
Tissue processing facility: CRYOSTAT

Overview

The tissue processing facility @DSB provides an essential platform for the preparation of tissue samples used in biomedical research. Its instruments, such as cryostats, microtome, tissue dissociators and homogenizers, automated tissue processors, and paraffin embedding stations, provide users with an efficient and specialized environment for the preparation and analysis of tissue samples, enabling in-depth research in the fields of cell biology, pathology, and tissue engineering.

Equipment

Leica CM1850 Cryostat: the Leica CM1850 is a powerful cryostat for routine as well as research applications in biology, medicine and industry. The instrument has been designed for rapid freezing and sectioning of tissue samples.

Leica CM1950 Cryostat: The new Leica CM1950 cryostat with DualEcoTec cooling system combines well-known sectioning capabilities with a state-of-the-art refrigerant system. For an efficient workflow, all instruments come with a spacious cryocabinet to facilitate handling of multiple specimens.

User manuals are available on the website: <https://facilities.biomed.unipd.it/>

Location

All the instruments are located at 1° floor, north side, room GEOTEC 02-132 (room 71).

Opening hours

Monday to Friday: 8:00 – 19:00

Service Coordinator

Prof. Barbara Molon

Staff

Dr. Angela Chiavegato (049-8276392)

Dr. Paola Caccin (049-8276026)

Dr. Michela Bondi (049-8275305)

tissueprocessing.biomed@unipd.it

The Facility's staff is available Monday to Friday during working hours (09:00-16:00).

Guidelines

Users are expected to perform experiments independently and must be adequately trained to ensure proper use of the instruments.

First use of the instrument and training

The training for cryostat use is mandatory: prior to the first use of any instruments, write to tissueprocessing.biomed@unipd.it to book the training session.

Booking procedures

All equipment must be reserved before every work session.

Reservations are made through the dedicated page on the *[DSB Facilities & Services](#)* website by selecting the “book now” icon associated with the required instrument.

If your plans change, reservations may be cancelled up to **24 hours before** the start of the reserved time slot.

Rules

The Facility does not provide accessories such as brushes, tweezers, blades, OCT, anti-roll system to internal (DSB) users. A set of accessories is available for the exclusive use of external users.

Before your session:

- Wear clean gloves
- Equipment must be checked in all their parts: everything must be clean and without any obvious damage. If this is not the case, please immediately contact the staff.
- Report to the staff the presence of incorrect behavior or waste not properly disposed of.

During your session:

- The cutting wheel must always be locked when handling samples inside the cryostat.

- The cryostat window must not be left open unnecessarily in order to prevent condensation formation.

After your session:

- DO NOT leave anything in the room and inside the cryostat.
- After use, it is RECOMMENDED to CLEAN and DISINFECT the instrument and surfaces:
 - o for **CM1850** clean inside ONLY with Ethanol 90-100%
 - o for **CM1950** clean inside ONLY with Ethanol 90-100% and turn on UV (15' cycle during the day and 45' after the last session of the day)
- At the end of your session, return the cryostat to its standby temperature (-20°C). Collect any biological waste in a resealable plastic bag (provided by the Facility) and throw it in the organic black bin or take it back to your lab and dispose of it appropriately.

Costs

Updates fees are available on the DSB Facility website.

Users will receive a biannual report that summarizes your reservations, based on the online booking calendar.

User support material

- Leica_CM1850_UV_IFU_1v5C_en.pdf
- Leica_CM1850_Manual.pdf
- Leica_CM1950_Manual.pdf