

# Guidelines for working at Nanolab during the Covid-19 pandemic

Version 10.4

**This is a complete version containing the guidelines for all labs and general behavior. Looking for something specific, please use the table of contents.**

## Change log:

*Changes since last version:*

**Changes to version 10.4**

*User Support (page 3)*

**Changes to version 10.1**

*All Covid-19 documents regarding rules at Nanolab, have been assembled in this document*

*Change log introduced (page 1)*

*Links to corona rules (page1)*

*Presence booking (page 1)*

*Laboratories 1. Floor building 346 (from page 4)*

Here is an overview of the extraordinary guidelines we have implemented during the Covid-19 pandemic. The guidelines are subject to change over time, depending on our experiences with these current guidelines and changes in overall guidelines and regulations from DTU and the Health Authorities.

**If you are sick or have symptoms of illness, stay at home. If you get symptoms or get sick while you are at work, go home.**

Stay home until you are completely healthy. You are considered sick when there are symptoms of illness - even mild symptoms. If you are in doubt, get tested for infection with the corona virus. If you are tested positive, you must inform your manager/supervisor.

With regards to COVID-19, you are no longer considered to be an infection risk when two days have passed after all symptoms have ceased. Only then can you return to your place of work.

Staff and students must follow the normal sick leave procedures: Notify your immediate manager/supervisor, write to the administration ([adm@nanolab.dtu.dk](mailto:adm@nanolab.dtu.dk)) tell her/him that you are sick and possibly suspect COVID-19, and follow DTU's sick leave guidelines available through DTU Inside.

The current guideline from the Health Authorities can be found at the homepage of the Danish Foreign Ministry <https://um.dk/en/travel-and-residence/coronavirus-covid-19/>.

For more information: <https://www.dtu.dk/english/Service/coronavirus>

***At all time, keep 2m distance***

***Microscopes in building 314 and 307 and the laboratories 1. Floor and in the basement of 346 have to be booked through LabManager.***

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## User Support in the cleanroom during Level 5 Pandemic restrictions:

An attempt to summarize how we can help users best possible while observing level 5 rules and regulations.

### Training

During times where regulations (e.g. social distance) prevent us perform usual training we can offer the following:

#### Cleanroom Introductory course

For user who have previously had access to the cleanroom certain circumstances may allow for the possibility to get temporary access. It is required to sign up and take the online parts of the course before getting permission.

Contact Majken Becker or Jesper Hanberg in order to assess your possibilities for access renewal.

New users are encouraged to sign up and take the online parts of the course and online parts of relevant TPTs. It is recommended, you familiarize yourself with the tools you are planning to use through a careful study of manuals and relevant videos.

#### Tool package training (TPT)

It is recommended that you take the online parts of the relevant courses and online parts of TPTs.

### Tool Training

Users with a recently expired authorization have a possibility to get their authorization renewed without specific training at the tool. [training@nanolab.dtu.dk](mailto:training@nanolab.dtu.dk)

For other users with expired authorization we may offer “re-authorization training” in the cleanroom observing the social distance by using wireless headsets if the tool and the room allow this procedure. Remember to clean the headsets after use.

In all other cases, we unfortunately cannot offer training.

### Processing

#### Students and researchers working on internal projects.

##### **If you need training for a single step in your process flow:**

Ask an authorized colleague to do the processing for you. If this is not possible, we may offer to do the processing for you. If the tool and room allows, you may follow the process while maintaining a safe distance and using wireless headsets for communication.

##### **If you need training for a full process flow:**

The only possibility here is to find an authorized co-worker to do the processing for you. We do not have the resources to run your process flow.

#### Students and researchers working on externally financed projects

##### **If you need training for a single step:**

Ask an authorized co-worker to do the processing for you. If this is not possible, in very urgent cases and our resource permit we can do the processing on the project. We will register equipment and time usage in LabManager on behalf of the user and project. Contact Jesper Hanberg for details.

If the tool and room allows, you may follow the process while maintaining social distance and using wireless headsets for communication.

##### **If you need training for a full process flow:**

We cannot offer training for this. If the project can cover the costs, we may conduct the processing for you. We will only do this in urgent cases and if our resources permit. Pricing depends on type of project. Contact Jesper Hanberg for details.

## Commercial companies

Same as for above.

