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Research Flow Cytometry Core

Quarterly Newsletter

Information Provided by your CCHMC RFCC

What's New?

BD FACSymphony S6 Sorter Now Open!

The BD FACSymphony S6 sorter is now available for use. This sorter has 5 lasers and 30 detectors. It allows for 6-way sorting into tubes or plates with 70, 85, 100, and 130 um nozzles. The S6 sorter accepts a broad range of fluorochromes and has an ultra-quiet electronics system enabling rare cell type sorting. Those who have already had a consultation and sort on the other BD sorters can now see the instrument under their Stratocore account and can schedule sorts. If you do not see the instrument, please let us know. Scan the QR code and choose "S6" for its configuration.

LSRII / BD FACSymphony A5 Cell Analyzers

The LSRII has kicked the bucket and has been decommissioned. It is no longer available for use.

A BD FACSymphony A5 analyzer has been ordered to replace the LSRII. This new analyzer will have 5 lasers, 30 detectors, and improved sensitivity for identification of rare cell types and events similar to BD FACSymphony S6 sorter.

Helpful Hints

Events and Event Rate?

In a flow cytometer, an event is any particle that scatters light, is detected by the instrument, and is above the threshold. These events include dead cells, debris, and your cells of interest. Detection of the cells of interest is complicated by a limited number of cells, the presence of cell debris, dead cells and artifacts. Events that fall under the threshold are not accounted for by the instrument and therefore are not included in the threshold count or event rate.

Improve your sort results

- Use the correct size collection tube
- Pre-coat the collection tubes with protein (BSA, FBS) buffer to improve cell viability
- Choose a nozzle 5x larger than the cells of interest
- Use a viability dye to ensure the collection of viable cells
- Enrich the sample for cells of interest to get rid of unwanted cells and debris
- Include serum or protein in your collection buffers
- For more helpful hints, scan the QR code and select "Cell Sorting Guidelines"

Meetings

Cytek Advanced Training

Is your unmixing correct? Attend the Cytek advanced training in person or online to find out, **February 7th from 9:30am to 3pm.** This training will focus on validating data and provides examples of common interpretations, pitfalls, and mistakes.

Please register: using the form. Once registered, we will confirm your registration and provide more information. If attending in person, bring your laptop with SpectroFlo already downloaded to review your experiment with Joel Crespo from Cytek.

High Parameter Meeting

We will have our high parameter meeting for flow cytometry data every 3rd Wednesday of the month between 9 and 10am in S6.125. Please block your calendar for the year and join us in person.

If there is a specific topic you would like to discuss, let us know by emailing Celine.

If you want to discuss your data, please let Celine know which date will work for you.

ORVCA Meetings

The ORVCA meetings are held the 4th Wednesday of every month. Please join us for our next user meeting on Wednesday, **January 25th, from 1-2pm EST**, when Chris Langsdorf, Product Manager, Dyes and Labeling Technologies, Protein and Cell Analysis, Thermo Fisher Scientific, will present **"Interrogating cell function by flow cytometry."**

On **February 22 at 1pm** Ray Eby, Ph.D. with Particle Metrix will present **"Multi-parameter analysis of EVs & Viruses with the ZetaView NTA system."**

Dates to Note

Jan 25, 1-2pm, zoom: ORVCA meeting: Interrogating cell function by flow cytometry
Feb 7, 9:30-3pm: Cytek Advanced Flow Training. Please register with the form.
Feb 15, 9-10am, S6.125: High Parameter meeting.
Feb 22, 1-2pm, S6.125: ORVCA meeting: Multi-parameter analysis of EVs & Viruses with the ZetaView NTA system.
Mar 15, 9-10 am, S6.125: High Parameter meeting.
Mar 22, 1-2pm, S6.125: ORVCA meeting: Slingshot product line.
Apr 19, 9-10am, S6.125: High Parameter meeting.
Apr 26, 1-2pm, S6.125: ORVCA meeting
May 20-24: CYTO 2023. Montreal, Quebec, Canada