

Electron Microscopy facility access for projects with special permission

v 1.23

7th May, 2020

Access to the DTU's common infrastructure requires that the project that needs access has received special permission from DTU through the respective Head of Department. Once this is in place, proceed according to the regulations below – part 1 regarding booking and part 2 concerning safety.

Please be fully aware that the permission is personal and only for the duration of the specific project. If we observe use of the facility not covered by a project with explicit permission by a Head of Department, we have been instructed to report it as unauthorized usage and revoke access immediately for a longer period.

The electron microscopy facility is a research infrastructure used by many scientists with individual process flows and requirements. In these times, it is a logistical challenge to regulate the usage of such a facility. We are in the process of optimizing the usage according to two main criteria:

- 1) Minimize the risk of virus contamination
- 2) Maximize throughput

This optimization is an ongoing progress. There will be changes and adjustments both physically in the labs and for booking via LabManager. It is our goal that we will be able to offer close-to-normal throughput once this optimization process is finalized. Please bear with us, as this is an extraordinary situation. Make sure to observe all the rules and regulations, ask if anything is unclear and if you see behavior that will risk contamination please tell us and/or remind users in a friendly way if there is a risk of contamination.

Part 1: Booking Rules

Access to the electron microscopy facility is granted as a special permission. This permission is given under the condition that all rules and recommendations of the health authorities are observed. To ensure compliance with these general rules, we have to set a number of rules and restriction in place that are adapted to our environment.

Please read these rules carefully. Not complying with these rules can result in a high risk of contaminating you and other users of the labs. Furthermore, there is an immediate risk that non-compliance will lead to revocation of the special permission for all facility users.

We will therefore be extremely strict in enforcing the general rules and guidelines but especially the rules imposed due to the current pandemic situation. Non-compliance even by accident or unintentionally can lead to an immediate revocation of your special permission to use DTU's electron microscopy facilities and adjoining labs.

It is absolutely important that we follow all the following steps meticulously. If you have doubts and questions, please come forward with them (preferably to Adam or Jakob).

By default, your access to 314 and permission to book equipment has been cancelled due to the complete lock down of DTU.

Opening hours:

The electron microscopy facility will be open **7:00 to 19:00 Monday to Friday** (closed during public holidays / DTU holidays). During opening hours, one member of DTU Nanolab staff will be on the premises to ensure that the basic rules as well as those set for preventing contamination are obeyed at all times. During these hours, we will also provide (limited) support. Special needs should be addressed prior to using the labs as we are only allowed to have a few support staff members present at any given time.

Training:

Until further notice, we **do not provide training sessions**. Training sessions involve two or more people in close proximity in the same microscope room – a situation that is not compatible with minimizing the risk of infection. As is the normal procedure, you cannot use any of equipment without proper training. If this is a major problem you can contact Adam and Jakob, but there is a chance that we will not be able to help in the current situation.

Before you start booking and planning your electron microscopy work:

- 1) Send a request to use the electron microscopy facility (including sample prep. labs) to adm@nanolab.dtu.dk
 - a. This request should contain proof that your project has received special permission (this can be a statement from your head of department in a separate email)
 - b. An estimate over how many hours at the electron microscopes (or other laboratories you need access e.g. sample prep., ultramicrotome, etc.) for your project and how these hours will be distributed over time and location.
 - c. State which laboratories you need access to (e.g. 314, sample prep. lab, ultramicrotome etc.)
 - d. State your LabManager initials and if applicable other peoples initials if they are included in the special permission for the project (this should be stated and confirmed in point a.)

- 2) Wait until you receive a confirmation which states:
 - a. Your project is approved for access to the electron microscopy facility and that you are a user with a critical project in LabManager
 - b. The date when you can start booking in LabManager

- 3) Once you have confirmation and a start date for booking you can book microscopes via LabManager with the following important modifications:
 - a. Read and understand the special rules that apply while entering and working in the electron microscopy facility. These rules are provided and sent to you on a separate sheet and can be found in LabManager and on Nanolab's web page. These rules will undergo changes. It is your responsibility to check if the rules have been changed before you enter building 307 / 314 (yes, each time before, we will also post changes in the Hygiene Station in B314)
 - b. The number of people in building 314 is restricted. At any given time, no more than 8 users plus 2 Nanolab staff are allowed in building 314. Maximum 1 person per microscope room is allowed (support personnel excepted).
 - c. In order to keep track of these numbers you will need to book your planned presence in building 314 in a separate LabManager calendar. This means for every booking of equipment you have to make

an additional “314 presence” booking and this applies for the other labs in B307. **All presence in B314 has to be booked in LabManager including when using the sample prep. labs in B314.**

