medizinische
fakultät
Universität Münster

# User and fee regulations of the Münster Flow cytometry facility (MFlow)

## 1. Introduction

### 1.1 Overview of the Flow Cytometry Platform

MFlow serves as a scientific facility within the Medical Faculty of the University of Münster, dedicated to advancing research through state-of-the-art flow cytometry services. Its mission is to provide comprehensive support in utilizing cutting-edge flow cytometers and cell sorting technologies, offering access to all research groups at the University of Münster.

Functioning as a decentral facility, MFlow integrates instruments located across the university campus. The network facilitates booking and billing for connected instruments, ensures proper maintenance and repairs, provides training on the operation of complex equipment, and supports the development of analysis pipelines.

### 1.2 Purpose of this Document

This document aims to inform users about the services offered by MFlow, outline the policies and procedures for accessing these services, and provide details on associated fees.

## 2. Scope of Services

### 2.1 Instruments and Equipment

New acquisitions of flow cytometers and cell sorters at the Medical Faculty of the University of Münster will be managed and operated by MFlow. Currently, MFlow offers access to a range of state-of-the-art cytometry instruments, categorized into three types:

- Conventional Analyzers
- Spectral Analyzers
- Spectral Sorters

An up-to-date list of available instruments can be found on the MFlow web site or can be requested from mflow@uni-muenster.de.

### 2.2 Technical Support

MFlow staff provides assistance with:

- Experimental design
- Instrument maintenance

- Coordination with external technical support as required
- Data analysis

### 2.3 Training Programs

MFlow offers comprehensive training programs to ensure users can operate instruments safely and effectively, all trainings must be arranged with MFlow management.

- Mandatory Trainings are required for all new users before instrument access is granted and includes programs of Principles of Flow cytometry and the Instrument Operation Training.
- Optional training programs on sample preparation, panel design, cell sorting and data analysis are offered to MFlow users free of charge every six months, subject to sufficient demand. Alternatively, these programs can be arranged upon request for a fee, as detailed in section 6.1.

### 2.4 Operational Hours

- **Standard Operating Hours:** Monday to Friday from 9am to 5pm.
- Users who have completed the training provided by MFlow personnel, accepted the MFlow User and Fee Regulations, and have an approved Cost Assumption Declaration are authorized to book and use the respective analyzers independently during extended hours.
- Technical support and training are only available during standard operating hours.

## 3. User Policies

### 3.1 Eligibility and Access

Access to MFlow is available to:

- **Internal Researchers:** Staff, and students of the Medical Faculty and the University of Münster.
- **External Academic Collaborators:** Researchers from academic institutions outside the Medical Faculty and the University of Münster.
- **Industry Clients:** Organizations interested in utilizing our services.

In any of these cases, the access to the services of MFlow requires consultation with the MFlow management. External and industrial partners are subject to a different scale of charges as outlined in section 6.2.

### 3.2 Registration process

- Attend mandatory training sessions.
- Agree to the user and fee regulations of MFlow.
- Complete the MFlow User Registration Form (Appendix A.1).
- Approval of the Cost Assumption Declaration (Appendix A.2).
- (if required) Complete MFlow Project Form (Appendix A.3)

- Prior to first access to the instruments and their associated rooms/laboratories, users must complete a one-time S1 or S2 biosafety briefing with the person or institution responsible for biosafety surveillance of the hosting institute/laboratory.

### 3.3 Scheduling and Reservations

Users are authorized to book and use the analyzers independently after having completed the training, accepted the MFlow User and Fee Regulations, approved the Cost Assumption Declaration, and received an S1 or S2 briefing from the Biosafety responsible of the institute/laboratory where the instrument is located.

Users affiliated with instrument donor institutions are granted priority access when booking their respective instruments, compared to users from non-donor institutions. The terms of this priority booking can be established through an agreement between the donor institution and Mflow management. These terms may include options such as unrestricted booking access (while non-donor users are limited to booking up to one week in advance), extended usage hours, and/or reserved time slots.

- Bookings are made via a central booking calendar.
- The cell sorters have a designed operator and are only offered as a service. Theoretical instruction on cell sorting is provided upon request but is not mandatory for booking the service.
- Flow cytometers can be booked in cycles of 30 minutes.
- For users from non-donor institutions, the specified maximum use time is 4 hours. Extended use is possible with prior agreement from MFlow management.
- The information collected through the Booking Calendar and Instrument Logbook is used to generate invoices and general user statistics.
- The time required for startup-daily QC, and shutdown procedures which apply to the first and last users of the day, should be excluded from the booking as no charges are incurred.
- Changes or cancellations should be made at least 12 hours in advance. However, changes/cancellations are possible up until the start of the reservation. Cancellation by the last user of the day does not relieve the user of the responsibility of shutting-down the instrument as outlined in section 5.1.
- Frequent last-minute changes/cancellations may be subject to fees as outlined in section 6.4.
- In the event of no-shows, MFlow charges 100% of the cost of the respective bookings as outlined in section 6.4.

