

# 12 MONTHS OF RESEARCH SAFETY

## AUGUST 2025

### ***MICROTOME SAFETY***

## Microtomes



**Left to Right: Rotary, Sliding, Freezing (Cryostat) microtomes, and foot treadle guard**

Microtomes (manual, semiautomatic, and automatic) are devices that are used to cut tissues into extremely thin sections. There are several types of microtomes available. The most commonly used microtomes are rotary, sliding, and freezing (Cryostat). Microtomes can present a sharp hazard, freezing hazard, and expose personnel to infectious agents or other hazards if not used properly.

## California Regulation & Best Practices

California/OSHA Standard 3558 applies to microtome usage. The regulation covers safe use, training requirements of operators, and proper adjustment, removal, replacement, or maintenance activities involved with microtomes and cryostats. For more information, visit <https://www.dir.ca.gov/title8/3558.html>

### Regulation & Best Practices:

- Before use, read and follow the manufacturer's recommendations for safe use. Where the manufacturer's recommendations are inconsistent with this guidance, follow the regulation and the guidance set forth in the Spotlight on Safety document linked below.
- Principal Investigators should provide equipment-specific training to users, document the training, and keep records for 3 years. Training must include the following topics:
  - Blade hazards, sharp safety, avoiding accidental activation, and injury prevention
  - Proper handling, placement, use, removal, cleaning, and disposal of the blades
  - Appropriate personal protective equipment (PPE)
  - Other potential hazards associated with the material being handled
  - Ergonomics
  - Incident/injury response and reporting to EH&S (link below)
- Visit <https://ehs.ucr.edu/document/sos-microtome> for more information and a copy of the training template.



## CONTACT US

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Report an Incident, Injury or Safety Concern [Here](#)

 **Questions?**