## Cleanroom:

It is obligatory to wear face masks in the cleanroom and all the common research infrastructure labs at all times. This is standard procedure in many cleanrooms and especially effective in a situation when you are talking to another person. Please follow the instructions when and where to put on and discard the mask. Our gowning area and the corridors leading to that area are not designed for keeping a distance of 2 meters. We have laid out rules for entering and using the gowning area, most explicit on the dirty side, where people spent most of the time. Please remember that the gowning area (on both sides) is a transit area and the main bottleneck regarding usage of the cleanroom. Therefore try to minimize the time you stay in this area, be swift in your gowning procedure, do not talk with other people unless absolutely necessary while being in the gowning area. Be considerate when you pass people in the corridor, step to the side, hold your breath for the moment passing. Wait outside the gowning area until it is your turn and the waiting zone inside is vacant. When using glasses, wipe them down with alcohol. Should you have accidentally touched yourself in the face with gloved hands, clean your gloved hands with alcohol before you touch anything else and change gloves in the gowning area. You will observe that we installed measures ensuring that the cleanroom suites are hung with a distance, and the cleanroom hood is placed separately in the room above your shoes. Please observe these arrangements and make sure that your cleanroom suit does not touch any other suit already hanging there. Gowning being a major bottleneck we have decided that you should leave the cleanroom immediately through the nearest exit in case of alarm. Do so, also in case of mild evacuation (ventilation alarm). Proceed as if it would be an immediate evacuation (hard evacuation) and proceed (still in your cleanroom suit) immediately to our collection and gathering area in front of building 358. Stay there until a Nanolab staff member will give you further instruction. Remember to keep distance, also in this situation. A small video, showing how to enter the cleanroom, explaining the new gowning rules is available in LabManager. We are trying hard to provide a safe environment that allows as many users as possible to their work and conduct their research. Please help us by being patient, considerate and understanding and thereby contribute to an environment where we all can achieve what we set out to achieve despite this difficult situation.

## Laboratories 1. Floor building 346:

Scientists from different research groups use the research laboratories. 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

To ensure compliance with all rules and recommendations of the health authorities, we have defined a number of rules and restrictions 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. If you have doubts and questions, please come forward with them (preferably to Stephan or Majken) and if you see behavior that will risk contamination please tell us and/or remind users in a friendly way.

If you are a new user of the Labs in building 346 it is absolutely necessary, that you receive the safety instructions by Majken to among others familiarize yourself with the alarm systems (sounds) and that you are always aware of the route to the nearest emergency exit. The building has installed several highly toxic gas supply systems and it is therefore of paramount importance that you are familiar with emergency procedures. Be sure that you have read and understood the brochure about working in bldg. 346. This brochure is available at the reception in building 347.

### Part 1: Booking Rules

The laboratories are divided in different zones, see schematics below. There are the following restrictions:

- Wet chemistry lab (145): Maximum 4 users. Each of the 3 work zones A,B,C can be booked separately and used by maximum 1 person; the flexible zone D can't be booked but used by maximum 1 person and only for short activities such as dishwasher loading/unloading or weighing samples. If you need to do real sample preparations or experimental activities, book one of the other zones.
- PHOENEEX lab (151): Maximum 3 users. Each of the 2 work zones E,F can be booked separately and used by maximum 1 person; the flexible zone G can't be booked but used by maximum 1 person for short activities such as plasma treatment.
- 3Dprinting/polisher lab (155): Maximum 1 user. The lab can only be booked as a single zone (zone H).

Please coordinate bookings with the other main users of the respective zones and update the Google calendar <https://calendar.google.com/calendar/b/2/r/week/2020/6/4> ; user name [researchlabs346@gmail.com](mailto:researchlabs346@gmail.com) ; login "Building346". Respect the booking times, but talk to each other if you need more time on the day or want to switch bookings. If you booked a time slot, but have periods where you don't have to be physically present (waiting periods), then leave the laboratory and wait in the office instead. In that case, other users can use the zone **after agreement** with the persons that booked the time slot. If possible, book half/full days and avoid short time slots in the middle of the days blocking the access for others.

