Core facility rules (Leica-SP5, Leica-SP8, Olympus FV3000, Zeiss AxioScan)

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General lab rules

- No food or drinks in the microscopy rooms.
- Leave the microscope room clean and ready for the next user.
- To access the microscopy room, you need to pass a yearly laser safety instruction, in case of the FV3000 (FLIM) additionally the S2 instruction .
- It is not permitted to open the windows due to the air-conditioning systems and/or given S2 regulations (only in W34) in the rooms.

New users

- Leica SP8, SP5, and FV3000 usage is reserved for the university employees (including PhD students). Bachelor and Master students may use the SP2, the image processing workstations and Zeiss Axio scan.
 Depending on the complexity of the task the FV3000 can be used after special training also by master students upon agreement. In this case a close supervision has to be continued also after the initial introductions.
- Before introduction, each new user has to read the operating instructions and fill out the user data sheet with the general personal and project-related data.
- The user should preferably already have experience with confocal microscopy. All users, even the experienced ones, must be trained by core facility staff on their own samples before using any microscopes alone for the first time (1-3 training sessions dependent on the

experience). New users are strongly **encouraged** to place their sessions within normal working hours due to better access to support.

• Register to uol.OpenIris.io and submit a request for training. It will be automatically forwarded to Petra Bolte and Levent Gütay.

Booking

- Booking can be performed via **Open Iris Booking platform**, uol.openiris.io, after full access is granted after successfull training.
- For the SP8 there are the following booking rules: During the main working hours (8.00-20.00) there are three time-slots per day: 8.00-12.00; 12.00-16.00; 16.00-20.00 (open end). You can book slots shorter than 4 hours. You are allowed to book three time-slots per week. Three slots can be booked on one day. No time limits for booking at the weekends and between 18:00 to 08:00. In addition to the three timeslots per week you are allowed to book free slots for the current day and the next day.

Using the confocal microscope (both for SP5 and SP8)

- Do not use the web browser. You are only permitted to use the University's internal network or to use the internet for remote use with Core facility or Leica staff (if you need Internet, feel free to use the Huygens Computer).
- Do not attach anything to the microscopes (or remove from) except the polarization filter (remember to remove it after using).
- Use gloves when touching your coverslip, if you have used toxic or carcinogenic substances (e.g. DAB, PFA, Natriumazid in mounting media). Take off the gloves before touching anything else. This means: Also never touch mouse, keyboard or focusing knobs etc. with the gloves.
- DO NOT move the scanning table manually (only possible for FV3000).
- Use a small amount of oil. Remove it from the objective you used BEFORE changing the objectives or finishing the session.
- When using the hybrid detector (HyD): DO NOT place the detector's wavelength range at the laser line, always start with low laser power (below 1%). Otherwise the detector can be damaged.
- Transfer the data to the server and remove the data from the microscope PC at the next occasion. Data are cleaned-up once a year. To transfer your

data use <u>\\smb.uni-oldenburg.de\lightmicroscopy</u> server. If you do not have an access, ask <u>levent.guetay@uni-oldenburg.de</u>

- please avoid using USB sticks or mobile usb drives.
- If someone after you uses the microscope, please make sure that the person actually shows up. If you are not sure, turn off the system after usage and put a note on the mercury lamp with the time of switching off (only SP5 and SP8).
- The mercury lamp should be switched off for at least 30 mins if you need to switch it on again. (NOTE, it is completely independent of the system, so if the software crashes you can simply leave it on and restart only the rest as you need).
- Inform facility staff about any problems with microscopes (Petra Bolte <u>petra.bolte@uni-oldenburg.de</u> and/or Levent Gütay <u>levent.guetay@uni-oldenburg.de</u>).
- If not timely urgent, please submit problems via OpenIris via the "submit issue" function under each microscope.
- Please sign the paper log book for each usage of Leica SP8 and Leica SP5-STED after each session, for FV3000 fill the "UserLog" Excel sheet.
- If the mercury lamp bursts: Please disconnect the lamp from electricity (pull out the power cord on the back side), leave the room, leave a clearly visible note with a warning on the outside of the door and contact Petra Bolte <u>petra.bolte@uni-oldenburg.de</u> or Levent Gütay <u>levent.guetay@unioldenburg.de</u> immediately.

Publication acknowledgement

 Remember the acknowledgement of the core facility in your publication where you used the core facility equipment, for example: "Support by the Core Facility Fluorescence Microscopy (University of Oldenburg, Germany) is gratefully acknowledged."

How to use Core facility data server (CFDS) on LAB PC.

- 1. First you need to **get an access to the CFDS.** If you do not have it yet: ask Levent Gütay (<u>levent.guetay@uni-oldenburg.de</u>), he will set up the access rights for you.
- 2. To Login to Core facility data server (CFDS) on all microscope PCs or the Huygens PC press the shortcut icon on the Desktop (Core facility data server icon).

- 3. When the program opens, Press 1, give your credentials: domain\user_name (example w2kroot\abcd1234), press ENTER and then password, press ENTER. (PS while you type your password cursor does not move.)
- 4. After the data transfer finished please disconnect: **Press 2** and Enter. Wait 30 sec and **Press 3** to close the window.
- 5. Avoid using USB sticks or mobile drives.
- 6. When you get access first time-please- take your time and transfer unused data from instrument PCs.
- 7. After each measurement session- please transfer your data immediately to the CFDS data storage. If you do not reuse your data in other experiments, clean up your local directories on instrument. It is your responsibility to get all the data copied.
- 8. Data organization: there are folders for each instrument, subfolders for each work group, and you have to create a subfolder with your name under each instrument you use. It is your responsibility to protect your files and folders, if access by others has to be avoided.
- 9. Data are stored on the storage up to 3 years. If the storage is full before that, we will have to clean up some of the old data earlier after a notice.

How to use Core facility data server (CFDS) on your PC.

- 1. First you need to **get an access to the CFDS.** If you do not have it yet: ask Levent Gütay (<u>levent.guetay @uni-oldenburg.de</u>), he will set up access rights for you.
- 2. If you are already connected to the university network (network cable, Eduroam etc.) go to step 6.
- 3. Use your UOL credentials always with the Domain name: w2kroot\abcd1234.
- 4. For access from home, you must install VPN: install GlobalProtect VPN from https://uol.de/en/itdienste/services/campus-network
- 5. Use GlobalProtect to connect via VPN to the Uni network.
- To access data you should map network drive in Windows
 \\smb.uni-oldenburg.de\lightmicroscopy, give you UOL credentials again
 (w2kroot\abcd1234). For MAC users you need to set-up Connect to server folder
 smb://uni-oldenburg.de/lightmicroscopy

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Alternatively there is another access possibility via the universities cloud server. Inside the cloud server you can once map the CFDS drive. Then you can access it from everywhere only via a web-browser (no vpn or special connection needed).More info here: https://uol.de/itdienste/services/datenhaltung/cloudstorage