# GENERAL FRAMEWORK FOR USE OF IMB CORE FACILITIES

#### **PREFACE**

JGU's master Terms of Use serve as a template for this document; these Terms of Use have been adjusted to suit IMB.

Core Facilities (CF) are central, scientific infrastructure and service units that operate according to CF concepts at the Institute of Molecular Biology (IMB) gGmbH in Mainz. The use of the CF is governed by the binding **General Framework for Use of IMB Core Facilities** and the specific **Terms of Use** of each respective CF in accordance with § 11. This framework allows for a simple, uniform and transparent manner of cooperation between CFs and users.

#### § 1 DEFINITIONS

- (1) Core Facilities provide scientific services (hereinafter referred to as **services**). Services are differentiated into
  - a) **operator service**, which refers to CF staff providing services or in-house produced products for the users, or
  - b) **application service,** which refers to authorized users operating CF instruments largely independently.
- (2) Each CF has specific **Terms of Use**. These regulate the intersection between users and CFs.
- (3) **PIs** are heads of scientific research groups. They are ultimately responsible for the execution of scientific projects.
- (4) **Users** are persons who make use or want to make use of a CF service.
- (5) **Internal users** are persons with an IMB contract or groups with IMB CF budget or those who are members of institutions that have active collaboration agreements with IMB or the Core Facilities.
- (6) **External users** are all other users not included in (5).
- (7) A **booking** is
  - i. a reservation of usage time for application service or
  - ii. a commissioning of an operator service.
- (8) **Access to CFs** describes the registration of users for potential use of CF services.

- (9) Access to services describes the basic eligibility to book or commission services.
- (10) **Management platform** for some CF services is the "OpenIRIS" web application. It is used for depicting, booking and invoicing of CF services. The following terms are used in the context of OpenIRIS:
  - a) **Providers** offer services. CFs are set as providers.
  - b) Resources describe CF instruments that are offered by a provider.CFs are free to utilize other management platforms if better suited for their services, such as LIMS.
- (11) **CF User Committees** are composed of the Director of Core Facilities, the Head of the CF and representatives of the PIs. Further details are outlined in the CF operating concept.
- (12) **Cost-bearing unit** at IMB is each working group with its own cost center, at JGU, UMC, MPIP, LIR, each organizational unit and each legal entity, its employees, vicarious agents or otherwise associated persons who make use of CFs.

#### § 2 SCOPE OF APPLICATION

- (1) These regulations govern the use of the services offered by IMB CFs.
- (2) The Terms of Use of each CF refer to this General Framework for Use of IMB Core Facilities. In the event of contradictions, the provisions of the General Framework for Use shall apply.
- (3) The General Framework for use is binding for all persons using the services of CFs at IMB.

#### § 3 ACCESS TO CF

- (1) Access to CF is regulated for various user groups:
  - a) Groups with an IMB Core Facility budget are prioritized and automatically have access or are granted access after request.
  - b) Internal users (see §1(5)) without an IMB Core Facility budget have access either automatically or after CF access request, as long as free capacity is available.
  - c) External users are granted access upon request in case of legitimate interest and available capacities (see § 4).

#### § 4 ACCESS TO CF SERVICES

(1) At the discretion of CF management, access to CF service is granted automatically with access to the CF or, depending on type of service, after consultation and in the case of justified interest while considering instrument-specific third-party funding lock-up periods. Access may be limited in time and linked to a training.

(2) Access regulations vary between CFs due to spatial conditions and legal frameworks (e.g. biosafety requirements) and are therefore defined by the CF Terms of Use in accordance with § 11.

#### § 5 BOOKINGS

- (1) For application service, booking of usage time is mandatory. For application service, the person entered in the booking bears full responsibility for the correct use of the resource.
- (2) Booking procedure for services is determined by the CF-specific Terms of Use in accordance with § 11.
- (3) In case of internal use, the person entering the booking must specify the project to which the ordered/booked service belongs (e.g. by specifying the "cost center" or the "billing object").
- (4) For operational reasons, CF may cancel a booking on short notice.

