

Shared Histopathology Equipment (Room #S225)

Contact Information

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General Guidelines for Room #S225: Shared Histopathology Area

- The Histopathology shared equipment consists of
 - a) Tissue Processor
 - b) Paraffin-embedding station
 - c) One Leica Microtome
 - d) Computer attached to a microscope and dissection scope (+camera) [room S201]

- Only **trained and authorized** individuals are allowed to use the shared equipment located on the S-building 2nd floor, rooms 225 and 201 (microscope). Please, read and follow the attached guidelines to use the shared equipment.

- We reserve the right to revoke user privileges in cases where these guidelines, including proper equipment clean up, are not followed.

- Always wear appropriate personal protective devices such as goggles and lab coats when using the Histopathology setup.

- To schedule **orientation and training**, please email to HistopathologyService@HSS.EDU For advice and questions regarding the **equipment usage**, please contact Orla O'Shea (osheao@hss.edu)

- For any other questions, please contact Drs. Miguel Otero (oterom@hss.edu), Kyung-Hyun Pak-Min (parkmink@hss.edu) or Carl Blobel (blobelc@hss.edu)

- Before using the equipment, please sign in using the specific Google calendars assigned to each item in HistopathHSS@gmail.com Access to **room #225 is restricted to approved users**, who should **request a key (before 5PM) kept at the Blobel lab (S-building, 7th floor)**. When requesting access, users must sign in a physical log to track equipment usage.

- When signing up for the Tissue Processor and the Embedding Station, please indicate the **number of samples** that you are going to process/embed, so that we know how often to change reagents.

- After processing, samples placed into the cassette bath of the paraffin-embedding station should be **embedded within 72 hours** in order to allow more users to process their samples.

- Pre-booked users have priority to use the equipment, but reservations will be cancelled if the machine is NOT in use within **1 hour** after the start of the reserved time

- However, we ask the users to please not block microtomes by booking them for prolonged times in advance (e.g. 9 to 5, Monday to Friday) in order to allow all users timely access to the equipment.

a) Tissue Processor:

- Sign up using HistopathHSS@gmail.com and the specific calendar "**Paraffin processor**".
- When booking the Tissue Processor, indicate (a) user, email, phone, (b) PI, (c) hours of use, (d) number of samples processed
- We use **ONLY Clear-Rite and not Xylene** for the shared Tissue Processor. Never use Xylene when utilizing the shared Tissue Processor.
- When signing up for the Tissue Processor, please make sure that you indicate the **number of samples** that you are going to process, so that we know how often to change reagents.
- If necessary, refill the paraffin bucket if the paraffin is clean. If the paraffin is dirty, dispose of melted used paraffin and replace with fresh paraffin.
- The Tissue Processor will be cleaned at least once a month, depending upon usage. Orla O'Shea (osheao@hss.edu) will schedule the equipment clean up and maintenance and will contact users requesting help to clean up the Tissue Processor, when required.

- Reagent stations and position in carousel
 - 1) Clear-Rite
 - 2) Water
 - 3) 70% Alcohol (dehydrant or ethanol)
 - 4) 80% Alcohol (dehydrant or ethanol)
 - 5) 95% Alcohol (dehydrant or ethanol)
 - 6) 100% Alcohol (dehydrant or ethanol)
 - 7) 100% Alcohol (dehydrant or ethanol)
 - 8) 100% Alcohol (dehydrant or ethanol)
 - 9) Clear-Rite
 - 10) Clear-Rite
 - 11) Paraffin
 - 12) Paraffin

b) Embedding Station:

- Sign up using HistopathHSS@gmail.com and the specific calendar "**Embedding station**".
- When booking the Embedding Station, indicate (a) user, email, phone, (b) PI, (c) hours of use, (d) number of samples
- When signing up for the Tissue Processor, please make sure that you indicate the **number of samples** that you are going to process.
- After processing, samples placed into the cassette bath of the paraffin-embedding station should be **embedded within 72 hours** in order to allow more users to process their samples.
- After a completed run, open the processor, pick up the basket and drain the molten paraffin into the chamber.
- Transfer the basket (avoid dripping paraffin) into the cassette bath.
- Take one of the cassettes, place on work area, remove the lid and discard. Take mold from the mold warmer and place underneath the dispenser handle.
- Fill mold (~50-60%) with paraffin; use pre-warmed forceps to place sample into the mold (double-check orientation of the tissue).
- Place mold onto refrigeration spot while holding the tissue down, and allow for paraffin on the bottom to solidify. Place cassette on top of mold.
- Fill mold with paraffin and place cassette and mold at far end of cold plate for total solidification.
- **Clean up and Maintain** the Embedding Station after you finished:
 - a) Stack all cold molds and place into mold warmer
 - b) Use plastic scraper to combine liquid wax
 - c) Remove solid paraffin from work space (scrape into the trash).
 - d) Clean all forceps (use a gauze or paper towel).
 - e) If cold plate is off, dry with paper towels. If plate is on (cold), scrape wax

c) Microtome:

- Sign up using HistopathHSS@gmail.com and the specific calendar "**Microtome-1**".
- When booking the microtome, indicate (a) user, email, phone, (b) PI, (c) hours of use
- Microtome should be used within 1 hour of booking time.
- Microtome blades must be provided by the user.
- Handle blades very carefully. Set up the microtome by (1) positioning sample first and (2) put in blade. Never put blade in before positioning the sample.
- Store blades in a covered container. **Never leave blades on countertops**. When leaving the microtome, make sure that the blade guard is in place.
- **Clean and Maintain the Microtome** thoroughly: microtome should be cleaned to remove tissue debris and wax
 - a) Clean microtome daily/after each use
 - b) Remove blade before cleaning
 - c) Remove excess wax/tissue using a dry paintbrush
- Clean work space after each use
- Empty and dry water bath after use