### 3.4 Data Management

- Data generated is initially stored locally (drive D) and from there it must be stored on the university Cloud of CIT.
- University staff can view and analyse the data remotely via their personal account in the University Cloud. In the case of external collaborators and industry clients, data may be transferred through suitable alternatives (e.g., Sciebo cloud service, encrypted USB stick, external hard drive), as determined in consultation with MFlow management. These methods do not require a separate contract.

- The use of personal storage media (USB hard drives and USB sticks) is not permitted.
- Local repositories (drive D) in the instrument's computer are emptied at the beginning of each working week as maintenance actions. MFlow and its management assume no responsibility for lost data.
- All data must be handled in accordance with the published data/privacy policies of the Medical Faculty of the University of Münster. The responsibility for non-compliance lies with the user.

## 4. User Responsibility for Compliance

### 4.1 Adherence to Regulations

Users are responsible for complying with all applicable local, state, federal, and international laws and regulations, including but not limited to:

- Operational and safety protocols.
- Biosafety and biosecurity regulations.
- Bioethics regulations
- Privacy and data protection laws.

Users must adhere to all published Medical Faculty of the University of Münster policies, procedures, and codes of conduct.

### 4.2 Biosafety

- User must complete an S1 or S2 briefing with the person or institution responsible for biosafety surveillance of the institute/laboratory where the instrument is housed.
- Users must comply with all biosafety level requirements and use all personal protective equipment (PPE) appropriate to their samples and the room in which the instruments are located at the time of use.

### 4.3 Confidentiality and Data Security

- While the platform implements measures to protect user data, it is the user's responsibility to ensure the security and confidentiality of their data.
- Users are responsible for retrieving and backing up their data in the university Cloud.

### 4.4 Bioethics Compliance

Users must strictly adhere to applicable bioethical regulations and guidelines when utilizing the services and instruments of MFlow.

- Users must obtain all necessary ethical approvals from relevant Institutional Review Boards or Ethics Committees for the use of human and animal samples.
- Documentation of ethics approval should be maintained by the user and will be presented upon request.

- All human samples must be pseudonymized. No unique personal identifiers or names should accompany the samples.
- Users are responsible for ensuring that informed consent has been obtained from all human donors in accordance with ethical standards and legal requirements.
- Compliance with institutional and national regulations regarding the ethical treatment of animals is mandatory.
- Appropriate approvals from Institutional Animal Care and Use Committees (IACUC) or equivalent bodies must be secured before commencing work.
- Users are fully responsible for complying with all bioethical laws, regulations and guidelines applicable to their research.
- Users must stay informed of and comply with any updates or changes in bioethical regulations that may affect their research.

By requesting to use MFlow services, the user guarantees that he/she/they has/have all necessary approvals and consents.

## 5. Liability and Indemnification

### 5.1 User Liability

- Users and their affiliated organizations are fully responsible for the proper use of the flow cytometry equipment and facilities.
- The first and/or last users of the day, as entered in the booking calendar, are responsible for startup-daily QC, and shutdown procedures respectively. This applies to the last user of the day even if the booking was cancelled.
- A logbook is kept for each device. The user must introduce the date and time of use and special incidents such as accidents or equipment malfunctions must be entered by hand. First and last users of the day must report the startup-daily QC, and shutdown procedures respectively.
- Any damage resulting from misuse, negligence, or failure to comply with operational and scheduling protocols will considered the financial responsibility of the user or their organization.
- Users acknowledge their obligation to cover costs associated with repairing or replacing damaged equipment due to improper use.
- An invoice for damages will be issued to the user or their affiliated organization, with payment expected within a reasonable timeframe, in accordance with institutional procedures.
- MFlow is not liable for loss or unauthorized access to User data due to maintenance or factors beyond its control, such as cyber-attacks or User negligence.

### 5.2 Withdrawal of Access

MFlow reserves the right to revoke booking privileges and access to facilities in the event of misuse and non-compliance, including but not limited to repeated misuse of equipment, non-compliance

with platform policies and procedures, and/or actions that compromise the security or integrity of equipment.

- Users will receive notification by email detailing the reasons for withdrawal of access.
- In some cases, access may be suspended immediately to prevent further damage or safety risks.
- Users may appeal the decision by submitting a written request to the Platform Director within 14 days of notification.
- The appeal will be reviewed, and a final decision will be communicated by email.

### 5.3 Indemnification

By using the services of the platform, users agree to indemnify and hold MFlow and the Medical Faculty of the University of Münster, its officers, employees and agents harmless from and against any and all claims, damages, liabilities, costs and expenses arising out of the user's negligence or willful misconduct, any violation of the platform's policies by the user, and/or violations of applicable laws or regulations during the use of the platform.

- This indemnification applies to all actions, including but not limited to legal fees, settlements, and judgments.
- External users or organizations may be required to provide proof of adequate insurance coverage prior to using the platform's services.

### 5.4 Limitation of Platform Liability

- MFlow provides services "as is" without warranties of any kind, either express or implied, including but not limited to warranties of merchantability or fitness for a particular purpose.
- Under no circumstances shall MFlow or the Medical Faculty of the University of Münster be liable for any indirect, incidental, special, consequential or punitive damages arising out of the use or inability to use the services of the Platform.
- MFlow's maximum aggregate liability to any user shall not exceed an amount proportionate to the value of services rendered, subject to applicable institutional policies and limitations. This shall not affect statutory liability in cases of intent or gross negligence.