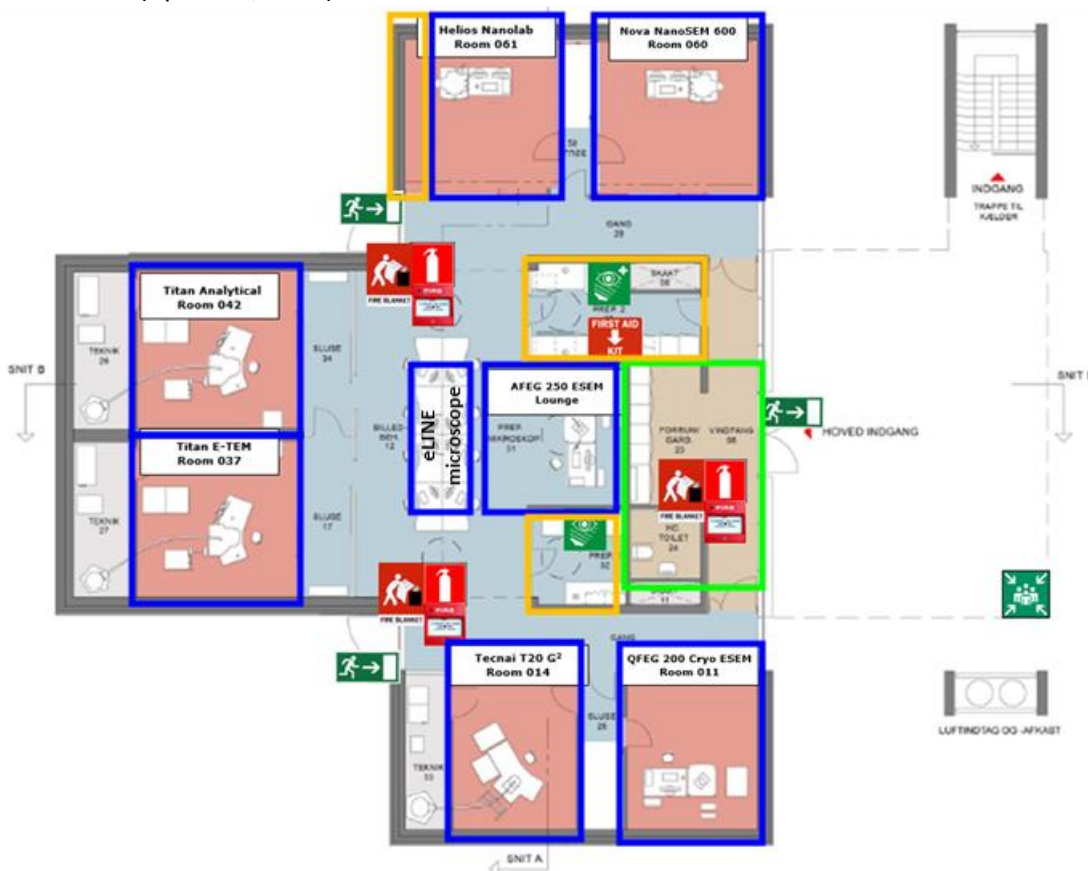
- d. Failure to follow these booking instructions (also if you forget) will lead to a deletion of your booking and revocation of access. If you are unsure, please ask, we are here to help you.

Part 2: Safety rules – rules to minimize risk of infection

Explicit rules on how to enter the electron microscopy facility are given in the document below. You will also find this sheet posted in Bldg. 314 and 307 on our web page and in LabManager. It will undergo revisions and updates and be adapted to the changing situation. It is therefore extremely important that you look at it each time you enter the electron microscopy facility.

Safety measures for building 314

Version 0.63 (April 29th, 2020)



Rules

- 1 person allowed in each electron microscope room and prep lab (plus 2 Nanolab support staff)
- Bring as few personal belongings as possible into building 314. Bring only samples and preparation equipment beyond the glass doors.
- Bags, laptops and tablets are not allowed beyond the glass doors. Use the microscope support PC or your smartphone for note keeping.
- Smartphones are allowed in 314, but have to be cleaned with ethanol before passing the glass doors.
- Maintain at least 2 meters physical distance to other people in the building
- Communicate with other users in the lab in order to avoid misunderstandings

1. Entering building 314

1. Wash hands with soap in the bathroom
2. Use hand sanitizer found at the entrance and put on gloves. Wear gloves at all times.
3. Clean sample box with 70% ethanol
4. Clean your smartphone with 70% ethanol.

