

UNC Flow Cytometry Core Facility

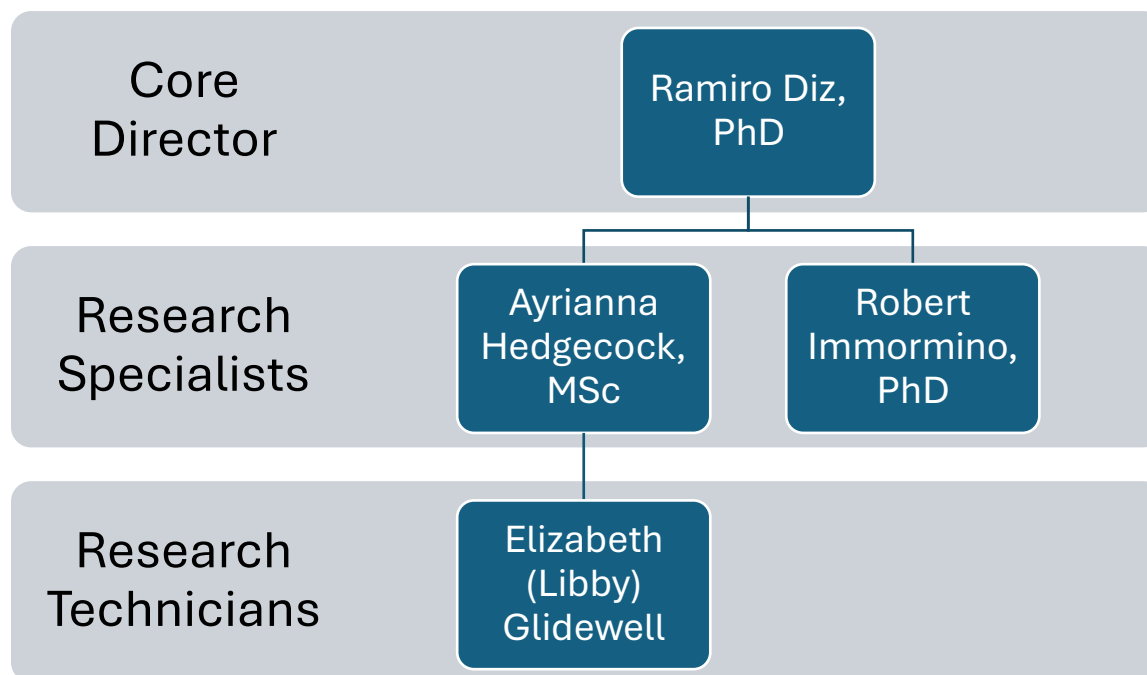
# Flow Core Policies and Supplemental Information

Updated 12/2/2025

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## UNC Flow Cytometry Core Personnel



- **Ramiro Diz, PhD:** Core Director. Specializes in Consultation services.
- **Ayrianna Hedgecock, MSc and Robert Immormino, PhD:** Flow Cytometry Core Research Specialists. Responsible for User Training, Cell sorting, and Staff assisted acquisition. May be available to assist with instrument issues, consultations, software training, and help with Data Analysis troubleshooting depending on training level.
- **Elizabeth Glidewell:** Research Technicians. Staff assisted acquisition, sorting, and user training
- [Email](#) or an [iLabs request](#) is the best way to contact the core.

## Acknowledging the Core in Publications

### Are you planning to publish your Flow Cytometry Data?

Please see our website for current instructions on how to [acknowledge the UNC Flow Cytometry Core](#).

## UNC Flow Cytometry Core Policies

By utilizing the Flow Cytometry Core Facility, you agree to abide by all policies stated here within and on our website. It is your responsibility to stay up to date with these policies. Violation of stated policies will result in [disciplinary actions](#) listed below.

## Hours of Operation

Trained users are welcome to use the instruments **24/7/365**. Staff assisted appointments are limited to M-F, 9-5 pm excluding university holidays.

## Scheduling

Trained users may schedule directly on iLabs calendars. Staff-assisted appointments will need to be requested via iLabs.

See full policy on Flow Core Website: [Cancellation Policies | Flow Cytometry Core Facility](#)

- **Analyzer appointments** can be cancelled up to **36 hours prior** to the scheduled start time of the appointment. Within the **36 hr** window, changes or cancellations of scheduled appointments will incur a cancellation fee.
- **Sorting appointments** can be cancelled up to **72 hrs before** the scheduled time. Within the **72 hr** window, cancellations of scheduled appointments will incur a cancellation fee. Same day cancellations will be charged the cancellation fee as stated and the sorter set-up fee if the instrument has been set up for your appointment.
- **Late arrivals** of >1 hr. will be deemed a “No Show” resulting in appointment cancellation and incurring a No-show fee” equal to 1 hour of instrument time. A delay of **30 minutes during staff-assisted appointments** will result in a cancellation.
- **Cancellation Fee:** 20% scheduled instrument time
- **Fees may be waived at Staff discretion.** Communicate with the UNC Flow Cytometry core ASAP! Illness, dependent care, and other emergencies are allowed excuses and fees can be waived with prompt communication.

