

Flow Cytometry Instrument Policy & Penalties

Sample Preparation

- _____ In order to safeguard the integrity of the instrument, all samples must be filtered with a $\leq 40 \mu\text{m}$ mesh cell strainer just before running on the instrument.
- _____ Samples should be resuspended in media that protects the viability of the cell preparation without disrupting the optimal functioning of the machine. The use of PBS without calcium and magnesium, supplemented with 5 mM EDTA and a maximum of 1% BSA or fetal bovine serum is highly recommended.
- _____ It is advisable to keep the samples on ice and protect them from light.
- _____ For proper compensation, it is required to bring positive control samples stained with only one fluorochrome for EACH fluorochrome used in the experiment. Omission of these controls may make it impossible to analyze the data properly. Negative and isotype matched controls are also needed.

User Responsibilities

- _____ Samples must be run by a CIC staff member until the user has been authorized to run their own samples. Every user will be required to pass a detailed performance examination to demonstrate their competence. Upon completion of the exam, the authorized user will receive a user name and password for access to the instrument.
- _____ The authorized user agrees to keep their user name and password confidential. If an authorized user agrees to help an unauthorized user, the authorized user **must** be present at all times. Under these conditions it is the authorized user who is ultimately responsible for the machine. **Failure to comply with this regulation will result in immediate and permanent loss of privileges for all parties involved.**
- _____ If a user suspects an instrument malfunction, please notify the CIC staff immediately. During off hours, please send an email describing the problem to muscatcc@missouri.edu. **Tampering with the instruments is prohibited and will result in loss of privileges. If a user causes further damage to an instrument by trying to “fix” it, they will be charged for time and labor to repair it as well as loss of privileges.**
- _____ Users are encouraged to choose an instrument that best suits their needs. For example, users performing less than 4 color experiments are encouraged to use the FACScan instead of the FACSCalibur or CyAn if they are not using the red 633 nm laser.
- _____ Users agree to properly care for the instruments and computers- Be gentle when changing the sheath/waste tanks, during long runs be sure to check fluid levels, and refrain from downloading material onto the computers (we don't want viruses!).

Instrument Procedures

- _____ Quick Reference Guides are available for reference near each of the instruments. Printed copies are available upon request.

- _____ The authorized user agrees to comply with the CIC recommended cleaning procedure included as part of the routine maintenance process.
- _____ The authorized user agrees to stay with the instrument during the CIC cleaning procedure as well as shutdown the instrument properly. **Failure of the user to perform proper shutdown procedure, causing the instrument to run dry, will result in loss of privileges.**

Reservations and Billing

- _____ Reservations are made first-come, first-serve and can be made through an online calendar or by calling the CIC Facility at (573) 884-7315.
- _____ Users are billed for the full time they reserve *plus* any additional time on the instrument. (If you reserve one hour and only use half an hour, you will still be billed for the full hour- reserve wisely)
- _____ Reservations may be cancelled 12 hours before the reservation time without consequence. If this time limit is not met, the user will be charged the full amount of the reserved time.
- _____ If a user runs over their allotted time, it is at the discretion of the next user whether or not to allow the first user to finish running their samples. If this occurs, please notify the CIC staff so the correct fees are charged to each user.
- _____ The instrument is available during off hours once the user has been authorized by the CIC staff.
- _____ Charges are billed on every half hour. If login time shows greater than 5 minutes over, the full half hour will be charged.

Rates:

Instrument	FACScan	FACSCalibur	CyAn
Self Operator	\$40	\$50	\$50
w/ CIC Operator	\$50	\$60	\$60

Data Storage and Transfer

- _____ Please bring a USB drive to transfer your data after each session. Please allow approximately 5 minutes to transfer your data as it will be included in your running time. Data will be purged on a monthly basis.
- _____ CellQuest and FlowJo are available for free data analysis on Workstations at the CIC Facility. Appointments can be made to use this software and receive assistance from the CIC Facility. Alternatively, Summit Software version 5.0 is available free of charge and is capable of analyzing results from any of the flow cytometry instruments. The software does not have any licensing limitations so users can download the software to unlimited PCs. As a result, a workstation is not provided for Summit. Low resolution black and white copies can be printed at the CIC Facility, but it is encouraged that users print a better quality copy in their own labs.

By initialing each of these points, the user and PI acknowledge that they agree with these written policies. A violation of ANY of these points is grounds for Penalties and possibly IMMEDIATE and PERMANENT loss of privileges.

General Penalty Outline

The following penalties will be applied should any of the above guidelines be abused:

1. A warning letter or email to the PI and user after the first offense and a mandatory “retraining” (at no charge to the PI) to ensure that the user understands how to properly follow CIC guidelines, and correctly care for the instruments.
2. A second warning letter after the 2nd offense stating that if it happens again then the user’s password will be revoked.
 - Any time spent by the CIC Facility servicing or cleaning the machine to correct the second offense is billed to the PI.
3. After the 3rd offense the user’s password is revoked. The user can still access the machines during normal working hours but a CIC operator will have to make their reservation and log them in and out. This will give the CIC the opportunity to observe that the user is able to follow all guidelines and properly care for the instrument.
 - Without a password the user can’t run the machine after hours or on the weekend. Because the CIC Facility needs to make the reservation and log the user in and out they would have to be given 24 hours notice before each experiment.
4. If a user is caught running the instrument without CIC authorization (i.e. running after hours under someone else’s login), the **entire lab** will lose CIC privileges.

The following penalties also apply to the specific situations (also outlined in the Policy):

1. The authorized user agrees to keep their user name and password confidential. If an authorized user agrees to help an unauthorized user, the authorized user **must** be present at all times. Under these conditions it is the authorized user who is ultimately responsible for the machine. **Failure to comply with this regulation will result in immediate and permanent loss of privileges for all parties involved.**
2. If a user suspects an instrument malfunction, please notify the CIC staff immediately. During off hours, please send an email describing the problem to muscatcc@missouri.edu. **Tampering with the instruments is prohibited and will result in loss of privileges. If a user causes further damage to an instrument by trying to “fix” it, they will be charged for time and labor to repair it as well as loss of privileges.**

3. The authorized user agrees to stay with the instrument during the CIC cleaning procedure as well as shutdown the instrument properly. **Failure of the user to perform proper shutdown procedure, causing the instrument to run dry, will result in loss of privileges.**

Note: The account login system allows for the CIC to properly track who uses the instrument. This login system will be used to enforce our policies and penalties. Be diligent about logging out at the end of your run. If our LOGIN history shows your account as the offending party, you will be penalized- NO EXCEPTIONS.

Printed Name: _____

Signature: _____

PI Name: _____

PI Signature: _____

Date: _____

Email: _____

Phone: _____