

# OLYMPUS CONFOCAL STARTUP PROCEDURE

## 1. Fill out the user log sheet

## 2. Set the power switches of the following units to I (ON).

1. Mercury Burner Power Supply (**only if needed**)
2. Main confocal controller (also turn the key to "ON " position)
3. SIM Scanner controller (**only if needed**).
4. Microscope Control Box IX2-UCB
5. Prior stage controller

## 3. Turn ON the computer

## 4. Turn on the lasers: **- only the lasers that are needed for your sample**

### 4.1 Argon laser: FV5-LA-MAR

1. Set the power switch to ON. (This starts the fan of the laser.)
2. Turn the key to the ON position (turn clockwise).



### 4.2 Helium-Neon Green/Red Lasers: FV5-LA-HEG/HER

Turn the key to the I (ON) position.

It takes a few tens of seconds after the key is set to ON till the laser oscillation begins.

*To ensure stable laser light output, the warm-up period should be 10 minutes or more when using the Argon laser power supply and 30 minutes or more when using the Helium-Neon Green or Red laser power supply.*



### 4.3 LD405 nm imaging laser: FV10-LD405

- Set the power switch to ON.
- Turn the key to the ON position.
- Set the shutter switch OPEN.

The red lighting of the LASER EMISSION LED of the LD405 laser power supply indicates that the laser is oscillating.



### 4.4. LD405 nm SIM (photobleaching) laser (only if needed)

## 5. Enter the user name and password to log in the Windows.

## 6. Start the FLUOVIEW software and log in

It takes 20 to 30 seconds to fully initialize the hardware. Do not click on anything during this time. Images cannot be observed if the manual shutter of the fluorescence mirror unit is closed. In this case, open the shutter.



## SHUTDOWN PROCEDURE

- 1. Clean the work area and objectives (if immersion was used).**
- 2. Switch to the lowest-magnification dry objective (10x) before exiting from the conofcal software**

### **3. Exit from the software**

- Exit from the Fluoview software  
*After exiting the application software, the light of mercury burner power supply unit may expose the specimen. To avoid this, close manual shutter on the microscope fluorescence filter turret (below the objectives).*
- Save your data on a CD or DVD.
- Shut down Windows.

### **4. Turn the power off:**

Turn off sequence:

1. 405 nm diode lasers if they were on.
2. Red and green HeNe lasers - **TURN OFF ONLY IF YOU ARE THE LAST USER FOR THE DAY**
3. **Argon laser: TURN OFF ONLY IF YOU ARE THE LAST USER FOR THE DAY. IF NOT, LEAVE THE ARGON LASER RUNNING.**
  - i. Turn the key to OFF position
  - ii. **WAIT!! The laser must cool down.** The fan to stop automatically when the laser unit has cooled down. It takes several minutes
  - iii. Set the power switch to OFF.
4. Microscope Control Box IX2-UCB
5. Prior stage controller box
6. Main confocal controller
7. SIM scanner controller (if it was on)
8. Mercury Burner Power Supply Unit

- 5. Sing off in the user log sheet and cover the microscope with the plastic cover**