

Making Cancer History®

## SOUTH CAMPUS FLOW CYTOMETRY & CELL SORTING CORE FACILITY

### **BD FACSCANTO II**

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

#### **PROCEDURE**

#### 1.0 Start Up

- 1.1. Check that the sheath cube is full and the waste tank is empty. Add 250 ml of bleach to the empty waste tank. Check that the FACS Flow Cart is on.
- 1.2. Turn on the computer. Log in to Windows as the Operator. The password is "BDIS".
- 1.3. Double click the DIVA icon to open the instrument acquisition software. Log in to the software.
- 1.4. Turn on the instrument system power by pressing the green button on the left side of the instrument.
- 1.5. Ensure that the plate coupler is attached to the SIP and the sliding doors are closed. On the main tool bar select Cytometer > Fluidics Start Up and follow the prompts from the software.

#### 2.0 Quality Control

- 2.1. Open the CST experiment template from the Flow Lab folder. Disconnect the plate coupler and place the CST beads on the SIP. Click "Acquire Data" on the Acquisition Dashboard and verify that events are accumulating on the plot.
- 2.2. Continue acquiring data for long enough to verify that two scatter populations and three fluorescent populations are discernable. Click "Stop Acquisition" and remove the CST beads.
- 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, load the CST beads onto the SIP, and 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, 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 10% bleach on the SIP, click "Acquire Data" with the flow rate set to "High" for five minutes. Repeat this procedure using a tube of diH<sub>2</sub>O.
- 3.2. Ensure that the plate coupler is attached to the SIP and the sliding doors are closed. On the main tool bar select Cytometer > Fluidics Shutdown and follow the prompts from the software.
- 3.3. Turn off the instrument system power by pressing the green button on the left side of the instrument. Exit DIVA and shut down the computer.

#### RELATED PROCEDURES

This handout is related to SCFC SOP IN003. Please see the full SOP for further information.