

# Research Flow Cytometry Facility Quarterly Newsletter



Information Provided by your CCHMC RFCF

## How to Cite the Research Flow Cytometry Facility

When publishing data generated using our facility, it is necessary to acknowledge us in your publications. See below for example statements and please acknowledge specific staff members as appropriate.

**To acknowledge our assistance:** “We would like to acknowledge the assistance of the Research Flow Cytometry Facility (RRID: SCR\_022635) in the Division of Rheumatology at Cincinnati Children’s Hospital Medical Center.”

**To acknowledge our facility:** “All flow cytometric data were acquired using equipment maintained by the Research Flow Cytometry Facility (RRID: SCR\_022635) in the Division of Rheumatology at Cincinnati Children’s Hospital Medical Center.”

**For NIH P30 Center Members:** Please include ONLY the P30 grant number of the corresponding center by adding the following statement in the acknowledgements:

“Supported in part by [insert appropriate P30 grant references here].”

1. Center for Rheumatic Disease Research (NIH AR070549)
2. Digestive Diseases Research Core Center aka Digestive Health Center (NIDDK P30 DK078392)

Example: “The project was supported in part by Grant NIDDK P30 DK078392 of the Digestive Diseases Research Core Center in Cincinnati. All flow cytometric data were acquired using equipment maintained by the Research Flow Cytometry Facility (RRID: SCR\_022635) in the Division of Rheumatology at Cincinnati Children’s Hospital Medical Center.

**For users of the SH800S cell sorter:** Please acknowledge the grant used to purchase the instrument by adding the following statement: “supported by NIH S10OD023410.”

**For users of the Aurora analyzer:** Please acknowledge the grant used to purchase the instrument by adding the following statement: “supported by NIH S10OD025045.”

**Please notify [Sherry Thornton, PhD](#) each time a manuscript or abstract is submitted or accepted for publication that reports work or results produced by the Research Flow Cytometry Facility.**

## Publishing Flow Cytometry Data

A basic scientific research principle is that results must be available to others for validation. An increasing number of journals are requiring raw data be placed in data repositories to publish. In light of this requirement, the International Society for the Advancement of Cytometry (ISAC) brought together a cross-disciplinary international group of bioinformaticians, computational statisticians, software developers, instrument manufacturers, and clinical and basic research scientists to develop the Minimum Information about Flow Cytometry Experiment (MIFlowCyt) standards. These standards are being supported and adopted by [scientific journals](#). The latest [MIFlowCyt specifications](#) are available on the [ISAC website](#).



## New Analyzers

We have a new Cytek Northern Lights 3-laser system (blue, red, violet) with 38 detectors, but no plate loader. If you have been trained on the Cytek instruments (Aurora or Maleficent), you can use the Northern Lights.

We are also looking for labs to try out the Northern Lights instrument and an Agilent Penteon instrument which we are demoing for a limited time as potential replacements for the aging Cantos. The Agilent Penteon is a 5-laser system (blue, red, violet, UV, yellow-green) with 30 detectors and it has a plate loader. We would like to run comparison experiments between the instrument you are currently using and the new instrument you could switch to. Please contact the facility to schedule a free of charge session for analysis of your samples.

## Analyzer Etiquette

**Respecting Peers:** If you are unable to finish your samples in the allotted appointment time, you still must stop and clean the instrument for the next person to start at their scheduled time. You can return later, move to an open instrument, or check with the person following you if you can run over time. **Only if the following user agrees** can you run over into the next user’s time. **Respecting the following user’s decision gracefully is crucial.**



**Changing Filters:** Please get into a habit of checking the instruments filters before acquiring to ensure everything is in order. If you change the filters for your acquisition, PLEASE change the filters back to their original configuration when you are done.



## Saving Data

The RFCF has [project drives](#) available for CCHMC researchers to save flow cytometry data. There are 4 drives for different kinds of data: RFCC-FACSDATA drive for analyzer and BD sorter data, RFCC-Aurora drive for Aurora spectral data, RFCC-IMAGESTREAM drive for Image Stream data, and RFCC-BigFoot drive for data acquired on the BigFoot. Please use the appropriate drive for the respective data. [Request access](#) to one of our project drives using the link or talk to RFCF staff.

## Dates to Note

**November 15, 9-10am, S6.125:** High Parameter meeting

**November 29, 1-2pm, S5.125:** ORVCA meeting; DeepCell

**December 20, 9-10am, S6.125:** High Parameter meeting