#### § 6 PROVISION OF DATA

- (1) The measurement data and results generated during **operator services** shall be recorded by CF in a suitable manner, stored digitally and made available to the users.
- (2) For **application service**, the data can be temporarily stored on the measuring devices used. Users are strongly encouraged to transfer the data collected on the measuring devices to a central IT storage structure immediately after measurement.
- (3) The storage and archiving of data is the responsibility of the user unless otherwise noted and agreed upon with the respective CF (e.g. Bioinformatics, Genomics).

#### § 7 OCCUPATIONAL SAFETY

- (1) Instructions from CF personnel must be strictly observed.
- (2) The CF is solely responsible for workplace-specific safety instruction. The responsibility for general safety instructions lies with the user's supervisor. The CF may specify in the core facility-specific Terms of Use according to § 11 which topics must be covered by the general safety instruction. Sentence (1) shall remain unaffected by this.
- (3) CF instrument operation requires documented safety instruction by an authorized person.
- (4) Prior to booking and use, applicable statutory provisions must be observed. Users must ascertain whether special legal requirements have to be met for the intended use (see CF-specific Terms of Use according to § 11).

A non-exhaustive list of examples:

- Occupational health and safety regulations (also regarding the use of lasers etc.),
- Ordinance on Hazardous Substances

- Genetic engineering laws (GenTG, GenTSV, GenTAufzV)
- Ordinance on Biological Substances (BioStoffV)
- Animal protection laws (TierSchG)
- Disposal of chemical waste

#### § 8 COSTS

- (1) The use of CFs is subject to a charge. The costs will be charged to the cost-bearing unit.
- (2) Prices are based on the legal and tax requirements for the respective project. The same usage fees shall apply within the usage groups. The current price list is part of the CF Terms of Use. The price list valid at the time service is provided shall apply; previous price lists shall become invalid accordingly.
- (3) If the costs to be invoiced are higher than the costs that can be invoiced via a third-party funded project, the CF may show these in a separate invoice.
- (4) Booked times will be charged if they are not canceled in due time, regardless of use. Cancellation deadlines are defined in the CF specific Terms of Use (§ 11).

#### § 9 PUBLICATIONS AND GOOD SCIENTIFIC PRACTICE

- (1) JGU<sup>1</sup> regulations and DFG<sup>2</sup> Guidelines for Safeguarding Good Scientific Practice in the CF apply.
- (2) CF staff who make a substantial scientific contribution to a publication are to be treated in the same way as all other researchers involved. Co-authorship is independent of cost sharing.
- (3) As soon as instruments or services (including in-house produced products) of a CF have contributed to a publication, the CF must be named in the publication. Further details are regulated in the CF-specific Terms of Use in accordance with § 11. The CF acknowledgment must also include the funding code/project number of publicly funded large-scale equipment.
- (4) Publications (papers, patents and theses) based on work carried out at the CF must be submitted to the CF. Further details are governed by the CF-specific Terms of Use in accordance with § 11.
- (5) In the event of non-compliance, § 12 (1) shall apply.

#### § 10 LIABILITY

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<sup>&</sup>lt;sup>1</sup> https://gwp.uni-mainz.de/files/2023/04/JGU-Mainz\_Ordnung-zur-Sicherung-guter-wiss-Praxis\_2023-02-13.pdf

<sup>&</sup>lt;sup>2</sup> https://zenodo.org/record/6472827

- (1) CF's liability towards users is limited to intent and gross negligence. In particular, CF assumes no guarantee for the test material and no liability for loss of data.
- (2) Users shall be liable in accordance with the statutory provisions. Any damage or malfunction must be reported to CF staff immediately. In the event of gross misconduct, CF management reserves the right to charge the costs incurred to the cost-bearing unit of the relevant user.

#### § 11 CORE FACILITY TERMS OF USE

- (1) The individual Core Facility must at least list the following information in their Terms of Use:
  - a) Scope of the General Framework for Use of IMB Core Facilities
  - b) Person(s) of contact
  - c) Equipment
  - d) Operating hours and allocation of usage time (application service)
  - e) Commissioning of services (operator service)
  - f) Cancellation and no-show conditions
  - g) Criteria for the allocation of usage time in the event of overbooking
  - h) Requirements/ necessary instructions/ necessary preparations for use (in particular preparation of the test material, necessary permits)
  - i) Return of sample(s)
  - j) Data processing, forwarding and, if applicable, archiving
  - k) Legal safety regulations and the resulting necessary instructions
  - I) Acknowledgment of the core facility used and naming of equipment funding in publications
  - m) CF services and prices (appendix)
- (2) The Terms of Use shall be linked on the management platform (iris.uni-mainz.de) and made available on the publicly visible homepage of the respective CF.

