

Safety Checklist for Operating a Cryostat or Microtome

The cryostat or microtome is an instrument that uses sharp blades to cut thin sections of fixed or unfixed tissue. Please consult with your area safety coordinator and follow the below protocol prior to use.

First time operation requirements:

- ✓ Prior to operating this instrument, complete the UC Lab Safety Fundamentals and Annual Lab Hazards Training
- ✓ Read, understand and acknowledge your lab's microtome hazard control plan on myresearchsafety.ucsd.edu
- ✓ Familiarize yourself with your specific instrument's user manual
- ✓ Read, understand, and sign the Safety Office's Cryostat and Microtome Safety Documents (check with your area safety coordinator)
- ✓ A designated microtome/cryostat trainer in your lab should provide an instrument orientation, explain all safety aspects, and supervise first time operation

Recurring operation guidelines:

- ✓ Proper minimum PPE must be worn: safety glasses, lab coat, disposable gloves and cut resistant (Kevlar or stainless steel mesh) gloves if changing blades
- ✓ No blades or other sharp edges on countertop and surrounding area
- ✓ Lock the hand wheel and guard the blade (and foot pedal if applicable) before any tissue manipulation
 - Ensure a clear distance between hands and blade
- ✓ Use brushes or appropriate tools to position and collect samples
- ✓ Use a magnetic tool to remove the blade if necessary
- ✓ Use a brush to sweep unwanted sections
- ✓ If leaving the instrument momentarily, lock the wheel and engage the blade guard. Put a sign on the machine to warn others it is currently in use
- ✓ When work is complete, leave the area clean and free of any sharp objects
- ✓ Instrument blades should be disposed in a sharps container or properly secured
- ✓ Unwanted sections and reagents should be disposed properly