reserves the right to prohibit further use of the facilities if a user is working in an unsafe manner that poses a danger to the user, other users, MIT.nano personnel, equipment, and/or infrastructure.
- Users must follow the appropriate protocols regarding dress code (personal attire/cleanroom garments/personal protective equipment), sample storage, handling materials and tools, transportation and handling of chemicals, emergency response and evacuation, equipment booking and sharing, space maintenance, and housekeeping.
- A physical buddy, located in sight of a user is required for wet chemical processing with corrosive chemicals that requires full PPE (apron, face shield, gloves). This includes work in all wet benches and hoods that have "PPE Required" taped zones in front of the workspace.
- Each facility within MIT.nano has unique safety considerations and requires specific
 training and certification. Spaces are mapped according to functionality and
 experimental compatibility. Therefore, each user will be assigned a set of safety training
 prerequisites specific to their experimental needs, including but not limited to
 emergency preparedness, chemical hygiene and hazardous waste management,
 biosafety, cryogenics handling, laser or x-ray use, and lab-specific safety trainings.
- MIT.nano maintains_a chemical inventory and Safety Data Sheets database. If you wish
 to bring any chemicals into a MIT.nano lab space that are not provided by MIT.nano,
 you must submit a request form for review. Only approved chemicals shall be used in

the MIT.nano facilities. MIT.nano reserves the right to remove chemicals that have not been approved through established procedures.

- All chemicals are brought in to the cleanroom space by MIT.nano personnel.
- Samples must be brought in through the established procedures.

Fees

- The user fees are in accordance with the following schedule (TBD)
- **Unassisted Use** is conducted by certified users who operate instruments without staff support. User is billed for Instrument Use.
- Assisted Use is instrument use where an MIT.nano staff member operates the
 instrument, and the user attends and observes, or vice versa in the case of training
 certification. User is billed for the full costs of the instrument time and the staff time
 used. User does not require instrument certification.
- **Training is Assisted Use** where the user requires instrument certification.

Accountability

- Any work conducted by a user, or services provided by MIT.nano and its personnel, are
 on a reasonable effort basis. Users accept ultimate responsibility for the progress and
 results of their work conducted within MIT.nano facilities.
- MIT.nano is not responsible for protecting your intellectual property.
- Computer use policy: no software installations are allowed on the instruments/tools/shared computers without prior coordination with MIT.nano personnel, this includes the Immersion Lab computers and VR systems.
- MIT.nano reserves the right to amend, abridge, alter, delete, add, or change any MIT.nano policies as deemed necessary by MIT.nano with or without written notification.
- Questions or concerns regarding MIT.nano policy should be sent to the appropriate MIT.nano User Services Director. If you're not sure who that person is you can email nanohelp@mit.edu and your question will be routed accordingly.