## Biosafety

See full policy on Flow Core Website: [Biosafety | Flow Cytometry Core Facility](#)

- **BSL1 areas.** The FACS Melody sorter is only available for BSL1 sorting. Unfixed human cell samples, samples currently or previously infected with a retrovirus, and any other potentially pathogenic samples cannot be sorted on the FACS Melody. Contact staff with questions.
- **BSL2 areas.** The UNC Flow Core Analyzers are in BSL2 rooms.
  - **Proper PPE** (gloves, a lab coat, and closed toe shoes) are required at all times.
  - **Use best practices** recommended by [EHS](#) for a BSL2 lab when interacting with the instruments and waste containers.
  - **Transport samples in [approved containers](#).**
  - Dispose of samples and any potentially contaminated material in the **provided biohazard waste bins**
  - Spills should be **reported** to the UNC Flow Core staff and cleaned with bleach and spill kit.
- **BSL2+ areas.** The Aria II and Symphony S6 rooms additionally pose aerosol hazards. BSL2 sorting will only be handled by trained staff.

## Disciplinary Actions

- **First Violation:** The user will receive a written warning detailing the nature of the violation and the required corrective actions.

- **Second Violation:** If the user commits a second violation of the same nature within a 12-month period, they will receive a second written warning and may be required to undergo additional training. The PI will also be informed of the violation.
- **Third Violation:** A third violation within a 12-month period will result in the revocation of the user's access to the instrument(s). Access will only be mediated through FCCF staff (staff-run appointments) until otherwise determined by corrective measures. The user and PI will be required to meet with FCCF management to discuss the violations and agree on corrective actions.
- **Severe Violations:** For severe violations, such as unauthorized access or instrument tampering, the FCCF reserves the right to immediately suspend the user's access to the instruments. The user and PI will be notified in writing of the suspension. The user and PI will be required to immediately (within 1 week) meet with FCCF management to have corrective actions discussed.

#### Escalation Process:

- **Initial Review:** All violations will be initially reviewed by FCCF staff; the user will be notified in writing (email) and given an opportunity to respond.
- **Core Director Review:** If the user disputes the violation, the matter will be escalated to the Core Director. The Core Director will review the violation and action taken and make a final decision.
- **Mediation:** If the dispute remains unresolved after the Core Director's review, the parties agree to participate in mediation via a member of the FCCF Internal Advisory Board (IAB). Decisions made through this process will be honored by all parties involved.

## UNC Flow Cytometry Core Instruments

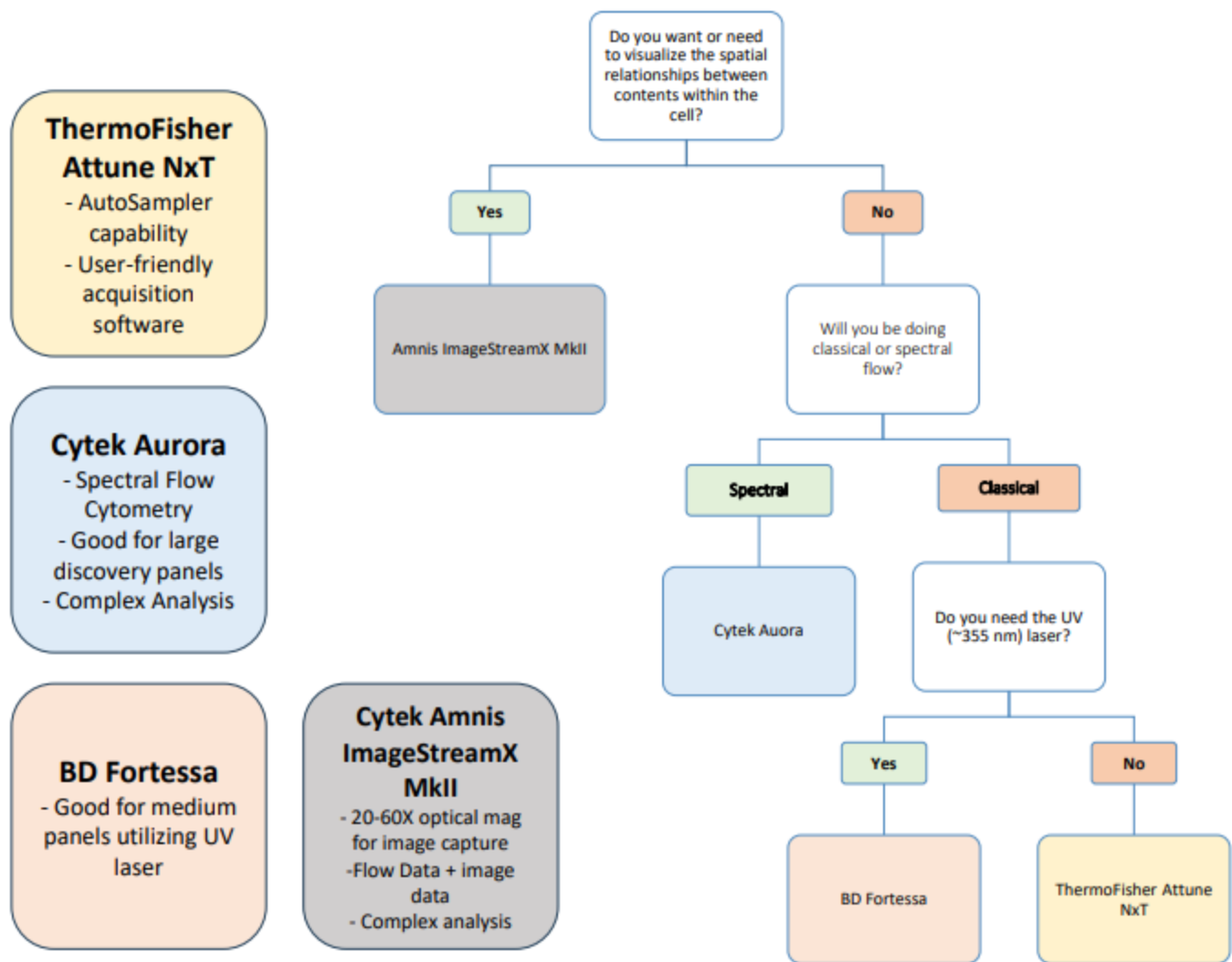
Optical layouts and additional information about each instrument can be found on the [UNC Flow Cytometry Core website](#)