#### § 12 RESTRICTION OF USE

- (1) In the event of improper use of the CF, disregard of rules or usage regulations or disregard of the instructions of CF staff, the CF management or its representative shall have the right to temporarily exclude the person or group concerned from using the CF with immediate effect. The same applies to users repeatedly failing to observe the rules of good scientific practice, including proper acknowledgment of CFs in publications. The CF User Committee shall decide on any exclusion lasting more than three months or permanent exclusion after hearing the CF management and the person and/or PI concerned.
- (2) Users shall not be entitled to compensation for damages due to the refusal, revocation, or subsequent restriction of access in accordance with §1.

#### § 13 DATA PROTECTION

(1) CF is entitled to store all data necessary for the processing of the use, including personal data of the users, and to use it to the extent necessary. The data will not be passed on to third parties for any purpose other than those mentioned above.

#### § 14 SEVERABILITY CLAUSE

Should any provision of these Terms of Use be or become wholly or partially unenforceable or void, or should a loophole be found in these Terms of Use, this shall not affect the validity of the remaining provisions. The invalid or unenforceable provision shall be replaced or the loophole filled by a valid and enforceable provision that achieves the original legal and economic intent and purpose. If the invalidity of a provision is based on a measure of performance or time (deadline or date) specified therein, the provision shall be reconciled with a legally permissible measure that comes closest to the original measure.

#### §15 TAKING EFFECT

These Master Terms of Use become effective on 01.01.2025. At the same time, any previous Terms of Use of the Core Facilities shall cease to apply.

Mainz, 17. December 2024

Dr Andreas Vonderheit

Director of Core Facilities and Technology

Institute of Molecular Biology Mainz

Andrews Jonderheit

## TERMS OF USE FOR

## FLOW CYTOMETRY CORE FACILITY

#### 1. SCOPE OF MASTER TERMS OF USE FOR IMB CORE FACILITIES

Use of the Flow Cytometry CF (FCCF) occurs in accordance with the General Framework for Use of IMB Core Facilities, which can be found here <a href="https://www.imb.de/core-facilities/">https://www.imb.de/core-facilities/</a> as well as the following defined content.

#### 2. POINTS OF CONTACT

For training requests or advice, please contact the Flow Cytometry team (<u>cytometry (at) imb-mainz.de</u>) or the CF Head (<u>s.moeckel (at) imb-mainz.de</u>). Further contact details for the CF team are available in OpenIRIS (<a href="https://www.imb.de/core-facilities/flow-cytometry">https://www.imb.de/core-facilities/flow-cytometry</a>.

#### CF Head:

• Dr Stefanie Möckel: s.moeckel (at) imb-mainz.de; cytometry (at) imb-mainz.de

#### 3. EQUIPMENT AND SERVICES

The Flow Cytometry Core Facility provides comprehensive flow cytometry services, offering access to state-of-the-art flow cytometry instruments and expert guidance. The FCCF offers full service on cell sorting, comprehensive training for independent use of the analyzers and assistance with initial setup of new experiments. After training, the analytical flow cytometers and the data analysis workstation can be booked and used in self-service mode. In addition, FCCF can assist with planning and design of flow cytometry experiments and support with data analysis using the software FlowJo.

