

User regulations

for users of non-university institutions

Core Facility for Cell Sorting and Cell Analysis

Version of 25th March 2024

1 Organization

1.1 Head

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1.2 Technical management

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1.4 Access

Information about the Core Facility for Cell Sorting and Cell Analysis can be found on the internet at <https://zsa.med.uni-rostock.de>.

The offer is available to the following user groups:

- University medical staff (separate user regulations)
- Employees of the University of Rostock (separate user regulations)
- External users

At full capacity, the staff members decide whether to accept new projects, with groups from the Rostock University Medical Center being given priority.

The employees of the Core Facility are usually available between 08:30 a.m. and 16:30 p.m. Users who have received complete instruction in the devices can use them within the specified time.

2 Equipment

The Core Facility for Cell Sorting and Cell Analysis has three flow cytometers for analyses; the Cytex™ Aurora, the BD FACSCalibur™ and the BD FACSVerser™, three different cell sorting systems; BD FACSAria™ Illu, the autoMACS® Pro Separator, as well as magnets for manual MACS separations and the Luminex100 / 200 for the multiplex bead-based analyses of soluble proteins. Furthermore we grant access to the BD Rhapsody barcoding system for single cell RNA analysis. USB dongle with a transportable license for the FlowJo™ and the SpectroFlow software can be borrowed for data evaluation.

The exact description of the devices, their configuration and applicability can be found on the homepage at <https://zsa.med.uni-rostock.de/ausstattung>.

3 Range of services

3.1 Services offered by the Core Facility

- Assistance in planning of flow cytometric experiments
- Individual instruction in the devices and the acquisition software
- Advice on possibilities of cell sorting and their implementation on the BD FACSAria™ Illu
- Establishment and measurement of marker panels (up to 27 colors)
- Advice and implementation of magnetic-based cell separation
- Advice and instruction in single cell RNAseq barcoding via the BD Rhapsody system
- Support in the evaluation of flow cytometric data including advice on the subsequent statistics
- Regular care and maintenance of the devices, performance check and data backup

3.2 Obligation of the user

- Recognition of the user regulations by the project manager and the user him/herself
- Booking of devices via the online booking portal *Clustermarket*
- Responsible use of the devices and provided workplaces
- Transport and anonymization of samples to the premises of the Core Facility

- Information about the success of experiments, especially after sorting

4 Registration

Individuals interested in using the Core Facility contact its employees to make an appointment for an initial meeting about the planned project.

This initial meeting serves to discuss the project at hand, the suitability of devices, sample preparation and protocol.

Up to three appointments (approx. 1.5 hours each), depending on the device complexity and individual prior knowledge, are agreed upon during which the user is familiarized with the device and the corresponding software. The user carries out the device settings for the specific sample with the help of employees.

Interested users acknowledge our user regulations, which can be downloaded from the Core Facility homepage. The last two pages of the user regulation are printed out and signed by the project manager and the user, then returned to the employees.

After successful registration and completion of the training units, the user is authorized by the employees to book the devices and consumables via the online booking platform *Clustermarket*, where the user must create an account.

This procedure is summarized in a welcome email that the user receives after the initial meeting.

In addition, the user obtains an email with some links and tips on the theory of flow cytometry.

5 Booking of devices

After successfully completing the introductions, the user is authorized by the staff to book the devices via *Clustermarket*.

An exception applies to the BD FACSAria™ IIIu, which can only be booked after direct consultation with the employees of the Core Facility.

If the devices are defective, a notification is sent by email and a notice is given on the homepage. Affected users report immediately to the employees of the Core Facility, so that the measurement can be carried out on an alternative device if necessary.

Booking by or for colleagues is not allowed. However, an unregistered user can work on the devices under the supervision of a registered, experienced user. This must be expressly approved by the Core Facility staff.

6 Cancellation policies

Cancellations up to 6 hours before the booked sessions are free of charge. The user is asked to inform subsequent users about this so that they can, if necessary, bring their measurement forward.

Cancellations shorter than 6 hours will be charged at the full hourly rate.

If the last booking on that day is canceled, the user must ensure that the device is switched off.

