

Making Cancer History®

SOUTH CAMPUS FLOW CYTOMETRY & CELL SORTING CORE FACILITY

NEW USER TRAINING

NEW USER CHECKLIST

PROCEDURE

1.0 Planning Your First SCFC Experiment

- 1.1. Sign up for the Flow Cytometry Orientation Class, tour the South Campus Flow Core (SCFC) lab, meet the staff, and discover the capabilities of the instrumentation in the lab.
- 1.2. Schedule an individual meeting with the SCFC staff to discuss the design of your experiment:
 - A. What is the sample type and preparation? Blood, tissue, bone marrow, cell lines, tumor, etc.?
 - B. How many cells are needed for the assay?
 - C. What reagents are needed? Use FluoroFinder or other panel design tools to help.
 - D. What instrument should you use? Analyzer or sorter? What fluorochromes are you using?
 - E. Plan a pilot experiment with a non-vital sample. Allot cells for antibody titration, if needed.
 - F. What controls do you need? Consider compensation controls (beads or cells), FMOs, unstained or parental samples, positive controls, and biological controls.
- 1.3. Schedule adequate time on the instrument for your experiment set up, sample acquisition, training, if needed, and cleaning.
- 1.4. When running your samples on the instrument:
 - A. Follow SCFC naming requirements (PI, user name, acquisition date). Do not include PHI.
 - B. Filter samples, especially if aggregates are present.
 - C. Acquire an adequate amount of data for each sample and control.
 - D. Save your experiment template for future use.
 - E. Export your data and move it to the designated server folder. Do not keep old data in the Diva browser or instrument computer D: drive.
 - F. Complete instrument cleaning before the end of your scheduled appointment.
 - G. If you are the last user of the day, shut down the instrument. See SOP near each instrument.
- 1.5. Analyze data on any of the available post acquisition software platforms such as FlowJo, Kaluza, or FCS Express. Schedule time with SCFC staff for training on the software.

RELATED PROCEDURES

This handout is related to SCFC SOP TR001. Please see the full SOP for further information.