



JCSMR FACS Facility

FACScan Startup and Shutdown Procedure

Startup

1. Turn on main power to cytometer.
2. Lower front panel of the instrument & check the vent valve position (up to pressurize).
3. Check that instrument is on **Standby** with ~ 1ml fresh ddH₂O on the probes (Sample Injection Port (**SIP**)).
4. Start the Macintosh, Logon *upon seeing the FileGuard Login prompt* to enable a successful startup while the cytometer warms up.
5. Check **Sheath** and **Waste** tanks have enough sheath fluid and space respectively. Change if required, and put in the waste container ~150ml concentrated bleach (under the sink) as needed.
6. Check **Sheath** in-line filter and fluid lines for trapped air and vent fluid to a beaker, cup, or other container to void any air bubbles in the system.
7. After the cytometer has completed warming up, set to **Run** and perform at least one **Drain & Fill** cycle (**Prime**) to clean both the flow chamber and the **SIP**. Bubbles should appear in the sample tube if the cannula is clear during the **Drain**.
8. Start **CellQuest**, connect to cytometer and run samples. Repeat Drain & Fill cycle using 10% bleach in ddH₂O as sample followed by ddH₂O alone as needed to remove any blockages. Detergent is also available in the red racks as an alternative.
Remember: *avoid putting on samples if the instrument is on **Standby**.*
Put on samples when on **Run** only.
9. When done, put 1 ml ddH₂O on the **SIP** (on **Run**), then set to **Standby**. Disconnect from the Cytometer then Quit CellQuest using the File menu item Quit. If it is before 6:00PM and other users are signed up, log off using the FileGuard menu. If you are the last person, or it is late and it appears to you nobody is about to use the cytometer, then you need to **Shutdown**.

Shutdown

1. Put ~1ml 10% bleach in ddH₂O on the **SIP** and let **Run** for ~ 3 minutes, then put on ddH₂O and let it **Run** for another 2 to 3 minutes.
2. Put on a new, fresh tube of ~ 1ml ddH₂O and then set to **Standby**. The level in the sample tube cannot be more than ~ 1ml before shutting down and leaving the system.
3. Shutdown the Macintosh computer, turn off the cytometer, then turn off the auxiliary fan in back of the cytometer.
4. Check for any other flow cytometers that have been left on or shutdown improperly.