

Safe Working Guidelines for Light Microscopy Facilities maintained by the Centre for Microscopy and Imaging in NUI Galway during the COVID-19 era.

The guidelines set out below have been informed by best practises established by the global imaging community. A series of meetings hosted and run by the Royal Microscopical Society along with Bioimaging North America and Bioimaging UK discussed safe operation of equipment within a multidisciplinary microscopy core facility. These meetings were attended by the Chief and Senior Technical Officer with responsibilities for the LM equipment in the Discipline of Anatomy and also the Centre for Microscopy and Imaging.

Please note these guidelines are subject to change over time and must be adhered to, to obtain access to the facilities. Sanctions will be in place for non-compliance.

1. General guidelines

- a. All users must adhere to the Standard Operating Procedures (SOP) for the specific equipment being used. This SOP clearly describes the access procedure for the LM facilities located within the basement of the HBB.
- b. Core facilities will operate only within 9am to 5pm.
- c. Equipment will need to be booked in advance via the PPMS software system and in consultation with the STO in charge of the equipment.
- d. There must be a period of 60 minutes (minimum) between bookings to ensure time for cleaning of equipment after use (see Section 2) and also to minimize interaction of users within the facilities. Users may not book sessions without the 60 minute gap between bookings (i.e. back to back bookings).
- e. Only one person can use a microscope at any one time. Where there is more than one piece of equipment in a room, the user must first contact the STO in charge to arrange/facilitate access. Rooms may be designated as single purpose.
- f. There will be no training provided to new users of the facilities at this time to maintain the social distancing guidelines. In person STO support on any given piece of equipment may also take place virtually or the user may be asked to leave to room for the issue to be resolved. The user may return after the STO has vacated the room. Groups may need to consider nominating a previously trained and experienced user to be responsible for carrying out their imaging until further notice. This is to minimize interactions on campus during these early stages of operation and reopening.
- g. A dedicated SOP for use and safe operation of a given piece of equipment will be provided next to the equipment, along with a logbook which users must sign to state they have carried out the appropriate sanitization and cleaning of the equipment after use. Users must provide their own pens.
- h. Users and PIs should be aware that this facility cannot immediately go back to the previous operational levels and productivity. A change in the working culture for these facilities will need to be recognised and incorporated into ongoing experimental

design and planning. Full-service imaging may be a solution for external users or users that haven't been trained yet.

2. General Cleaning and Hygiene

- a. All users must adhere to SOP (above) and follow the directions for entering the facility.
- b. A squeeze bottle of 70% ethanol and paper towels will be provided at each workstation to wipe down the instrument's frequently touched hard surfaces (including the mouse and cling-film wrapped keyboard), lab chair and lab bench around the equipment.
- c. Gloves must be worn. Gloves should be sanitized with 70% Ethanol periodically throughout the imaging session.
- d. It is necessary for users to wear a face covering during imaging sessions. This is to prevent any potential transmission onto the area of the microscope beneath the eye pieces.
- e. Cleaning is a shared responsibility. There will be periodic cleaning of the equipment by the staff, but users are responsible for cleaning the equipment and surrounding bench spaces before and after their session. Clingfilm will be present on the frequently touched surfaces (eyepieces, mouse, keyboard, focusing knobs, etc.) and this must be disposed of by the user at the end of their session.
- f. Immersion oil bottles should also be carefully wiped with 70% ethanol if used during imaging
- g. Wipe down microscope slides, or other sample holders and containers with 70% ethanol before coming into the facility.
- h. For users not carrying out their own imaging, all samples or slide boxes must be sanitized and cleaned down with 70% ethanol prior to handing over to the STO.

Notes

- i. Ethanol should be in squeeze bottles and not spray bottles. If spray bottles must be used, these are to be sprayed onto cloths or paper towels and not directly on the equipment.