1. **Turn on** the power to the flow cytometer (green button on the front side of the instrument).
2. **Start up** the computer and log into Windows. Choose “Switch user”.

Username: [your NetID]

Password: [your active directory password]

1. **Log** **in** to the BD FACS Diva software.

User: PI’s last name

Password: PI’s CAPITALIZED INITIALS

1. **Prepare the sheath container:**
   1. Make sure the cytometer is on STNBY mode.
   2. Disconnect air line from the sheath container.
   3. Depressurize the sheath container by pulling up on the vent valve.
   4. Remove the sheath container lid.
   5. Add sheath fluid until the line.
   6. Replace the sheath container lid.
   7. Reconnect the air line.
2. **Prepare the waste container:**
   1. Disconnect the orange waste tubing carefully put inside a glove.
   2. Disconnect the black sensor
   3. Unscrew the lid carefully. Place upside down not to spread the waste.
   4. Empty the waste container carefully into the sink (it contains bleach).
   5. Add ~1L of bleach to the waste container until the marker line.
   6. Reconnect the orange waste line and make sure you hear ‘click’.
   7. Reconnect the sensor line.
3. **Check the fluidics:**
   1. Check the sheath filter for trapped air bubbles.
   2. Roll the white clamp and watch for the stream of sheath fluid into a beaker to remove bubbles and check the fluidics.
4. **Prime the fluidics:**
   1. Remove the dH2O tube from the SIP
   2. Press the PRIME button. After it finishes the STNBY mode activates itself. Repeat.
5. **Clean the instrument:**
   1. Install a tube of freshly refilled 10% bleach (no more than 2.5 mL) on the SIP.
   2. Press RUN and HIGH button.
   3. With the arm pushed to the side let the solution sit for 30 seconds.
   4. With the arm in the middle (sample) position, let solution sit for 5 minutes.
   5. Wipe with Kimwipe
   6. Repeat with fresh tube of dH2O.
6. **Perform Quality Control (QC):** 
   1. Locate QC Experiment under Shared View.
   2. Click ‘+’ on the current month’s Specimen.
   3. Add a ‘New Tube’ and rename with today’s date
   4. Vortex the beads and place on the SIP with arm in the middle position
   5. Press RUN and LOW button
   6. Record 2000 events. Make sure all the peaks fall within the markers
   7. Run freshly refilled 70% EtOH on HIGH for 2 minutes to remove beads.
7. **Run samples:**
   1. Use Kimwipe between samples to reduce carryover
8. **Clean the instrument:**
   1. Install a tube of freshly refilled 10% bleach (no more than 2.5 mL) on the SIP.
   2. Press RUN and HIGH button.
   3. With the arm pushed to the side let the solution sit for 30 seconds.
   4. With the arm in the middle (sample) position, let solution sit for 5 minutes.
   5. Wipe with Kimwipe.
   6. Repeat with fresh tube of dH2O.
   7. Leave the tube of dH2O on the SIP with the arm in the middle position.
   8. Press STNBY and LOW
9. **Turn off** the instrument by pressing the green button
10. **Log off** the Windows

*If you changed the filters on LSRII, please make sure the cytometer is back in its original/default configuration.*