

Making Cancer History®

# SOUTH CAMPUS FLOW CYTOMETRY & CELL SORTING CORE FACILITY

## **BD FACSCELESTA**

# QUICK GUIDE: START UP, QUALITY CONTROL, AND SHUT DOWN

#### **PROCEDURE**

#### 1.0 Start Up

- 1.1. Check that the sheath cube is full, the waste tank is empty, and the FACS Flow Cart is on. Add 250 ml of bleach to the empty waste tank. If the sheath cube is low, remove the probe, replace the cube, replace the probe, and press "Restart" on the FACS Flow Cart.
- 1.2. Turn on the computer. Log in to Windows as the Operator. The password is "BDIS". Double-click the DIVA icon to open the instrument acquisition software. Log in to the software.
- 1.3. Turn on the instrument system power by pressing the green button on the right side of the instrument.
- 1.4. Ensure that there is a tube with approximately 2 ml of diH<sub>2</sub>O on the SIP. Press the PRIME button to prime the instrument. Repeat priming again after the instrument has returned to STANDBY.

#### 2.0 Quality Control

- 2.1. Open the CST experiment template from the Flow Lab folder. Press the RUN and LOW buttons on the instrument. Click "Acquire Data" on the Acquisition Dashboard and verify that events are accumulating on the plot. Remove the diH<sub>2</sub>O from the SIP and replace it with the CST beads.
- 2.2. Continue acquiring data for long enough to verify that two scatter populations and three fluorescent populations are discernable. Click "Stop Acquisition".
- 2.3. On the main toolbar select Cytometer > CST and wait until the cytometer connects to the CST software.
- 2.4. Ensure that the correct CST bead lot number is selected then click "Run". Review the Performance Tracking Report, and make a note of any problems or errors on the whiteboard.
- 2.5. Remove the CST beads from the SIP, replace the diH<sub>2</sub>O, and place the instrument in STANDBY.
- 2.6. Exit the CST software and allow the instrument to reconnect to DIVA.

#### 3.0 Shut Down

- 3.1. Place a tube with approximately 3 ml of Contrad on the SIP and leave the sample arm open. Press RUN and HIGH and leave it for one minute. Close the sample arm and continue running for one minute. Repeat this procedure using a tube of 10% bleach. Repeat this procedure using a tube of diH<sub>2</sub>O. Leave the diH<sub>2</sub>O on the SIP and place the instrument in STANDBY.
- 3.2. Turn off the instrument system power by pressing the green button on the right side of the instrument. Exit DIVA and shut down the computer.

## **RELATED PROCEDURES**

This handout is related to SCFC SOP IN012. Please see the full SOP for further information.

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