### Analyzers

- [Attune NxT](#) (Two) (ThermoFisher): 4 laser/14 colors + Autosampler.
- [Aurora \(Cytek®\)](#): 5 laser/ 64 detectors + Autosampler; spectral flow cytometry
- [LSRFortessa \(BD\)](#): 5 lasers/18 colors
- [Amnis ImageStreamX](#) (Cytek): Imaging flow cytometer; 3 lasers/ 12 detectors

### Sorters

- [FACS Aria II](#) (BD): Staff-operated BSL-1 or BSL-2+
- [FACS Symphony S6](#) (BD): Staff-operated BSL-1 or BSL-2+
- [FACS Melody](#) (BD): User-operated BSL-1 only

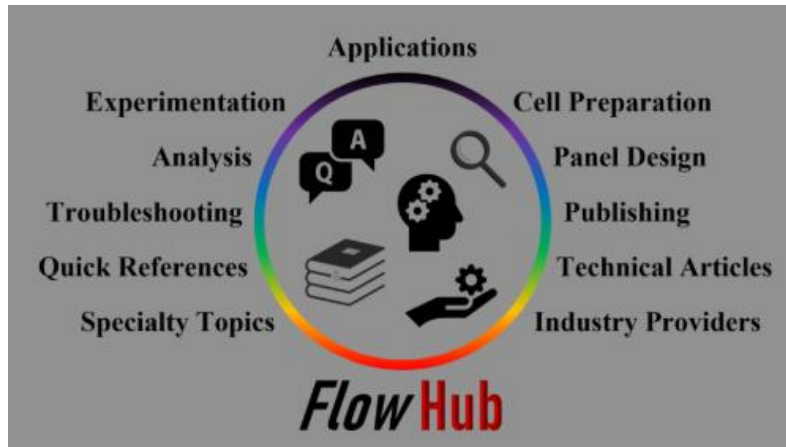


## Analysis Software Licenses

- [FlowJo \(BD\)](#)
- [FCSExpress7 \(Dotmatics\)](#)
- Request access to site license via [iLabs](#)

## Resources

Prior to instrument training you are given access to the Flow Cytometry training site [Work-Flow](#), which has a wealth of information on Flow Cytometry. Check out the [FlowHub](#) as a starting point for technical help, publications, and practical flow protocols! These are available to Flow Core users as lifetime access.



We have also compiled useful protocols and technical references on the UNC Flow Cytometry website's [Resource Page](#) and on the [Flow Core User Group Teams page](#).

Additional advice is also available by [scheduling a consultation](#) with the UNC Flow Core via iLabs. **Consultations are always FREE!**

## Rigor and Reproducibility

[Guide to Rigor and Reproducibility](#)

### Controls are Essential

	<p>Negative controls and compensation controls are essential.</p>		<p>Adding the <u>singlets</u>, <u>time</u>, <u>viability &amp; dump gates</u> to your analysis will improve the accuracy of your results by removing cells that do not belong in your population of interest.</p>
	<p>By activating the height value in your flow cytometer's software package, you will be able to draw an accurate <u>singlets gate</u>.</p>		<p>By looking at <u>time</u> versus the flow of your cells, you will be able to evaluate whether or not the cytometer operated correctly during your collection run.</p>
	<p>By using a <u>viability &amp; dump gate</u>, you will ensure that you are only looking at your 'living' population of interest.</p>		<p>Using and communicating these gates in your flow cytometry experiments will help improve consistency and reproducibility of the overall field of flow cytometry data analysis.</p>