Startup Procedure for the Zeiss LSM 710 Confocal

- 1. Open the valve on the nitrogen tank. Do NOT adjust the regulator.
- 2. Sign in on the user login sheet and write down the current clock time under 'Start Time'.
- 3. Turn on the Main Switch (labeled #1).
- 4. Turn on the Systems/PC and Components switches (labeled #2).
- 5. Turn on the X-Cite mercury lamp (labeled #3).
- 6. Turn the argon laser key (located underneath the microscope) to the right, so that it is in the horizontal position (labeled #4).
- 7. Turn on the computer (labeled #5).
- 8. Login to your account. Double-click on the Zen software icon to start the software.
- 9. In the pop-up window, select 'Start System'.
- 10. After 5 minutes, turn the argon laser power from 'Idle' to 'Run' (labeled #6).
- 11. When the green light comes on (indicating the laser has stabilized), turn the knob clockwise until the red light comes on, then turn the knob back slightly, just until the red light turns back off (labeled #7). Note- it takes the argon laser 5 minutes to stabilize, so you may have to wait a couple of minutes before completing this step.

Shutdown Procedure for the Zeiss LSM 710 Confocal

Check Google Calendar to see if someone is signed up to use the microscope after you.

If someone is booked within one hour after you are finished with the microscope...

- 1. Save your images.
- 2. Exit the software and log out of your Windows account.
- 3. Clean the objective lens(es) with Sparkle and lens paper.
- 4. Fill out the logbook. Record the current time in the 'End Time' space of the login sheet.

If someone is booked >1 *hr after you are finished with the microscope...*

- 1. Save your images.
- 2. Exit the software.
- 3. Turn the argon laser dial counterclockwise (labeled #7).
- 4. Turn the argon laser power from 'Run' to 'Idle' (#6).
- 5. Shutdown the computer (#5).
- 6. Turn the argon laser key (located underneath the microscope) to the left, so that it is in the vertical position (#4). Note- you must wait ~ 2 minutes for the fan to shut down before shutting down the Main Power.
- 7. Clean the objective lens(es) with Sparkle and lens paper.
- 8. Turn off the X-Cite mercury lamp (#3).
- 9. Turn off the Systems/PC and Components switches (#2).
- 10. After the argon laser fan shuts off (about 2 minutes), turn off the Main Switch (#1).
- 11. Fill out the user logbook. Record the current time in the 'End Time' space of the login sheet.
- 12. Put the cover on the microscope.

^{**} Please note: Never look into the laser beam coming through the objective lens, as you may damage your eyes or risk going blind. Never look at UV light coming through the objective lens; it may damage your eyes.