### 5.5 Acknowledgment of Risks

- Users acknowledge that the use of flow cytometry equipment involves inherent risks, including exposure to lasers, biological samples, and other hazardous materials.
- By using the platform, users voluntarily assume all risks associated with such activities.

### 5.6 Reporting and Resolving Incidents

- Users must report any incidents, including accidents, injuries, equipment malfunctions, or security breaches, immediately to the head of the platform or platform staff.
- Reported incidents will be investigated promptly to determine cause and necessary corrective actions.
- Users are expected to fully cooperate with any investigations conducted by the platform or regulatory authorities.

## 6. Fee Policies

User fees are used to support maintenance contracts, instrument repairs, essential software updates and service personnel. MFlow's coverage of repair costs is limited to the total fees collected for the specific instrument requiring repair.

The fee structure of MFlow for the use of instruments is in accordance with the German Research Foundation (DFG) guidelines for the use of instruments and core facilities (DFG form 55.04 – 07/24).

### 6.1 Instrument Usage Rates

- **Conventional analyzers:** For the use of the device under this category, 10€/hour will be charged.
- **Spectral Analyzers:** For the use of the device under this category, 25€/hour is waived.
- **Spectral Sorters:** For the use of the device under this category, 80€/hour will be charged in service mode. Operation by the user himself is not possible. From the third hour of use, the costs are reduced to €40/hour.

### 6.2 Additional Services

- **Training and Education:** 70€/hour for non-mandatory training programs.
- **Data Analysis Support:** 70€/hour.

### 6.3 Pricing Tiers

- Costs for external collaborators and industry clients are determined as required and included in the user and cost regulations.
- Changes to the fee schedule will be announced 3 months in advance.

### 6.4 Billing Procedures

- Before a user is authorized to book a device, the respective institute director or a person responsible for the budget must confirm acceptance of the costs by signing the MFlow MFlow User Registration Form and the Cost Assumption Declaration.
- Invoices are issued quarterly and are based on the data recorded in the booking calendar. Invoices are due within 30 days.
- Accepted payment options include direct debit from a pre-specified account or external money transfer. For internal university users, particularly within the Faculty of Medicine, invoicing and internal cost center or fund transfers are also supported, subject to prior approval and availability of booking details.
- Late payments may result in suspension of facility access and additional late fees.

### 6.5 Cancellation and No-show Policies

- Cancellations made less than 12 hours prior to reservation may incur a fee of 50% of the costs for affected bookings.

- Failure to appear for a scheduled session will result in a fee of 100 percent of the costs for affected bookings.

## 7. Quality Assurance

### 7.1 Instrument Maintenance

- Instruments are subjected to quality control checks on each day of use.
- Instruments will undergo routine maintenance at a frequency appropriate to each instrument and its conditions.
- Users will be notified of any planned or unplanned downtime via email.

### 7.2 Standard Operating Procedures (SOPs)

- SOPs are available in the laboratory for all instruments.
- Users should review relevant SOPs prior to operation.

### 7.3 User Feedback

- Feedback is encouraged and can be submitted via mflow@uni-muenter.de
- User input helps us improve our services.

## 8. Intellectual Property and Publications

### 8.1 Data Ownership

- Data generated through the use of MFlow services is the property of the institution on whose behalf the user is acting.

### 8.2 Acknowledgment Policies

- If MFlow equipment was used to obtain data in a publication, MFlow should be acknowledged as follows: "We thank the Münster Flow Cytometry Facility (MFlow) at the University of Münster for assistance with flow cytometric data acquisition, technique, or data analysis".

### 8.3 Authorship Considerations

- In the case of substantial intellectual or experimental contributions, Platform staff may qualify for co-authorship.
- Authorship decisions should be discussed prior to the start of the project. MFlow recommends a meeting between the parties involved (users, facility staff and institute management) prior to such contributions.

## 9. Contact Information

### 9.1 Platform Staff Contacts

- **MFlow Manager:** Raul da Costa, raul.dacosta@uni-muenster.de, +49-251 83 53069

- **Technical Specialist:** Hannah Flüter, flueter@uni-muenster.de, +49-251 83 53127
- **Administrative Assistant:** Henriette Hentrey, hentrey@uni-muenster.de, +49-251 83 53064
- **MFlow Speaker:** Oliver Söhnlein, soehnlein@uni-muenster.de, +49-251 83 53001

### 9.2 Support Services

- For assistance, contact mflow@uni-muenster.de
- Support requests will be addressed as soon as possible.

## 10. Appendices

### Appendix A: Forms and Applications

- **A1: User Registration Form**
- **A2: Cost Assumption Declaration**
- **A3: Project Form**

## 11. Policy Updates and Revisions

### 11.1 Version Control

- **Document Version:** 1.0
- **Last Updated:** 28.07.2025

### 11.2 Amendment Procedures

- Policy changes will be communicated via email.
- Users are responsible for reviewing updates.

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