2. In the Prep lab

1. Only one person at a time is allowed in the prep lab
4. Be aware that most users have to use the prep lab to some extent. Be quick about your business without rushing
5. Communicate when you see other people needing the prep lab in order to maintain physical distance

3. At microscope

Starting your experiment

1. Clean binoculars with 70 % ethanol (if present)
2. Work on your experiment

Finishing your experiment:

1. Transfer data to personal network storage
2. Clean binoculars with 70 % ethanol (if present)

4. When you need the restroom

1. Wash hands with soap and finish using hand sanitizer
2. Put on gloves

5. Exiting building 314

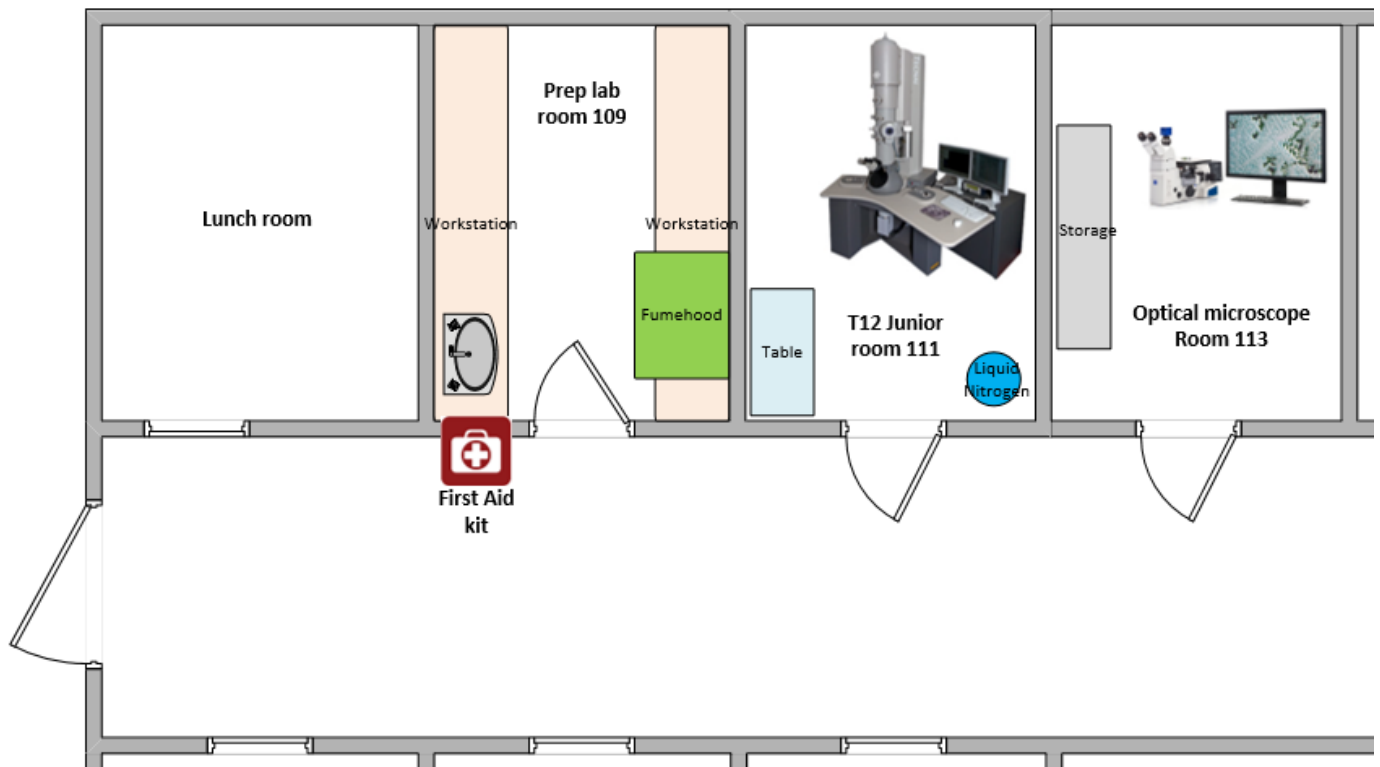
1. Clean your box and tools with 70% ethanol
2. Remove gloves and put in the appropriate bin
3. Wash hands with soap and finish using hand sanitizer at the exit
4. Gather your personal belongings and leave the lab

6. Support

1. Nanolab will have 1 or 2 persons onsite at DTU (314/307) for support
2. Use the Teams channel for the microscope to ask for help/support online (you will be added to the respective Teams channels, when permitted access to 314)