7 Responsibility of the user

The user agrees to the user regulations via his/her own signature plus the signature of his/her supervisor and submits the signed documents to the employees of the Core Facility. The users may only use the corresponding devices independently after successful instruction, after returning the signed user regulations (last two pages), and after having received safety instructions. Each user undertakes to clean the devices according to the instructions, to prepare them for the next measurement, for documenting the session in the logbook and to clean the workplace (tidy up and disinfect).

8 Responsibility of the Core Facility

The Core Facility employees service and clean the devices regularly. A so-called performance check is performed regularly and ensures reliable measurements. Every activity by the employees is documented in the folder for users to view.

The employees maintain discretion about planned and ongoing projects towards third parties. Exceptions must be agreed individually.

9 Biosafety

The user's project manager is responsible for the annual, documented instruction on genetic engineering, infection protection, occupational safety, etc. and guarantees the user's knowledge on the respective safety classifications, transport and handling of biological samples.

As part of the briefings, a short safety instruction is given by the employees of the Core Facility. This is documented with a signature (see appendix to this user regulation) and is repeated annually. The laboratories in which the devices are located are class II (BioStV and GenTG) approved. Appropriate protective measures, such as wearing laboratory protective clothing (bring your own protective clothing or take it out of the central pool) and hygienic working methods (disinfection of workplace and hands) are compulsory.

The users must document their measurement in the logbook, which is available on each of the devices. Especially measurements of S2-level samples (e.g. human samples, virally transduced samples) must be reported.

Higher safety measures must be taken when using the BD FACSAria™ IIIu, as the device produces aerosols due to its operating modes. Therefore it is inevitable that the employees of the Core Facility are informed in advance of the safety aspects of the sample to be analyzed or sorted. If necessary, appropriate measures for prevention and decontamination of the device are discussed and initiated.

10 Data collection, evaluation and storage

The Core Facility is responsible for the correctness of the data collection and evaluation. The user is obligated to export his data and save it on an external storage medium. The collected data belongs entirely to the user. The standard formats *fcs, *xls, *doc, *odt, *ods, *csv, *png and *svg can be used for data exchange.

The employees archive the raw data every six months in the form of a backup, which saves the data on external hard drives of the appropriate devices and also on external, transportable hard drives as part of the regular cleaning / maintenance of the devices.

11 Acknowledgment in publications

The users of the core facility agree to adequately recognize the use of the core facility in accordance with the rules of good scientific practice.

This means that the use of the devices and the services provided by the Core Facility staff must be mentioned in every form of publication. This also includes theses, conference contributions, third-party funding applications and patent applications.

Employees of the Core Facility will be taken into account when publishing data that was established and collected in the Core Facility with the cooperation of the responsible persons of the Core Facility. Co-authorship is granted depending on the scope of services provided by the respective employees. Of course, this requires participation in the writing of the corresponding manuscript.

For the Core Facility, the above-mentioned references are important proof of the necessity for their existence and serve the further development within the framework of evaluation processes and third-party funds applications.

12 Costs

The use of the online booking portal *Clustermarket* costs €23.00 per year and is passed on to the user with the first quarterly invoice.

A fee is charged for the use of the equipment, which is shown in the table below. The costs incurred are invoiced on a quarterly basis.

Device/Product	Type of use	Gross price
BD FACSAria™ Illu	assisted	145,00 € / hr
BD FACSCalibur™	autonomous	53,00 € / hr
BD FACSVerse™	autonomous	80,00 € / hr
autoMACS® Pro Separator	autonomous	82,00 € / sample
Cytek® Aurora	autonomous	58,00 € / hr
Luminex®100/200™	autonomous	258,00 € / hr
BD Rhapsody	autonomous	209,00 € / cartridge
FlowJo™ /SpectroFlo Dongle	-	35,00 € / day *

* The dongle can be picked up and returned between 8:30 a.m. to 16:30 p.m.

user name: _____

user group: _____

Recognition by signature



Rostock, 25th March 2024

Date

Signature Prof. Dr. Brigitte Müller-Hilke, head of the core facility

Rostock, _____

Date

Signature user

Rostock, _____

Date

Signature project manager

Appendix

Documentation of safety instructions for the user

Date	Signature	
	User	Instructor