## Wet chemistry research Lab - 346/145

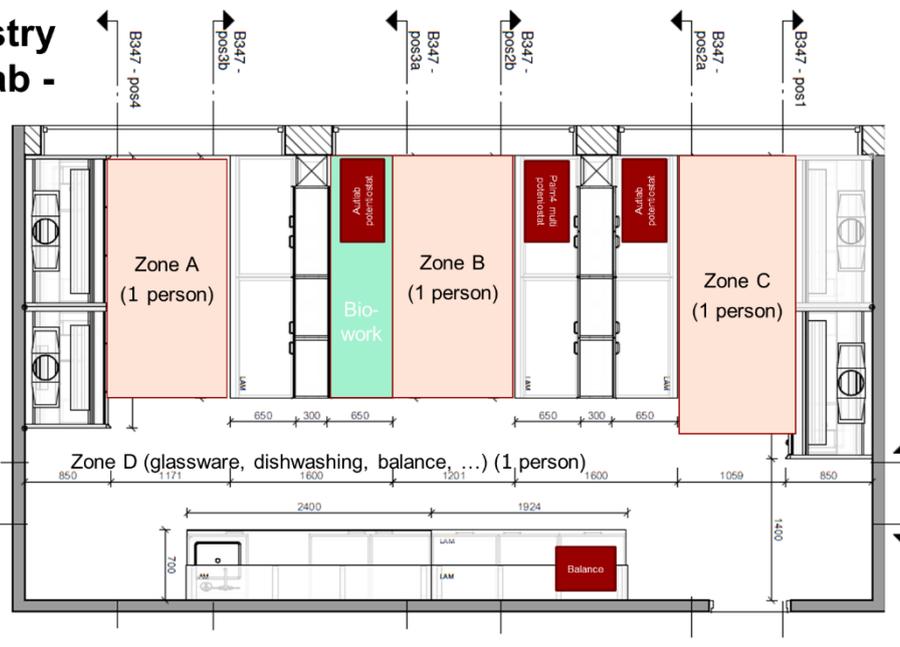
**Total maximum 4 persons**

Zone A: 1 person  
2 fumehoods

Zone B: 1 person  
Autolab potentiostat  
Palm4 multi potentiostat

Zone C: 1 person  
Autolab potentiostat

Zone D: 1 person  
only short activities or transit



## PHOENEEX Lab – 346/151

Total maximum 3  
persons

Zone E: 1 person

Laser writer

Probe station

BMF 3D printer

Zone F: 1 person

Furnaces

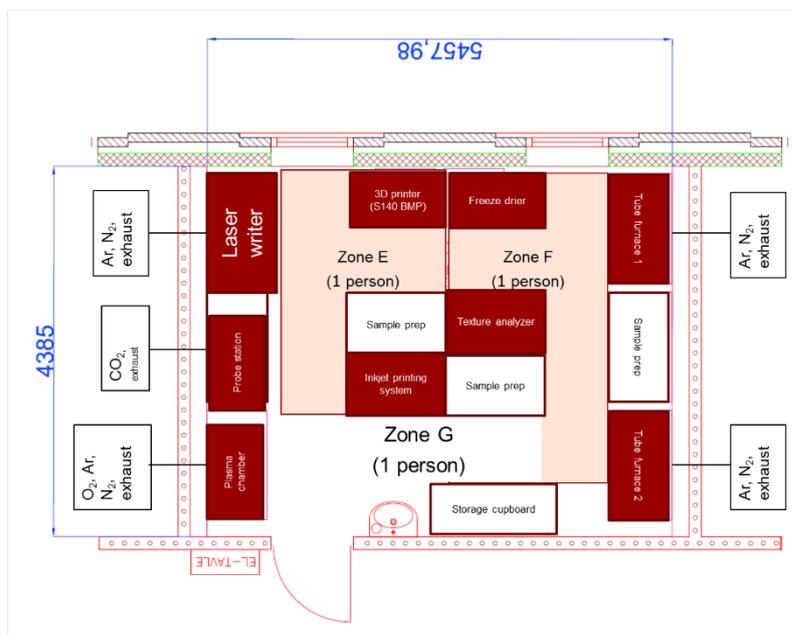
Texture analyzer

Freeze drier

Zone G: 1 person

Plasma chamber

Inkjet printer



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

Explicit rules on how to minimize the risk of infection are given here. Please note that all the general rules and guidelines about good laboratory practice are still valid. **If you are ill or have ANY symptoms of the COVID-19 illness you are not to be in the workplace.** If you get symptoms of illness while being at work, then go home.

