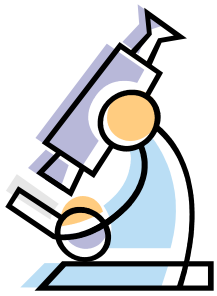
LSM startup /shutdown guide



If you are the first user of the day:

1. Turn on the mercury lamp first.
2. Turn on the remote control.
3. Turn on and logon computer.
4. Open LSM 510 program.

If you are not the last user of the day:

1. Lower objective lens and take your sample away.
2. Use lens paper with Sparkle to clean the objective lens.
3. Exit LSM 510 program. Do NOT turn off all lasers- when the warning menu pop up, just click OK.
4. Log off computer.

If you are the last user of the day:

A:
1. Lower objective lens and take your sample away.
2. Use lens paper with Sparkle to clean the objective lens.
3. Exit LSM 510 program, turn off all lasers when the warning menu pops up.
4. Wait about 5 minutes for the laser cooling fan stop.
5. Shut down computer.
6. Turn off remote control.
7. Turn off Arc lamp.
8. Put microscopy cover on.

B: if you can't make to your session for some reasons.
1. Call and email the user right in front of your scheduled time.
2. Let the user know you will not come to your session.
3. Ask the user to follow "the last user of the day" procedures.

If you are using LSM during holiday:

- If you are the only user, always follow the "the last user of the day" procedures.
- If there is another user scheduled time about 1 hour after your scheduled time, you still need to follow the "the last user of the day" procedures, unless the user informs you about his/her coming.
- If another user's scheduled time is right after your scheduled time or less 30 minutes, call or email the next user to make sure his/her coming.

Extend your scheduled time

For unforeseen circumstances in research, you may need to extend your scheduled time if there is nobody schedule right after your scheduled time or there is time gap between your scheduled time and next user. Once you extend your schedule, please schedule a new session online to make up the extended time you used.

Cancellation Policy:

After signing scheduler online, you may simply cancel your schedule online 24 hours before your scheduled time. Any cancellation within 24 hours of your schedule time, you will be charged for your time.

If you have any questions and concern, please contact CAM staff.

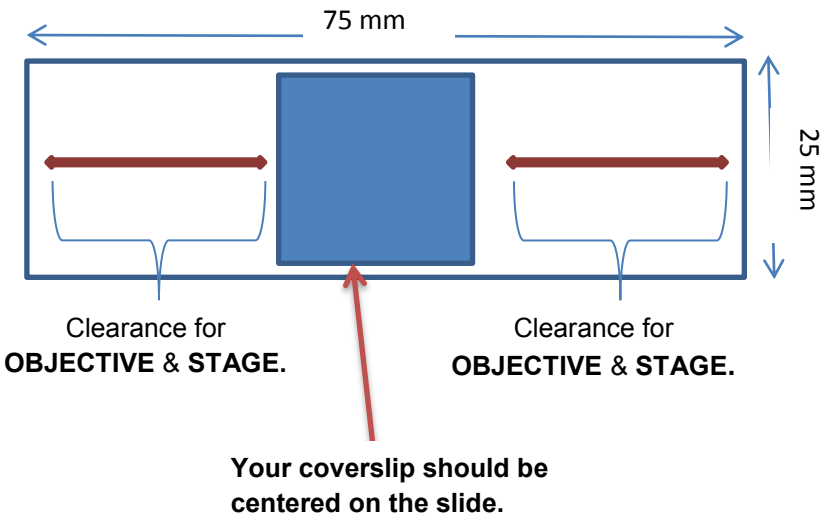
Safety Recommendations for CAM Laser Confocal Microscope Procedures

- Following the rules and safety procedures you have learnt from the “Basic Laser Safety Awareness Training”
- A visual inspection of the fiber optics, apertures and laser safety systems is required before commencing laser imaging procedures
- Be familiar with the risks to yourself and others before commencing the use of lasers
- Always exercise caution when operating class 3b and 4 lasers
- Read the precautions specified in the equipment manuals before operating lasers
- Observe the precautions specified in the equipment manuals when operating lasers
- Do not look directly into the laser beam to avoid serious eye damages and possible blindness
- Be aware of the risk of burns if exposing skin, hair or clothes to lasers
- Only commence the use of lasers after properly setting your sample on the stage of the microscope and turn the light path from vision to laser scanning
- Never directly look at the laser beam and your sample while laser is scanning
- Never try to change sample when laser is still scanning
- When laser scanning your sample, you may look at the image on screen, while turning the microscope stage controller to find new interesting area of your sample or turning the fine focus to do Z stacks
- Never remove/change any parts of the instrument that are not included in the instrument training
- Do not bend/play with the optical fiber or put anything on the fiber. Damage of the optical fiber may cause laser exposure
- In case of an emergency, the following numbers are provided:
    - University Office for Research Safety: **3-8300** Chicago campus
    - After hours: **911**

If you have any questions and concern, please contact CAM staff.

Mounting Samples for Imaging at CIF

Slide:



ALSO PLEASE REMEMBER:

If you want to image with 40x or higher do not grow your cells on chambered slides!!!!