

## FACS Service Booking Form

**All FACS Service Request should be sent by email:**

**Please complete this form and send it to: [ajairaj@uwaterloo.ca](mailto:ajairaj@uwaterloo.ca)**

**Please find FACS service guidelines and rules below.**

Date: \_\_\_\_\_ Requested by: \_\_\_\_\_ Supervisor: \_\_\_\_\_

Contact email: \_\_\_\_\_ Department: \_\_\_\_\_ Extension #: \_\_\_\_\_

Type of the experiment: \_\_\_\_\_

Species: \_\_\_\_\_ Cell type: \_\_\_\_\_ Cell size: \_\_\_\_\_

# of samples: \_\_\_\_\_ Biological Level: \_\_\_\_\_

Fluorochrome(s): \_\_\_\_\_

Negative control: \_\_\_\_\_ Positive control: \_\_\_\_\_

Date	FACS service for	# of samples	Time started	Time finished	Hour to be charged	Amount	Signature of user

Total	
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Account #: \_\_\_\_\_ - \_\_\_\_\_  
 (format as: XXXXX XXXXX-XXXXX XXX)

Account Holder's Name: \_\_\_\_\_

Administrator use:	
Charge back send out:	
Reply received:	
Confirmation to Finance:	

Guidelines/Rules for FACS service:

1. Please book your appointment at least 2 days in advance for analysis, and 1 week in advance for sorting.
2. All FACS sample analysis MUST be finished before 3:30pm to allow for end of day maintenance.
3. The life-span of the laser is time-limited, thus once the laser fired up, the life-span of the laser is reducing. Please make sure you are on-time for your appointment, otherwise, you will be charged for the time while the machine is waiting for you.
4. Again, due to the laser life span, please cancel your appointment at least 30 minutes in advance by phone. Once the laser is turned on for warm-up, you will be charged for 30 minutes service.
5. The user must sign for usage at the end of each session. All sessions will be charged to your supervisor's account.
6. Sample volume should be no less than 250uL. Falcon brand 2052, 2022, 2008 or 2035 tubes 12x75mm polystyrene must be used. If you don't have it you may purchase a supply from the Core Facility (current pricing applies).
7. Due to machine configuration limitation, this machine can only analysis the following 9 color fluorochromes: **FITC, PE, PerCP (PI), PerCP-Cy5-5, PerCP-Cy7, APC, APC-Cy7, DAPI, and INDO 1-Blue**. **The cell/particle size limits is 500nm.**
8. The FACS machine is a contained system. The core facility is registered as a Biosafety level I-II lab. Human samples are permitted under specific circumstances:
  - a. All samples acquired from general public or patients are to be fixed for a minimum of 30 minutes in 0.5% paraformaldehyde.
  - b. Unfixed samples are permitted from patients belonging to a select clinical group or trial that have been prescreened for HIV, Hepatitis B,C,D, HTLY, EBV, CMV. Proof of this screening must be submitted to the core facility manager.

**Please note:**

Unfixed human samples from unknown sources which have not been tested for blood borne human pathogens or that are radioactive or that are transected or transduced with known viral human pathogens are absolutely not permitted in this core facility. *Any infectious cells lines or Biological hazards Level III and up are not permitted in this FACS service.*

9. If your samples tend to clump, your samples should be filtered before acquisition. *This is not the same as filtering through steel mesh after ex-vivo harvest!* 70um nylon mesh is available from numerous suppliers or you can use **35-2235 falcon tubes** from BD which come with a strainer in the cap to help reduce samples from clumping. We also provide this filter tube at site if you don't have it (~\$1.5 per tube). Clumping samples are known to clog up the FACS machine causing unnecessary down time for cleaning which may delay your scheduled analysis time.
10. For every experiment you will need the following:
  - a. Unstained cells
  - b. Cell stained with your fluorochrome(s)
  - c. If more than one fluorochrome is used, you will need single stained samples for each fluorochrome, i.e. 1 tube stained only with green fluorochrome, 1 tube stained only with red fluorochrome, then the rest of the test tubes can be combined both fluorochromes.
11. If you would like to sort cells, you have to arrange it one week ahead. If you need to perform **sorting cells with PBS** or any physiological buffer (sterilized or not), you have to provide the PBS and bring it to the facility 2 days in advance.

FACS Service

**Example:**

**Date:** Jan 08, 2013    **Requested by:** Chris Liu    **Supervisor:** John Thompson

**Contact email:** XXXXXXXX@uwaterloo.ca    **Extension #:** 35141

**Type of the experiment:** Apoptosis

**Species:** Human or Fish, etc    **Cell type:** Liver    **Cell size:** 15 – 20 um

**# of samples:** 10    **Biological Level:** II

**Fluorochrome used:** FITC / PI

**Negative control:** alive cell    **Positive control:** dead cell