#### 1. Entering the laboratories

- Bring as few personal belongings as possible into building 346. Use your office instead for storing bags or leave them in the hallway outside the lab.
- If you have long hair, put it up
- Wash your hands in the wash rooms
- On the small table on the first floor in 346 outside the labs there is hand sanitizer; disinfect your hands
- On the same table there is 70% ethanol. If you need to bring your laptop, mobile phone, pens or other personal items, clean them with ethanol before entering the lab
- Put on gloves if you are going to work in the wet chemistry lab, they should be available on the same table
- Put on your lab coat stored on the hangers outside the lab
- Enter the laboratory
- Put on safety glasses. Safety glasses are disinfected with 70% ethanol before use
- Before starting your experiments clean the workspace with 70% ethanol

#### 2. Working in the laboratories

- Only 1-2 persons allowed in each zone, see booking rules and schematics above
- Gloves and face mask are mandatory in the labs at all times. Do not touch your face with your gloves. If you do so, change to new ones.
- If you use the fume hood or the balance, clean the shields/cover with 70% ethanol afterwards
- Maintain at least 2 meter physical distance to other people in the building
- Communicate with other users in the lab in order to avoid misunderstandings

#### 3. Leaving the laboratories

- After completion of your experiments and leaving for the day, clean the workspace with 70% ethanol
- If you are the last user, clean surfaces in the shared workspace (e.g. Zone D) with 70% ethanol
- Keep the laboratory as tidy as possible, this is now even more important than usual
- Take off lab coat and safety glasses
- Leave the laboratory

- Take off gloves and throw them in the trash bin
- Wash hands with soap and finish using hand sanitizer at the exit

DTU Nanolab's research laboratories on the 1. floor in 346, are laboratories which are predominantly reserved to Nanolab staff and are not bookable in LabManager. It is therefore strictly necessary that you coordinate the usage of these labs with the main user group. For the labs in building 346, 1. floor please coordinate usage with Stephan Keller.

#### Dicer room 1. Floor 346:

- Only one user, use gloves at all times. Always use facemasks.

#### Basement building 346:

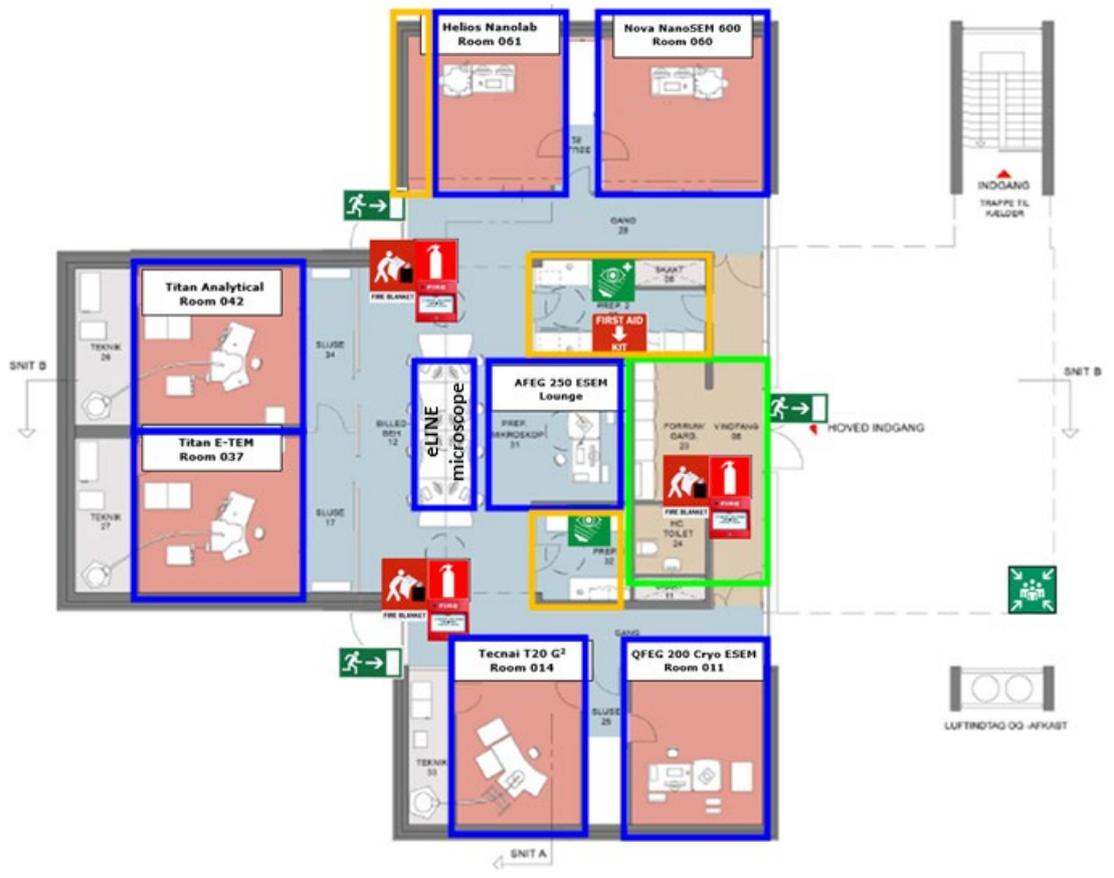
- Max 2 persons per room. Always use gloves and if more than one person in the room, use facemask at any time also when sitting in front of the tool.
- Bring as few personal belongings as possible into the room.

