Attention SLIM Users:

*We have recently replaced the SLIM laser. There is a new procedure for turning on and off the laser.*

**Laser Start-Up Procedure:**

1. Turn the key on the laser controller from “STANDBY” to “ON”. The laser controller, shown in the image below, is located on the platform below the table, and it is marked with red tape with a “1”. Turning the key is the only thing you will have to change using the controller itself. Everything else is through the program described in the following steps.

![Laser Controller](image)

2. The controller takes about 5 minutes to ramp up the power. It reads a current that ramps up to around 45 A, and then it reads a percentage ramping up to 100%. When it is ready, the screen on the controller reads “Status: OK”.

3. Open the new laser control program on the computer desktop. The program is called “GLATransitionGUI”, and the icon is shown below.

![Program Icon](image)

4. The laser control program looks like the following screen shot. The only things you should need to change are the wavelength (by typing in a value in the upper right or by clicking one of the preset wavelengths) and the status of the laser shutter.
5. The laser should be at 800 nm when you begin. Allow the laser to sit for 5 minutes at 800 nm.
6. Tune the laser to 700 nm. Allow the laser to sit at 700 nm for 5 minutes.
7. Tune the laser to the desired wavelength for your experiment. Wait 5 minutes.
8. Open the shutter by clicking on the button shown above and begin your experiment.

Laser Shut-Down Procedure:

1. After doing the pollen grain calibration, close the shutter with the shutter control as shown above.
2. Tune the laser to 800 nm, and close the laser control program.
3. Turn the key on the laser controller back from “ON” to “STANDBY”. The screen should read “Status: Starting” for a short time before reading “Status: Standby”.