

Turning the Olympus FV1000 confocal laser scanning microscope on:

Only people who have had an introduction from Dr. Kees Straatman are allowed to operate the system. An introduction from your boss/supervisor is not enough!!!

1. Write your name, date and starting time in the logbook.

2. Switch on the wall socket '**Computer**' and '**LSM controller 1**'. In case the incubator temperature manager is switched on (the stage incubator is on for live cell imaging) the middle red switch on the Power Manager, right of the microscope (see image right), is lighted and you have to switch on the other red switches individually.

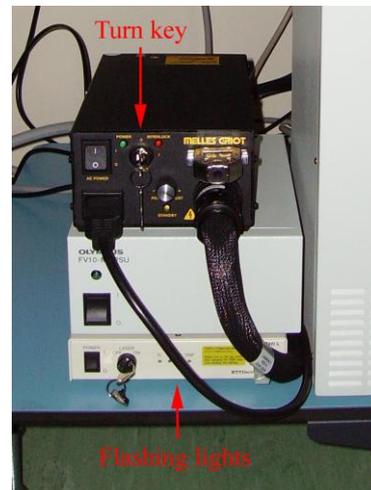


3. Olympus suggests switching on all laser units also when using only one of the lasers.

Switch on the 3 wall sockets with the plugs labelled '**laser**'. You should hear a fan on one of the laser units starting.

- Turn the key on the top laser unit (left of the microscope on the lower shelf, see image) to '**on**' (clockwise). This laser (458, 488 and 515 nm) needs at least 15 minutes to warm up.

- The lower laser unit should show a red flashing light for '**Temp**'. When this light stops flashing turn the key of this laser unit clockwise to '**on**'. Two green laser lights will start flashing. If these lights stop flashing the lasers are ready for use.



4. If you need the fluorescent bulb, switch on the wall socket labelled '**Fluorescence**'.

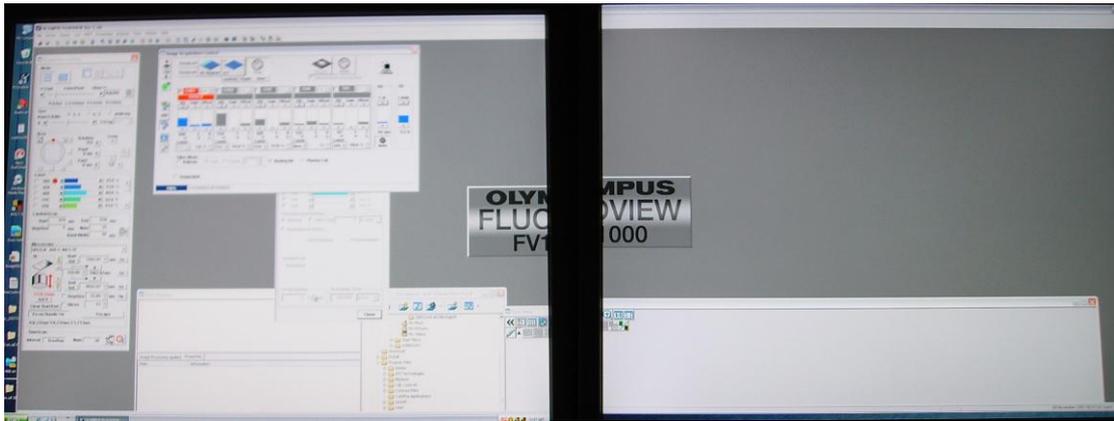
5. Switch on the computer.

6. Start the program by double click the icon FV10-ASW x.x (x.x being different version numbers)

7. A login screen will appear like the one below. Just click '**OK**'



After a few minutes (be patient!) a screen like below should appear and the system is ready for use.



For more information about how to operate the Olympus FV1000 confocal laser scanning microscope consult the manual or contact Dr. Kees Straatman.