#### Packlab building 347:

- Only two persons per room, facemask required at all times.
- You have to book packlab presence in labmanager. Max 2 persons are allowed per room.

## Building 314 and 307:

### Building 314:



### General rules:

- Only 1 person is allowed to work in each electron microscope room and prep lab.
- Maintain at least 2 meters physical distance to other people in the building.
- Wearing a mask or face shield is mandatory whenever you are moving around in the building (it's not needed when you are sitting at the instrument).
- 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.
3. Clean sample box with 70% ethanol

### 2. In the Prep lab

1. 1 person at a time is allowed in the prep lab.
2. Be aware that most users have to use the prep lab to some extent. Be quick about your business without rushing.
3. Communicate when you see other people needing the prep lab in order to maintain physical distance.
4. **Before** starting to work, clean the workstation with 70% ethanol which can be found in the middle area.
5. **After** finishing the work, clean the workstation with 70% ethanol which can be found in the middle area.

### 3. At microscope

#### Starting your experiment

1. Clean workstation and binoculars (if present) with 70 % ethanol which can be found in the middle area
2. Work on your experiment

#### Finishing your experiment:

1. Transfer data to personal network storage
2. Clean workstation and binoculars (if present) with 70 % ethanol which can be found in the middle area

### 4. After using the restroom

1. Wash hands with soap and finish using hand sanitizer

### 5. Exiting building 314

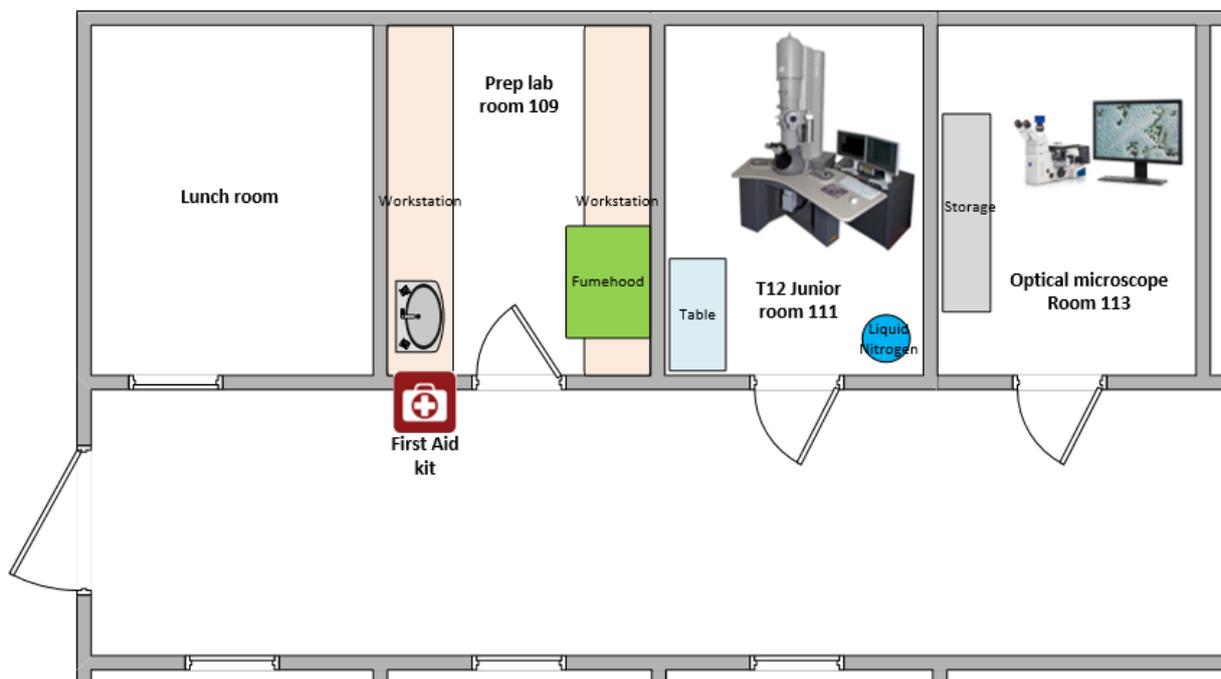
1. Clean your box and tools with 70% ethanol
2. Wash hands with soap and finish using hand sanitizer at the exit

### 6. Support

1. 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)

## Building 307:

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



### General rules:

Only 1 person is allowed to work in the prep lab and microscope rooms.

