



ILH / CIGL Multiscale Imaging Platform - Regulations*

Introduction

The ILH/CIGL Multiscale Imaging Unit (IU) is a scientific infrastructure, equipped with expensive and very accurate equipment, which is also very sensitive and vulnerable due to improper usage. These devices can potentially be very dangerous due to high energy lasers (class 3B and 4).

The IU in order to ensure and maintain the high quality of instruments' operation, performs regular quality controls, provides pre-imaging consultation and extensive on-site training for each individual user and implements strict usage regulations.

User Regulations

- Access to IU equipment is only allowed for registered users who had instructions for laser safety
 and training for instrument usage. The users must sign a declaration, confirming their awareness of
 the risks working with class 3B and 4 laser light sources, but also their understanding about all the
 rules and guidelines of the IU.
- Access into room 19 and permission to use the microscope(s) will be granted only for properly trained users. Entrance of unauthorised persons is <u>strictly prohibited</u>. Sharing of room access with others is not allowed and could lead to a termination of access.
- Only IU staff members are entitled to provide user training. Training of new users by other users is not allowed and will not be considered valid.
- Every user will have a separate user account for the PCs controlling the microscopes. Sharing of these accounts is not allowed. In case of shared experiments / collaborations, please contact the IU coordinator in advance.
- The users are obligated to inform their group leader / supervisor about the usage of the IU instruments and also for the regulations of the facility (current document).
- Inactivity of an account for more than 3 months could potentially result in a withdraw of access for the specific instrument. In such a case a new introduction for the user is needed.

Booking

- Registered users will get access to an online calendar. Only bookings in this calendar will be considered valid.
- Normal working hours are between 8:00 a.m. and 5:00 p.m. Booking of the system outside of these normal working hours and during weekends is allowed for experienced users and after the approval of the IU coordinator.
- Booking of a microscope more than two weeks in advance should be avoided. Extension of the advanced booking time is possible for special needs, upon permission by the IU coordinator.
- · Long term experiments (i.e. live imaging) is preferred to be executed over-night.
- Any user failing to show up within 30 minutes of their sign-up time may lose their time slot to another user.
- Over-booking of the instrumentation should be avoided. The IU reserves the right to apply certain restrictions in booking duration per user especially for overbooked instruments and/or when the above-mentioned rules are not applied.
- Cancellation of booking should be done at least 24 hrs in advance.
- The coordinator of the IU reserves the right to block, delete or modify booked slots due to failure, maintenance, QC of the system, or due to any other reason essential for the instrumentation of the IU.

^{*} These policies are subject to change at the discretion of the IU coordinator. If not sure, please ask for an up-to-date version





Equipment

- All equipment is to remain in the rooms and setups they are intended for. Changing lenses, filters etc. is <u>strictly prohibited</u>. If necessary, this is only done by the IU coordinator.
- Users should use the equipment with care and in accordance with the instructions of the IU staff. In case of doubts, they should ask for assistance.
- In case of potential damage to the systems due to inappropriate usage (i.e. chemical or mechanical damage to the optics or other parts of the system), the IU staff are obliged to intervene and stop the experimental session(s) immediately.
- Users are responsible for keeping the equipment (lenses, microscopes' stages etc) clean according to the introduction guidelines.
- Repair/replacement costs resulting from negligence and/or misuse of instruments despite the clear instructions of the instructor may be charged (in full or partially) to the users' department or group.
- If the user happens to be the first or last user of the day (check the booking site!), is also responsible on switching on or off the system.
- Special applications requiring rearrangement of equipment setups are possible on a case-by-case basis and as time permits. These applications must be first discussed with the IU coordinator.
- Malfunctioning equipment should be reported immediately to the IU coordinator.

PCs and data storage

- The usage of USB drives on the PCs of the Imaging Unit is restricted. Only in case of emergency and only after the approval of the IU coordinator is allowed
- Users are not allowed to install any kind of additional software at the PCs of the IU. In case of special software needs, contact the IU coordinator.
- Sharing of Windows user accounts is prohibited and will result in termination of access to CIGL Imaging Unit.
- The users are allowed to save their acquisitions on the microscopes' computers but only for short periods. They should transfer their data on their own file servers, or on the file servers of their department as soon as possible! Data stored on IU computers might be removed, without previous notice when there is a special need.
- The Imaging Unit is not responsible for backing up or retrieving any data acquired. However, special data management workflow is provided with the use of OMERO server. (Information available at a separate document).
- The windows operating system of microscopes' PCs as well as the imaging software, save log files for all users' actions that can be retrieved for any reason by the coordinator of the IU.

Room guidelines (S1/S2 laboratory classification)

- Only vaccinated persons against influenza and SARS-COV2 virus are allowed to enter the IU rooms.
- All rooms of the IU are classified as S1/S2 laboratory space and are subject to the official security regulations. No drinking or eating is allowed within the IU rooms.
- Preparation or trashing of samples is not allowed within the IU rooms. Users should prepare their samples on their own laboratory rooms and bring them safely into the room, placing them on the microscope stage. After finishing their imaging, users are called to discard their samples safely in their own lab following all recommended procedures.
- In case of special requirements for sample preparation (i.e. intravital imaging), the users need to inform the coordinator of the IU in advance.
- After each experiment, the users must disinfect all (used) surfaces according to the guidelines.
- All users need to remove all their belongings (tools, notes etc) after each session, returning the room to its previous condition, available for the next user(s).
- Users with S1/S2 classified samples, have the absolute responsibility to inform the IU coordinator in advance, and are required to fill in additional log books, following the relevant instructions.





Appendix 1: Terms & Conditions (guidelines for PIs)

The use of the Imaging Unit is offered on the basis of scientific collaboration. Thus, the contribution
of the platform to each research project needs to be acknowledged with an authorship of the IU
coordinator to the relevant publications with the following affiliation:

Mutliscale Imaging Platform, Institute of Lung Health (ILH) at the Center for Infections and Genomics of the Lung

- Scientific contributions of additional IU staff or collaborators that include development and implementation of original techniques, experimental design, substantial practical input in the analysis of samples as well as significant intellectual input in the related interpretation of data, require co-authorship under the name of the IU facility.
- The supervisors of the users are kindly requested to inform the IU coordinator about the submission of publications containing data generated in the Imaging Unit.
- The Imaging Unit can offer (upon request), additional help on the parts of the manuscripts referring to microscope usage and image collection and analysis before submission.