**SSFC Imaging Protocol**

Updated 2018/10/18

**Start Up Protocol**

1. Turn on Prior Lamp
2. Turn on Aurora Laser launch
   1. Flip main power on
   2. Turn laser key to on
   3. Flip shutter into open
3. Turn on computer breakers (on the rack under the keyboard)
4. Turn on computer
5. Put plunger with Amicii Prism in on the Bruker hardware segment
6. Open Prairie View Software
7. Double Right click scan settings
8. Write down current Camera Piezo Settings peak to peak voltage
9. Change Camera Piezo Settings peak to peak voltage to 0
10. Press Update Scan Settings

**Acquisition Protocol**

1. Double right click on the terminal
   1. This will let you input commands
2. Input Commands (SS needs to be upper case):
   1. SS 0 0 0
   2. SS -1.69 .2113 16
3. Assign all lasers that will be used into Channel 1 in the Lasers Window
4. Slides need to be placed with coverslip face down
5. In the main window T-series tab
   1. Check the box for max speed .
   2. Set # of Reps to 16
6. Set Save Path
7. Press Start T-Series

**Powering Down Protocol**

1. Copy acquired data to a back-up
2. Remove slide
3. If an oil objective was used clean the slide and objective carefully
4. Pull out Amicii prism plunger
5. Double Right click scan settings
6. Reset Camera Piezo Settings peak to peak voltage to original value
7. Press Update Scan Settings
8. Perform Pollen Grain Test
   1. Settings:
      1. 10x objective
      2. EM gain 200
      3. 50ms exposure
      4. 60 um pinhole
      5. LUT = full range
      6. Quad filter
   2. Procedure
      1. Find the highest intensity point of the pollen grains
      2. Move laser power slider until you have only a few pixels of saturation
      3. Record the laser power on the sheet
9. Turn off Aurora Laser Launch
   1. Flip shutter into closed
   2. Turn laser key to off
   3. Flip main power switch off
10. Turn off Prior Lamp
11. Turn off computer
12. Turn off computer breakers (on the rack under the keyboard)