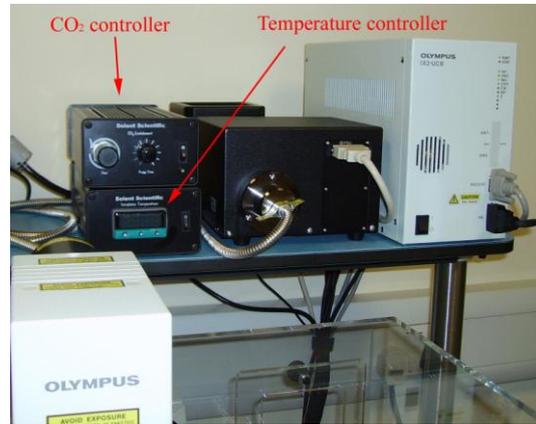
Switching the Olympus FV1000 confocal laser scanning microscope off:

- Remove your sample from the microscope and clean the objective with lens cleaning tissue if you have used an oil objective. **DON'T USE ANY OTHER TYPE OF TISSUE TO CLEAN THE OBJECTIVES!**

- Save your images and close them.

- Write your finishing time and the lamp hours in the log book.

- If you have used CO₂ and/or heating on the stage **switch off** the units on shelf above the microscope (see image). If the temperature controller was switched on before you arrived, check with the next person if he/she needs it.

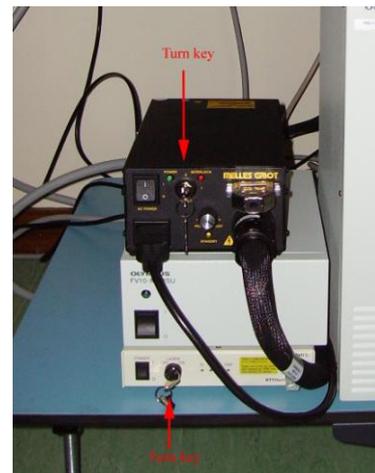


- Check in the online calendar if you are the last user. If not, contact the next user and discuss if he/she takes over from you or not. You as last user are responsible for the system!

If you are the last user of the day:

1. Switch off the socket labelled '**Fluorescence**'.

2. Switch the laser units off by turning the key from the upper laser unit to '**0**' and the key of the lower unit to '**off**' (both anti- clockwise). Before you can switch the laser sockets off **WAIT** till the fan on top of the lasers has stopped! You will hear the difference; it will take a few minutes. You can continue with switching off the system.



3. Close the confocal software and shut down Windows

4. Switch off the socket labelled '**Computer**'.

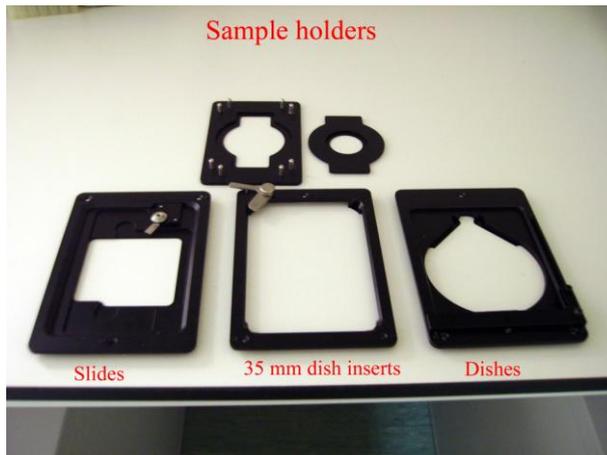
5. **BE AWARE** if the temperature controller is on for the next user (might be the next day!) don't switch off the '**LSM controller**' but flick the red switches on the unit to the off position till only the incubator is on (see image). Otherwise switch off the socket labelled '**LSM controller**'.



6. If you are the last user in the room switch off the lights when you leave.

If you encounter any problems which you are not able to solve yourself, please contact Dr. Kees Straatman.

Sample holders for the Olympus confocal laser scanning microscope.



We have sample holders for slides, 35 mm dishes (3 parts that fit in each other) and large dishes (with a sliding arm to facilitate different dish sizes). The 35 mm dish insert can also be fitted with a CO₂ chamber.