BD FACSMelody Standard Operation Protocol
Machine Startup and Shutdown Procedures (For Experienced users only)

**Machine Start up:**

1. Refill the sheath tank and empty waste tank if necessary, make sure all the tubing are connected properly.
2. Turn on the power switch on the machine body (1)
3. Turn on the power of chiller (2A) and press entre button (2B)
4. Turn on the power of compressor (3)
5. Turn on the computer (4) and log in to Window (User name: Bdadmin Password: BDIS#2$$).
6. Double click and run the BD FACSChorus software
7. Log in with 0cleaning (Password: Abc1234!@#$)
8. Once the system has connected, click **Run Extended Fluidics Startup.** Follow the prompts on the screen to complete startup procedure.

*Note: When insert the closed-loop nozzle, insert the nozzle stopper first and then closed loop nozzle
9. After fluidics startup is complete, click **Continue** to Cleaning step.

10. Click **Flow Cell Clean** and follow the prompts on the screen to complete procedure OR Click **Skip** to go to the next step.

![Flow Cell Clean](image)

11. Remove the closed loop nozzle and insert the sort nozzle. Double check the **ND filter 1.0** is installed. Make sure the sort chamber door is closed tight.

![ND filter 1.0](image)

12. Click **Continue** and wait for the stream to be turned on.

![Insert the sort nozzle](image)
13. Prepare a tube BD CS&T RUO Beads (500ul PBS + 2 drops of beads, vortex beads bottle before use).

14. Close the upper chamber door. Verify the Bead Lot Number and click Run Cytometer Setup.

15. Load the tube and follow the prompts.

16. After CS&T has completed successfully, Click Log out on the Left panel.

17. Click Log out

18. Log in to your own account to perform Drop Delay Assay and experiment.
Machine Shutdown:

1. After performing the 3-step cleaning process with Cleaning Solution 1, 2 and 3 at flow rate 95 for 5 minutes each, Click **Cytometer** on the Left panel and click **Daily Fluidics Shutdown** and follow the prompts.
   *Click **Long-Term Shutdown on Friday night** and follow the prompts. Use the ethanol tank and filter next to the SORP to perform the procedure.

2. Quit the BD FACSChrous Software when fluidics shutdown is completed, followed by shutting down the computer
3. Turn off the Power button on machine body
4. Turn off chiller
5. Turn off compressor
6. Remove the closed loop nozzle and put it back to the nozzle holder. Remove the nozzle stopper and wipe with DI water.
7. Wipe the deflection plate and sort chamber with DI water.
8. Degas the sheath tank by pulling up the gas valve. Refill sheath tank with PBS
9. Empty the waste tank right away if the waste is left than half a tank. Add in some bleach if the waste level is over half a tank.
10. Add in some bleach and make sure its volume covers the bottom layer of the tank.
11. Turn off the lights and lock all the doors before leaving.