Microtome and Cryostat Safety

During operation
- Wear proper PPE
- Blade lock must always be engaged when blade is on the blade holder
- Blade guard must be used when blade is present but cryostate is not used
- Arm (wheel) lock must be engaged when the rotary arm is not active
- Blades (including diamond/glass blades in case of ultramicrotome) and samples must always be handled with appropriate tools such as forceps
- The metal parts in cryostats can get as cold as -50°C and present a freezing hazard. Do not touch metal parts with bare hands
- Always have a sharps container and a proper waste container accessible
- A minimum clearance of 1 inch must be maintained between the operator’s hands and any moving parts or blade
- When operating microtomes, the foot pedal must be so positioned to avoid accidental activation
- When not in use, the foot treadle of electrically-powered microtome must be guarded by a cover/guard that will prevent unintended operation

Cleaning, Repair and Maintenance
- Always clean the equipment between users and at end of each session
- Use proper disinfectant (10% bleach if working with infectious materials including blood borne pathogens)
- Use forceps to remove residue from the interior of the microtome
- Always wear utility/wire mesh/cut resistant gloves while handling/inserting/removing/decontaminating the blades
- Always store the blades in blade boxes. The blade should only be on the cryostate when it is in use.
- When calling outside vendors for repairing and maintenance, ensure the cryostate is properly decontaminated with from disinfectant before the vendor arrives

Reference/Resources (see over)

Contact UCI EH&S for questions and guidance: (949)824-6200
Safety Moment:

**Microtome and Cryostat Safety**

I have reviewed and understand the contents of this Safety Moment document.

Name (print)  | UCInetID | Signature | Date
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Reference/Resources

**Wire mesh gloves can be bought from Amazon.com - Stainless Steel Wire Mesh Gloves ($12.96/pair)
https://www.dir.ca.gov/title8/3558.html
http://sp.ehs.cornell.edu/lab-research-safety/Documents/GBP_Microtomes_and_Cryostats.pdf

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