

**Standard Operating Procedure
for
Central Instrumentation Facility (CIF),
AIIMS Bhopal**

Ref Number: AIIMS/BPL/TMC/CIF/2023/879

Dated 07/07/2023

Standard Operating Procedure for Central Instrumentation Facility (CIF), AIIMS Bhopal

Version No:1.0

Date of implementation: 14/06/2023

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Reviewed by: Dean Research, AIIMS, Bhopal

Approved by: Executive Director, AIIMS, Bhopal

List of Amendments

S.NO	NATURE OF AMENDMENTS		PAGE NO.	DATE
	BEFORE	AFTER		

Purpose

Purpose of this document is to outlay complete guidelines to ensure full potential utilization of the facilities in Central Instrument Facility at AIIMS, Bhopal. This SOP is to describe the procedures to be followed to use the facility at CIF. This document is intended for faculty, students (Undergraduate, Post Graduate and PhDs), research staff of AIIMS Bhopal. This document also intends to guide researchers and users from outside AIIMS Bhopal.

Mission:

“Our mission is to provide cutting edge infrastructure for world class research and quality diagnostics with the support of advanced high end instrumentation.”

Scope

Central Instrumentation Facility is being established at AIIMS, Bhopal, to provide users an access to a wide range of high-end instruments for pushing the boundaries of biomedical research to world class standards. These instruments and facilities help the faculties, research scholars and students of AIIMS, Bhopal to carry out globally competitive clinically relevant Biomedical research and theragnostic development for better healthcare. The high-end equipment currently installed in this facility offer users to employ cutting edge technologies such as Next Generation Sequencing (NGS) technology, *In-vivo* imaging, Cell sorting and counting etc.

The CIF hopes for extending the facilities each year and making it a core and centralized facility for maximum utilization of the high-end resources. By realizing full functional potential of CIF, we expect a prominent hub for pioneering and collaborative research especially for central part of the country. CIF is expected to self-sustain by revenue generation for the upkeep and maintenance of the instruments. Hence, a nominal charge on sample testing and analysis will be collected from the users.

Terms of usage

- Cost of the services: The user needs to mention about the funds and availability of consumables for these high-end equipment. This could be either having their own funds for reagents or using the equipment on a paid basis. User charges need to be paid as approved by the competent authority.

Note: Damage to any Central Instrument machines by user(s) may be subject to charges.

SOP No. CIF/1	Standard operating procedure for the use of instruments (Approved by Hon'ble Executive Director, AIIMS Bhopal on 14/06/2023)
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I. Procedure to use the equipment

1. Prior to booking an appointment for the Instrument, kindly send an email request through the concerned HOD, to the HOD, Department of Translational Medicine.
2. A visit to CIF/Translational Medicine Laboratories at 3rd Floor Medical College Building will be arranged to discuss your experimental requirements and planning for equipment use, with the current In-Charge Faculty member(s) of the particular instrument.
3. As a follow up from S. No. 2 above, the equipment to be used will be booked.
4. Perform initial steps that do not require CIF laboratory use for sample processing. Then bring samples and all necessary reagents (as per their storage requirement) to CIF.
5. Users should come 30-45 minutes in advance to the laboratory, with all necessary consumables, accessories such as pipettes, tips, tissue paper etc.
6. All instrument operational steps will be performed by trained CIF scientist/staff. User presence is required during every step for data procurement.
7. Collect/store your data.
8. Perform necessary cleaning of laboratory space (instruments and accessories) after use. Remove and dispose appropriately, the used tubes/strips/plates/tissues/solutions from the bench.
9. Make sure to enter requested details in the instrument logbook (provided) prior to using instrument and leaving the facility.

II. Reports

10. Raw data in the form of analysis reports will be sent by email, or the user may pick it from the CIF in Pen drive, in case of large data file.
11. All the records will be stored for a maximum of 45 days following analysis. After the said period data may be deleted due to shortage of storage space.

12. Specifications of instrumental conditions utilized in the analysis as well as calibration, curves, calculated concentrations, can be obtained and matching library data may be provided.
13. If the user wants to note the software settings details, he/she may save the same in his/her notebook for future reference.
14. CIF will ensure to safeguard the data privacy and strictly preserve the IPR of the users.

III. Timings

15. The facility is expected to run on all working days (from 9 am to 6 pm). However, all users can deposit their samples from Monday to Friday (9 am to 1pm) at the office of CIF.
16. The facility will abide by the holidays of the Institute and remain closed on these days.
17. Saturdays are reserved for the maintenance of instruments, meetings and events (workshops etc.).
18. Users can collect their reports from 3-5pm (Monday to Friday) from the office of CIF.
19. In compliance to directives of Office order DIR/AIIMS-BPL/OO/2021/338, dated 18/10/2021, Department of Translational Medicine will be taking care of calibration and maintenance of the instruments periodically, in collaboration with the companies using their standards.

IV. Responsibilities of the users

20. Users have to prepare and process their samples following reliable protocol. In case of any query, the user may consult CIF for advice for the right method to follow.
21. The user has to decide his/her experiment and choose appropriated kits and protocols accordingly. Please note that CIF only offers machine and technical assistance during run, but has no responsibility for issues regarding the quality or yield obtained after run.
22. Once the machine use is over, user need to clean working areas and discard all the used consumables, plasticwares etc prior to leaving.

V. Responsibilities of the CIF staff and Faculty-In -Charge for equipment

23. Scientists/staff under the supervision of Faculty-In-Charge for a particular instrument, will be performing all procedures involved in handling the instrument and data acquisition.
24. As mentioned earlier under 4– IV, the user is required to perform initial steps of sample processing as guided by Faculty -In-Charge. However, may ask for support in case of any need.

25. Considering the nature of high-end equipment, CIF scientists and staff will ensure that the all-necessary precautions are being taken to ensure safer run.
26. User's protocols have to be approved by CIF staff to make sure that this do not cause any damage to the machine/instruments.