#### List of available instruments

Instrument	Instrument class (defined by DFG)	Description	Service Type	Initial Operation	(OpenIRIS Link)
BD LSRFortessa SORP	Instrumentation class II	cell analyzer	application service and operator service	2012	BD LSRFortessa SORP
Agilent NovoCyte Quanteon	Instrumentation class II	cell analyzer	application service and operator service	2022	Agilent NovoCyte Quanteon
BD FACSAria III SORP	Instrumentation class III	cell sorter	operator service	2012	BD FACSAria III SORP

Invitrogen Bigfoot	Instrumentation class III	cell sorter	operator service	2022	Invitrogen Bigfoot
Union Biometrica BioSorter	Instrumentation class III	cell sorter (large particle)	operator service	2013	Union Biometrica BioSorter

#### 4. OPERATING HOURS AND ALLOCATION OF USAGE TIME

#### **Hours of Operation**

Mon – Thu	Fri	Sat – Sun, incl. holidays
Application service	Application service	Application service
Internal/access permit: all day	Internal/access permit: all day	Internal/access permit:
External: 07:00 – 19:00	External: 07:00 – 19:00	External: not available
Operator service	Operator service	Operator service
09:00 – 17:00	09:00 – 16:00	not available

The CF reserves the right to adjust hours of operations or closing times.

#### • Allocation of usage time for CF services:

Usage time and service request acceptance are allocated according to the first-come-first-serve principle.

Booking of instruments before use is mandatory. Instruments can be booked up to 6 weeks in advance by registered users using the online calendar. For the sorters, the booking needs to be done with at least 48 hours' notice. Individual users should not book more than 4 time slots (>4 hours each) per week and instrument.

Bookings for more than 4 time slots per week (>4 hours each) and instrument is possible after contacting the FCCF team. Time intensive or long-term measurement/experiments on the analyzers should be scheduled during off hours (i.e., between 7 p.m. and 7 a.m. or on weekends). If this is not possible, please contact the FCCF team.

#### 5. COMMISSIONING OF CF SERVICE

Obligatory requirements for sample preparation are available on the SharePoint.

Urgent measurements or special requirements can be arranged by telephone or email.

#### Contact:

Area	<b>Phone</b>	Email
0.281/0.287	39-21519 / 39-21509 / 39-21514	Cytometry (at) imb-mainz.de

#### 6. CANCELLATIONS AND NO-SHOW TERMS

For cell sorters, cancellations within 48 hours or less before the booking will be charged at 100%. No-shows (i.e. not utilized booking without cancellation) will be charged at full price (100%). For cell analyzers, cancellations within 36 hours or less before the booking will be charged at 100%. No-shows (i.e. not utilized booking without cancellation) will be charged at full price (100%).

## 7. DECISION CRITERIA FOR THE ALLOCATION OF USAGE TIME IN THE EVENT OF OVERBOOKING

In the event of overbooking, internal users with IMB core facility budget are prioritized over other internal users and these ahead of external users. In the case that further prioritization is necessary, it will be determined with the CF's User Committee.

The CF Head also reserves the right to refuse bookings and commissions for service at his or her own discretion stating reasons.

## 8. REQUIREMENTS/ NECESSARY INSTRUCTIONS/ NECESSARY PREPARATIONS FOR USE (IN PARTICULAR PREPARATION OF THE SAMPLES, NECESSARY PERMITS)

- Requirements and necessary instructions for operator service:
  - On cell analyzers and analysis software: If additional assistance is needed, the booking type in the Open IRIS software can be changed from 'Regular Usage' to 'Operator Assisted' (additional charges apply). Operator confirmation is required for this modification, and assistance is guaranteed only upon receipt of a booking confirmation.
  - On cell sorters:
    - Users can independently enter bookings, but for the completion of the booking process, filling in a booking form is required. The form gathers crucial details about the experimental setup, including cell and sample counts, provided controls (both experimental and technical), biosafety, staining panel, etc. Booking is considered incomplete until receipt of a booking confirmation.
- Requirements and necessary instructions for application service:
   Use of application services in the Flow Cytometry CF only after booking an appointment in OpenIRIS and with valid instruction by FCCF staff. Measuring for colleagues is not allowed unless they are registered users of the facility.

Necessary preparations for the use of the CF, in particular sample preparation, required permits, etc.:

 Sample preparation should occur according to instructions provided on the SharePoint or a digital copy can be provided upon request. When conducting measurements in tubes, only the following tubes are permitted for use with our cell analyzers: Falcon 5 ml 12x75 mm tubes (#352008, #352058, or #352235).

