Running CS&T on the FACSymphony (A3 & A5) Emory Pediatrics/Winship Flow Cytometry Core Version: 1.01 Updated: 1 March 2021

Note: Cytometer Setup and Tracking (CS&T) takes 5 minutes and should be performed every 24 hours

Windows login: username: Administrator password: BDIS#1\$\$

## Prepare CS&T beads:

- 1. Obtain CS&T bead vial from the large fridge (orange label, Cat # 642412)
- 2. Vortex bead vial
- 3. Prepare the bead suspension by adding 1 drop of beads to 350 uL of PBS in a FACS tube

## Warm up instrument and run CS&T:

- 1. Ensure instrument is on (green button on right-hand side of instrument) and log into PPMS
- 2. Confirm UV laser is on and warmed up for at least 20 min. (see SOP for turning on laser)
- 3. Open BD **FACSDiva** and login

username: Admin password: flowstaff123

- 4. Go to Cytometer > CST
  - a. The CS&T workspace will open
- 5. Remove the tube of DI water from the SIP, vortex the bead suspension and install the SIP
  - a. Switch instrument from STANDBY to RUN
  - b. Check sample rate is set to **LOW**
  - c. Check sample rate fine adjustment is set to 250
- 6. In the Setup control window on the right, select **Check Performance**
- 7. Select **Run** in the software and **OK** to all software prompts that follow
- 8. The performance check will start running and a dialog box will appear when complete
- 9. View the cytometer performance report or Finish
- 10. Remove the beads from the cytometer, install the DI water on the SIP and run the water on **LOW** for ~2-3 minutes
- 11. Leave the tube of DI water on the SIP and switch the instrument to STANDBY
- 12. The Cytometer Performance results are displayed in the **System Summary** window. Possible results are indicated as follows:
  - a. Passed
  - b. Passed (Completed with warnings)
  - c. Failed notify Flow Core staff immediately by submitting instrument report on PPMS Instrument is not suitable for use
- 13. Close CS&T window
- 14. Wait for the cytometer to reconnect and choose "Use CS&T settings" at the prompt
- 15. If not running samples, log out of DIVA log out of PPMS

This SOP was adapted from BD's Cytometer Setup and Tracking Application Guide, found here: https://tinyurl.com/rr65ofm

