

2022 Policy for Use of the LSM880 Live-Cell Confocal System

1. Faculty, staff, postdoctoral fellows, and students who wish to use the Zeiss LSM 880 Live-Cell confocal laser system in the BIDMC microscopy core facility should contact the Confocal Core Supervisor (contact information, below), to schedule training. The training consists of three sessions: 1) a complimentary 1hr consultation session, 2) one customized training session, and 3) one mentored session, each 1- 3 hrs long. Each individual user of the confocal system MUST receive instruction from the BIDMC Confocal Core staff before using the live-cell confocal system. This requirement exists regardless of whether or not there are already trained individuals from the same laboratory using the confocal or whether the new user has prior experience with similar confocal systems.
 - a. Training other users in your lab group or allowing untrained users to access the confocal under your sign-up will result in having confocal usage privileges revoked for a period of **6 months**, with no second warning. Reinstatement of privileges requires retraining before independent usage will be allowed and training fees will be charged for the retraining session for everyone including SIG and HDDC users.
2. Users who have reserved time on the confocal laser system are responsible for reporting for their session. All users are expected to begin and end their sessions promptly in consideration of others. Please note that you will be expected to pay for any food or other breaks you take during scheduled time on the confocal.
 - a. **Users are expected to cancel all reserved but unneeded time on the Google calendar at least 24 hrs. prior to the session.** If you do not do so and fail to report for your session, you will be charged the regular user fee if the core is unable to re-book your time from the waiting list.
 - b. All time booked for a session on the confocal system will be charged even if the experiment failed and the confocal time, as booked, is unneeded. It is thus important to review all slides/experiments on a fluorescence microscope prior to your session so that your time on the confocal system is used as productively as possible.
 - c. **Users who are more than 15 min late for reserved time may have their time reassigned to other users, unless your change in schedule is communicated to Lay-Hong Ang by phone at 7-5373 or by email at lang@bidmc.harvard.edu.**
 - d. Any user who cancels another's time on the online calendar and takes the time for themselves will be subject to immediate loss of privileges with no recourse for reinstatement. No exceptions.
3. Access to the Live-Cell confocal system is by access code to the combination lock. All trained users will be issued a personal access code by the public safety. Please note that permission to an access code does not exempt SIG users from following the strict access policy as outlined in item #1.
4. The Live-Cell confocal system is available for use 24/7. When making a reservation on the calendar, please clearly indicate the duration of your session as well as a contact number. If no contact number is identified on the sign-up sheet, the user will NOT be notified of instrument problems or other issues with the instrument prior to their session. Communications with other users before or after your session is highly recommended so that the lasers are left running for you to shorten your wait time.
5. **Microscope stage adapters for culture dishes, slides, and/or plates will NOT be left for you in the room. Instead, users are required to sign-out the stage adaptors they need to use from the Confocal staff.** Alternatively, you can purchase stage adaptors

- for your lab group and can bring them to your session. Ordering information for microscope stage adaptors can be provided by core staff. Please contact the Confocal Supervisor or Specialist in advance if you need the stage adaptor during off-hours.
6. Users that need specific objective lens installed on the microscope for live-cell work are required to contact the Confocal Supervisor or Specialist in advance of their session. Users are **strictly prohibited** from removing the objective lenses from the microscope (or from other microscopes in the core) on their own. If any damage occurs to the lenses by their removal, the repair or replacement of this lens will be charged to the respective lab-no exceptions.
 7. Users are responsible for ensuring that the microscope, table, and surrounding area are kept clean and organized, as you find the room when you enter. Microscope objective lenses should be handled with care and cleaned after each use with ROSS lens paper (in the blue box—PLEASE don't use Kimwipes!!). The Live-Cell confocal room has been designed as a BL2 facility since live human and mouse cells are used for live-cell experiments. Hence, **NO FOOD AND/OR DRINKS** are allowed in the confocal room. There will be a bottle of 70% ethanol for disinfecting the area after use as well as a spill kit under the sink to clean up spillage. You are **REQUIRED** to inform the Confocal Supervisor or Specialist of all spills in this facility so that the spill kit can be replaced.
 8. Users are responsible for ensuring that the microscope and confocal system are shut-down properly, as per the detailed instructions in the training session. If the next person is not present and prior communication was not established, all components of the system should be shut-down.
 - a. If the microscope, confocal, and/or gas components are not shut-down properly and any component is left running for an extended period (this includes the lasers, computer, or mercury bulb), the user will be charged for this time at the regular rate to recover costs for replacing the used parts.
 - b. On the second offense at leaving the microscope or components running, the user will be required to complete another training session. This will be a training session with only 1 trainee (you) and will be charged at the regular rate.
 - c. Any subsequent offenses will be subject to permanent loss of privileges at the discretion of the facility Supervisor or Director and in collaboration with the user's direct supervisor.
 9. Users are fully responsible for transferring their images to an external storage device in a timely manner. Please remember that the images from an overnight session must be saved and so you need to clean-up and save images by 8 AM the next morning. If this is not done, the Core, Core Staff, and/or the morning user is (are) not responsible for your lost data. Confocal time should not be scheduled that will be used **ONLY** to run the computer workstation. All images should be copied to an external storage drive **DURING** your scheduled session. If you wish to open or analyze images, please download the Zeiss confocal assistant (freeware) at www.zeiss.com on your personal computer. **ALL files will be deleted from the confocal system on Friday afternoon by 2 PM. You will not be contacted to move or clear images from the hard drive in advance of this weekly deadline.**
 10. Two computer work stations can be reserved for image processing for a 3 hr period. The workstation in Dana 828 has the original Zen blue software, AxioVision software, Adobe Photoshop, and Imaris software. This workstation is to be used only for processing images obtained from the confocal microscopes and should not be used for personal reasons, including email. Image manipulation using the Zeiss software or Adobe Photoshop should be performed under the ethical guidelines for the BIDMC Microscopy core that are outlined at <https://www.bidmc.org/research/core-facilities/histology-confocal-em/confocal-imaging-core>

11. Failure to follow training and other standard procedures is subject to penalty at the discretion of the Core Facility Director. In general, users will be expected to cover the expense incurred by any intentional misuse of the microscope, confocal system, or computer. If mistakes are made in good faith and reported promptly, consideration will be made and the penalty reduced accordingly.
12. User conflicts or problems should be communicated immediately to the Core Supervisor or to the Core Facility Director. This must be done in writing via email.
13. Appeals to this policy are to be submitted in writing to the Core Facility Director.

14. Contact Information:

Confocal Core Supervisor

Lay-Hong Ang, PhD

E/DA-814, Phone: 617-667-5373

Email: lang@bidmc.harvard.edu

Confocal Specialist

Aniket Gad, MSc

E/DA-814, Phone: 617-667-1880

Email: agad@bidmc.harvard.edu

Core Facility Director

Susan J. Hagen, PhD

RW-871, Phone: 617-667-5308

Email: shagen@bidmc.harvard.edu

I was given a copy of and have read and understand the BIDMC Microscopy core facility **“Policy for Use of the LSM880 Live-cell Confocal System”**. I fully understand that when using this instrument in the BIDMC core facility, I am held responsible for proper use of the instrument and will be held accountable for any problems that result from my actions. I also understand fully the sign-up and training requirements for extended use of the instrument and facility.

Printed name: _____

Signature: _____

Date: _____