Emory Pediatrics/Winship Flow Cytometry Core Updated: 1 March 2021

Cytek Aurora Long Term Shutdown and Storage Version: 1.01

Cytek Aurora Long Term Shutdown and Storage

If you need to shut down your Aurora or Northern lights cytometer for an extended period of time (e.g. more than 1 week), follow the steps below to properly clean and decontaminate the fluidic lines to ensure the system will operate smoothly when it is time to turn it back on.

Materials

Approximately 1L of 10% bleach (10% is diluted Clorox household bleach, which is around 6.0% sodium hypochlorite)

Approximately 2L of DI water – this is key to prevent bacterial growth in the lines while the system is off

Two 5mL polystyrene tubes containing 3mL 10% bleach

Four 5mL polystyrene tubes containing 3mL DI water

Steps

- 1. While the instrument is on and connected to SpectroFlo, go to the Cytometer Menu.
- 2. If time permits, perform an overnight Contrad soak to thoroughly clean the flow cell by running Fluidics Shutdown with 2 modifications:
- 3. In Step 4, load another tube containing 3mL 25-50% Contrad.
- 4. Once Fluidics Shutdown is completed, remove the Contrad tube from the cytometer and load a tube containing approximately 1mL DI water.
- 5. Power off the system and leave it overnight.
- 6. The next morning, power on the instrument and connect to SpectroFlo.
- 7. Run a Long Clean. Follow the steps in the wizard to complete the Long Clean (video tutorial here, skip to minute 3:18).
- 8. When the Long Clean has completed, run Fluidics Shutdown. Instead of running the tubes prompted by the software wizard (10% bleach, DI, 30% contrad, DI), ONLY run DI water tubes.
- 9. When the Fluidics Shutdown is complete, power off the instrument and leave a tube containing approximately 1mL DI water on the sample injection port (SIP). This will keep the sample line wetted and prevent it from drying out.

Resuming Operation

- 1. When you are ready to use the instrument again, power on the instrument.
- 2. Open SpectroFlo, log in, and wait for the software to connect.
- 3. Optional: If you'd like to replace the DI water in the system with a different sheath, run a Long Clean using 10% bleach, and then your desired sheath.
- 4. Open a Default Experiment and set flow rate to Medium.
- 5. Load a tube containing approximately 2mL DI water and click start.
- 6. After 30 minutes, click Stop.
- 7. Run QC to ensure the cytometer is functioning properly.