Safety measures for building 307

Prep lab room 109, T12 Junior room 111 and room 113



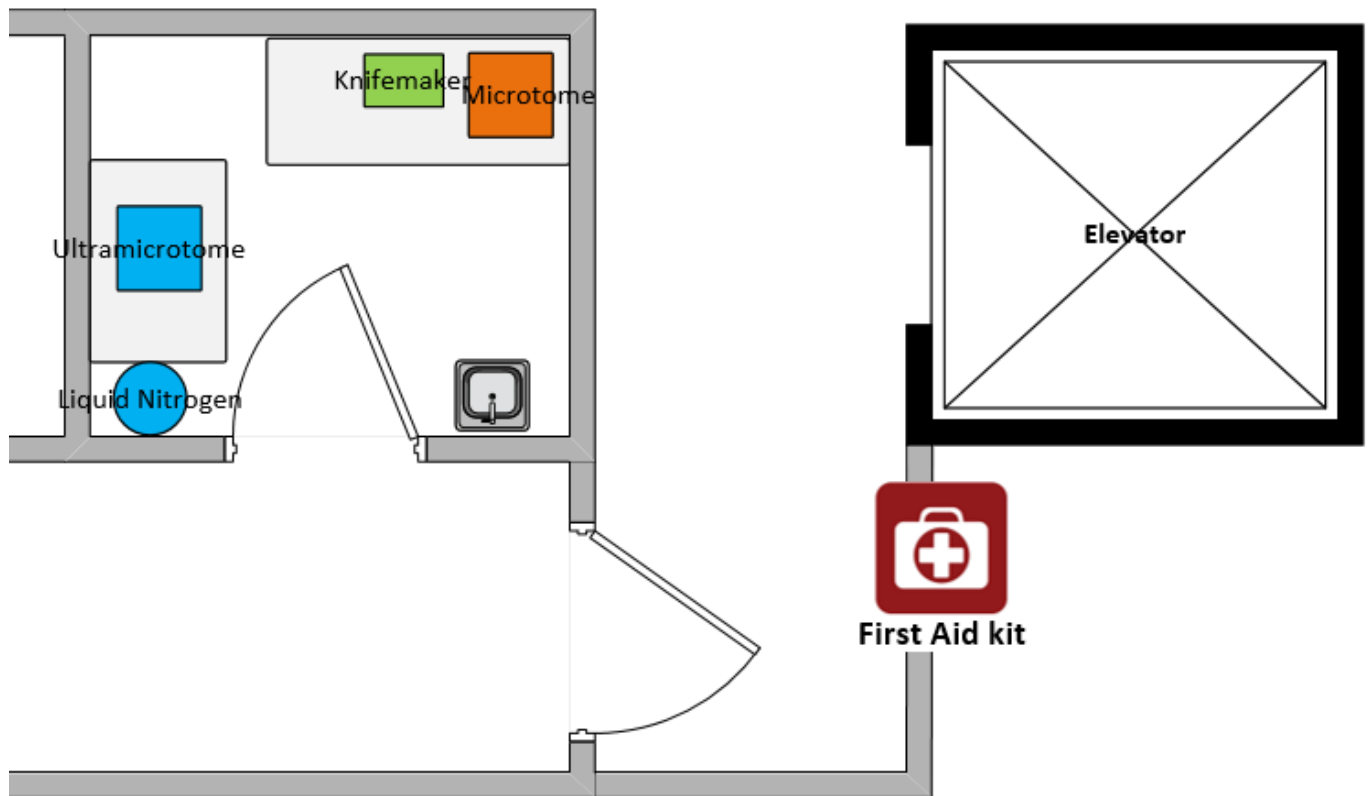
Rules:

- 1 person allowed in the prep lab and microscope room

The procedure is as follows:

1. Enter prep lab room 109
2. Wash hands with soap and finish with hand sanitizer
3. Wear gloves and mask
4. Disinfect personal belonging with 70% ethanol
5. **Point 1-4 applies to room 109, room 111 and room 113**
6. **Before** starting experiment, clean workstation with 70% ethanol
7. **After** finishing experiment, clean workstation with 70% ethanol
8. Dispose of gloves in trash can
9. Wash hands with soap and finish with hand sanitze in room 109

Ultramicrotome basement room 906



Rules:

- 1 person allowed in the ultramicrotome room

The procedure is as follows:

1. Enter ultramicrotome room
2. Wash hands with soap and finish with hand sanitizer
3. Wear gloves and mask
4. Disinfect personal belonging with 70% ethanol
5. **Before** starting experiment, clean workstation with 70% ethanol
6. **After** finishing experiment, clean workstation with 70% ethanol
7. Dispose of gloves in trash can
8. Wash hands with soap and finish with hand sanitizer