

Justification: (Briefly describe why you need to use the facility)

General information and regulations:

- The flow core room is located in HEB 233A
- All users will read and follow the SOP form

General Rules:

- Samples will be completely prepared prior to the arrival into the flow core room.
- The flow core facility managers will be contacted prior to use to discuss proper sample preparation before samples are acquired.
- Samples will be transported to and from the facility in appropriate capped fluorescence-activated cell sorting (FACS) tubes. These should be within an appropriate container (leak proof, puncture-resistant plastic carrier with a secure lid that will be able to contain the BSL-2 samples if a breakage occurs).

Procedure:

- Users will enter the room with the appropriate PPE protection for working with BSL-2 agents or cells.
- The FACSDiscover S8 flow cytometer will be cleaned utilizing an aseptic manufacturer's protocol (BD Biosciences). The FACSCanto II will be cleaned with 10% bleach and water prior to running the samples.
- The aerosol containment system (ACS), consisting of a Biological Safety Cabinet (The Baker Company, model BDM401) is turned on 3 minutes prior to FACSDiscover S8 sorting.
- Use of the FACSCanto II Analyzer is a closed loop system and minimizes any aerosol formation, thus do not have the ACS.
- Once the machine is prepared, samples are brought in a sealed tube.
- Samples will then be sorted according to standard procedures.

Post-sample Acquisition Procedure:

- 5 mL of 10% bleach will be run for 10 minutes, followed by 5 mL of distilled sterile water to clean the sample lines. Cytometers will have appropriate shutdown protocols.
- All working surfaces within the area will be wiped down with 70% ethanol.
- Waste tanks will be emptied after the liquid waste has been exposed to 10% bleach for at least 30 minutes.
- If a spill occurs, it will be treated with 10% chlorine bleach, followed by 70% ethanol.
- Users will remove PPE upon exiting the room.

**SOP for FAC Use Within the Flow Cytometry Core Facility**  
**Location: Health Education Building (HEB 233A)**

- All solid waste (tubes, pipette tips) within the FACS room will be collected in an autoclave bag and sealed prior to removal from the room or disposed of in the red bin in HEB233A.

**Additional Information:**

- In the event of any malfunction of the FACS, the person in charge of the sorter will be notified (Andrea Kalinoski, #419-383-4205, and/or David Weaver, #419-383-3402).
- If there is any sign of failure in the aerosol containment system or a potential leak of the system during the use of the infectious material, everybody within the laboratory will leave and not return until future notice.
- The biosafety officer will be immediately informed (Skylar Rohrs #419-383-5089).
- If there is an exposure, then the affected person will go immediately to UToledo hospital emergency room and an incident report will be filled out.