DEPARTMENT
OF
EXPERIMENTAL
BIOLOGY
MUNI SCI

How to operate confocal m. Leica SP8

SECTION OF ANIMAL PHYSIOLOGY AND IMMUNOLOGY

Basic info

Confocal microscope Leica SP8 represents everything needed to get publication-quality images with just a few clicks.

Even though its operation is not complicated at all you always have to keep in mind its price is worth 6,5 million CZK.

How to access Leica SP8

- 1. Write an email to the responsible person for the first introduction.
- 2. Within the following month, practice at least 3x under the supervision of any experienced user.
- 3. You will recieve access to the reservation system.
- 4. After this, you can use machine on your own following Never ever and Must do sections.

Aditional materials



Never ever

- 1. Use the microscope alone without proper training and/or your mentor before you will be allowed to.
 - 2. Make a booking for your students/colleagues/friends
- 3. Use any immersion on dry objectives, water immersion on oil objective (63x) and oil immersion on water objective (40x).
- 4. Use immersion objectives without proper immersion (water for 40x, immersion oil for 63x).
- 5. change the immersion objectives without cleaning them properly (40x with the paper tissue; 63x with ethylene ether).
- 6. Use gain higher than 100% and laser power greater than 1% for HyD detectors.
 - 7. Lean on anti-vibration table.



Responsible person and expert users

Reservation system access





Must do

- 1. Always book your session in advance, if you are planning to cancel it, do it asap so anybody else could use your spot.
- 2. Contact any expert user if you are not experienced enough.
- 3. Sign into the user sheet provided next to the computer.
- 4. Always use the proper immersion for each immersion objective and clean the immersion once you are done with scanning or you want to switch to different objective.
- 5. At the end of the session:
 - a. Clean the immersion objectives if you used any
- b. always switch off all the laser and detectors in LasX software
- c. choose objective 10x
- d. save your data
 e. check the
 schedule and switch
 off the microscope
 if you are the last
 user of the day,
 otherwise let it run
- 6. If any problem appears, use responsible person or reach somebody in the D36 building which will help you to find responsible person.