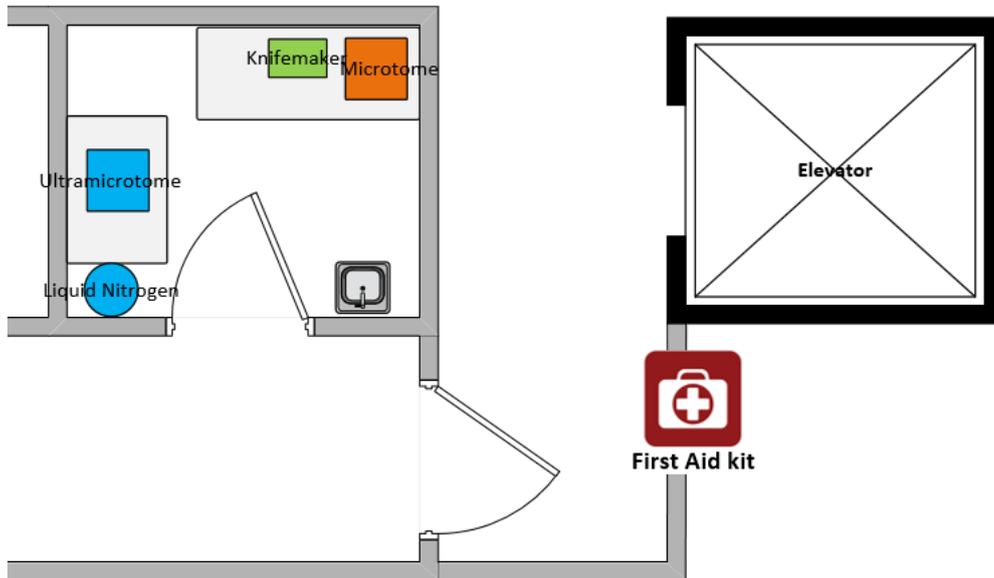
### The procedure is as follows:

1. Enter prep lab room 109
2. Wash hands with soap and finish with hand sanitizer
3. Disinfect personal belonging (sample box, tools) with 70% ethanol

4. **Point 1-4 applies to room 109, room 111 and room 113**
5. **Before** starting to work, clean the workstation with 70% ethanol
6. **After** finishing the work, clean the workstation with 70% ethanol
7. Wash hands with soap and finish with hand sanitise in room 109

Building 307:

#### Ultramicrotome basement room 906



#### General rules:

Only 1 person is allowed to work in the ultramicrotome room.

#### The procedure is as follows:

1. Enter ultramicrotome room
2. Wash hands with soap and finish with hand sanitizer
3. Disinfect personal belonging (sample box, tools) with 70% ethanol
4. **Before** starting experiment, clean workstation with 70% ethanol
5. **After** finishing experiment, clean workstation with 70% ethanol
6. Dispose face mask (if used) in trash can
7. Wash hands with soap and finish with hand sanitizer

## General behavior in DTU Nanolab:

### Offices:

- You can work only one person in the small offices.
- Maintain distance, e.g. move your desks.
- Be sure to tidy up for cleaning.
- Help out sanitizing - e.g. door handles, light switches, taps, coffee makers and copiers.
- Start the day with good hand hygiene. Be sure to wash your hands or use hand sanitizer after arriving at work.
- Sanitize your cell phone before sharing it with others.
- Finish your workday by cleaning your workstation with cleaning wipes, alcohol or regular cleaning products.
- Pay particular attention to good hygiene when visiting the toilet.
- Keep yourself informed about the CoVID-19 situation and minimize possible spread. Please follow the rules written on the posters from the Danish Health Authorities.
- Avoid shouting or singing, in all cases where it is difficult to maintain 2 meter distance e.g. if you need to discuss data, results or problems etc. in front of a computer screen with a colleague, wear a facemask.
- You have to work from home if your presence is not required or relevant. Please write in the absence calendar and add a phone number where to get hold of you.

### Eating:

- To comply with distance requirements and to minimize the spread of infection in common areas, you have to observe the max occupancy of the respective rooms at all times. Eat in the office, or if necessary, eat in turns. No gatherings beyond 5 persons no matter the size of the room and its max capacity.
- Remember to maintain distance also when using the lunch tables outside.