

Quarterly Newsletter



Information Provided by your CCHMC RFCC

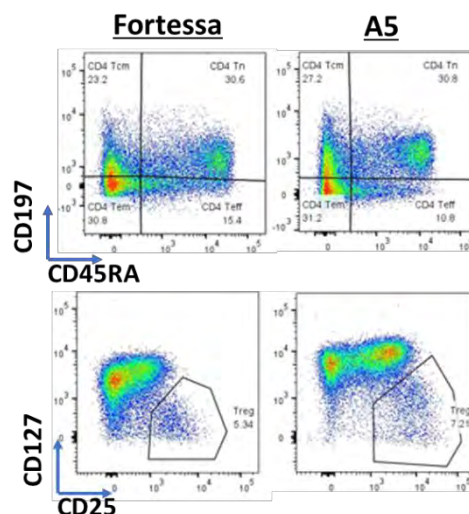
FACSymphony S6 & A5

The BD FACSymphony S6 sorter and A5 analyzer add cutting edge technology to our Research Flow Cytometry Core. This technology allows for more parameters to be detected so you can get more information from one experiment saving on other costs such as antibodies, reagents, mice and manpower. The FACSymphony A5 and A6 instruments have the same laser configuration and allow the use of up to 30 parameters to define distinct populations without the need for filter changes. The low-noise electronics on the PMT detectors with high sensitivity and combined optics provide excellent sensitivity to resolve dim or rare populations.

The figure shows a sample run on a LSR Fortessa (left) and on the new Symphony A5 (right). The populations are resolved better on the A5 with distinct separations. This example resembles the difference that would be observed between an AriaII and the S6. Check out the High Parameter meeting presentation on our website for more examples and information (coming soon).

Training requests for the A5 are now being accepted through Stratocore. Current Fortessa users require a 15 min. orientation to the new instrument.

The S6 can sort up to 6 populations into tubes or in plates. It has 70, 85, 100 and 130 um nozzles for a wide range of cell sizes. Please consult RFCC staff for a free panel test on the S6.



Analyzer Information

Analyzer Cancellation Policy

Cancellation of your appointment must be made via Stratocore. If you cancel less than 5 minutes before your scheduled time, you will still be charged for the appointment. If you are **more than 15 minutes late** for your appointment you will forfeit your time unless you leave a note at the instrument that you are coming late.

Running Many Samples in One Stretch of Time

Problems often occur with the instrument when there are many samples to run on a flow cytometer over the course of an hour or more. If running many samples on a flow cytometer, the samples that get run later may need to be refiltered before running to prevent clogging the instrument. As samples sit waiting to be run, the cells will aggregate and clumps which will clog the instrument. Periodically washing the instrument at least every hour will also help to run the later samples without incidents.

Analyzer Troubleshooting

When the cytometer instrument encounters a problem, please check the [troubleshooting guides](#) on the desks or walls by the instruments. Staff is happy to help, but you may save some time by referring to the guides.

Sorter Information

Sorter Cancellation Policy

Cancellation or rescheduling of your appointment must be done via Stratocore. Please explain the reason for cancelling in the comment section at the bottom of the form and don't forget to click on "add" before closing the form. You will be charged for the full time reserved on Stratocore if you cancel less than 24 hours (business day) before the scheduled time. If a PI incurs a cancellation fee more than 3 times in 3 months, the PI must meet with the RFCC before another sort is scheduled. If the RFCC must cancel an appointment due to inoperable instruments, staff shortages, or inclement weather, you will not be charged.

FACS Aria 2 (Arnie) Retiring

Arnie is going to be decommissioned by the end of the year. Users who are currently using Arnie need to be prepared to move to another sorter such as the Aria 1 (Fusion) or the FACSymphony S6. We are currently investigating sorting instruments to replace Arnie. Please contact [Celine Silva Lages](#) with your suggestions and justifications.

Save the Date!

The Imaging and Cytometry Research Day organized by the Ohio River Valley Cytometry Association will be held August 29, 2023. Join us for an enlightening day which includes keynote speaker John Nolan, featured speaker Joanne Lannigan, and local speaker Erin Hertlein. For free registration and abstract submission for a poster price, visit: <https://orvca.research.cchmc.org/annual-conference>.

On August 30, John Nolan will discuss analysis of Extracellular Vesicles (EV). He will provide tools and resources for this research and can analyze some of our user's EV samples. To schedule, contact [Celine Silva Lages](#).

Dates to Note

August 16, 9-10am, S6.125: High Parameter meeting
August 29, 8-4pm, S1.203: ORVCA Research Day
August 30, 8-3pm: ORVCA Research Day. John Nolan: EV analysis of researcher samples
September 8-10: GLIFCA meeting
September 20, 9-10am, S6.125: High Parameter meeting
September 27, 1-2pm, S6.125: ORVCA meeting; On-chip Biotechnologies
October 18, 9-10am, S6.125: High Parameter meeting
October 25, 1-2pm, virtual: ORVCA meeting; Aimplex Biosciences