#### • Biosafety guidelines:

- For work with genetically modified organisms, permits and documents in accordance with GenTG, GenTSV, and GenTAufzV must be available before work begins.
- Analysis and sorting of samples beyond biosafety level 1 (BSL-1) are not permitted on the LSRFortessa, Novocyte Quanteon, and FACSAria.
- Human samples must be accepted only from tested patients (HBV, HCV, and HIV negative) or are otherwise considered as BSL-2.
- All other materials beyond BSL-1 need to be fixed with formaldehyde before measurement on the analyzers. Suitable downgrading protocols can be provided upon request.
- Sorting of samples originating from BSL-2 material (e.g., transduction or infection with lentivirus, adenovirus, retroviruses; untested patient material) must be carried out on the Invitrogen Bigfoot. The following documents have to be provided by the user no less than one week before the experiment: risk assessment, GMO datasheet (Formblatt GO) and official approval or proof of project submission to local authorities.

#### 9. RETURN OF SAMPLES

N/A

#### 10. DATA PROCESSING, SHARING AND, IF APPLICABLE, ARCHIVING

Measurement data and reports on service measurements are made available to internal users via a group drive. For external users, the data can be provided via Seafile or by other arrangement.

Measurement data from the use of Flow Cytometry CF is stored on the **measurement computer and group drive for 1 month**. Users are responsible for storing data in the central IT infrastructure.

It is not permitted to connect your own storage media directly to the CF computers.

## 11. STATUTORY SAFETY REGULATIONS AND THE RESULTING NECESSARY INSTRUCTIONS

The general requirements for safe work in the laboratory apply. The regulations on biological safety, genetic safety, radiation protection and laser safety must be observed. By signing the Terms of Use, the PI confirms that all applicable safety instructions have been given.

## 12. ACKNOWLEDGING THE CORE FACILITY AND USE OF EXTERNALLY-FUNDED INSTRUMENTS IN PUBLICATIONS

The existence and financing of core facilities depends in part on proper acknowledgment in publications. This is an important metric of the value of most core facilities, so if you publish any data that were generated with one or more instruments or with the help of the Flow Cytometry Core Facility, we ask that you include an acknowledgement in your publication. The CF used and, if applicable, the instrument funding project number and persons must be named in the acknowledgement of the publication. Please see the following examples.

#### Acknowledging the CF:

"The authors gratefully acknowledge the IMB Flow Cytometry Core Facility for their support and assistance in this work."

Acknowledging the CF if flow cytometers from groups other than Flow Cytometry CF have been used (including statement, which part of the experiments were performed at IMB):

"We thank the IMB Flow Cytometry Core Facility for usage of the [enter Flow Cytometry CF instrument name], which was used for [enter application, method or assay]."

Acknowledging the CF and CF staff (including the reason why the person is being acknowledged):

"The authors thank [enter staff name] of the IMB Flow Cytometry Core Facility for their support and assistance with cell sorting and data analysis in this work."

Acknowledging the CF, CF staff (including the reason why the person is being acknowledged) and instrument including project funding number:

We thank the IMB Flow Cytometry Core Facility, especially [enter staff name] and [enter staff name], for their assistance with [type of assistance] analysis and [type of assistance]. [Method] was performed on the [instrument name & project number].

List of instruments for which the funding and the funding project number must be specified:

	Instrument	DFG Project #
Flow Cytometry	BD FACSARIA III SORP (CELL SORTER)	210144599
	BD LSRFORTESSA SORP	210253511
	INVITROGEN BIGFOOT (CELL SORTER)	511658729
	BIOSORTER	233119806

Before publication, the materials and methods section describing FCCF methods should be submitted to the FCCF for proofreading.

The Flow Cytometry Core Facility is pleased to collaborate on scientific projects. Co-authorship is warranted whenever our scientists have provided substantial intellectual contribution to the project. Please apply the same standards as you would within your group or with collaborating groups. CF service fees are meant to cover part of the running costs and do not preclude authorship involvement in accordance with the principles of good scientific practice.

#### 13. TAKING EFFECT

These Terms of Use become effective on 01.01.2025. At the same time, any previous Terms of Use of the Core Facilities shall cease to apply.

Mainz, 17. December 2024

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J. Nochel

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