



General Risk Assessment

Form RA1

(Refer to Notes for Guidance before completing this form)

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| School Assessment No: | SuRF-RA1-004.02 |
| Title of Activity: | Cryostat-Microtome Use, Cleaning and Decontamination |
| Location(s) of Work: | Laboratories E1.24 of the Shared University Research Facilities (SuRF) within The Queens Medical Research Institute (QMRI), 47 Little France Crescent, Edinburgh, EH16 4TJ |
| Brief Description of Work: Use of cryostat-microtomes for cutting sections of fresh or frozen tissues. Refer to Standard Operating Procedure: SuRF-HIS-004 and COSHH Form: SuRF-COSHH-004 | |

| Assessment History: | | |
|----------------------------|--------------|---------------------------|
| Number: | Date: | Reason for Change: |
| 01 | 01/06/2013 | Original |
| 02 | 17/11/2014 | Change to hazard listing |
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1.0 Hazard Identification:

Identify all the hazards; evaluate the risks (low / medium / high); describe all existing control measures and identify any further measures required. Specific hazards should be assessed on a separate risk assessment form and cross-referenced with this document. Specific assessments are available for hazardous substances, biological agents, display screen equipment, manual handling operations and fieldwork. See <http://www.ed.ac.uk/schools-departments/health-safety/risk-assessments-checklists/risk-assessments> for details.

| Hazard(s) | Present Risk Evaluation L/M/H | Control Measures (i.e., alternative work methods / mechanical aids / engineering controls, etc.) | Risk Evaluation after control L/M/H |
|---|----------------------------------|---|--|
| Risk of cuts from sharp blade used for cutting sections | Medium | <ol style="list-style-type: none"> 1. Full training MUST be given before use of this piece of equipment. 2. Users must be shown and have read through instrument manual before using equipment unsupervised. 3. The blade guard and handle lock must always be applied before placing a frozen block in the holder. 4. The microtome MUST NOT be left unattended without the blade guard being in place. 5. Use of appropriate PPE | Low |
| Biological hazard, possible, HepB, HIV, MRSA infection from handling fresh human or animal tissue. | Medium | Refer to SuRF-COSHH-004 | Low |
| Asphyxiation or cryogenic burns from handling liquid nitrogen. Cryogenic burns from handling solid CO ₂ (dry ice) or other cryogenic substances. | Medium | Refer to SuRF-COSHH-004 | Low |



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|--|--------|-------------------------|-----|
| Fire and subsequent burns from handling extremely flammable liquids. | Medium | Refer to SuRF-COSHH-004 | Low |
|--|--------|-------------------------|-----|

2.0 Engineering controls: Identify all relevant controls (*Tick relevant boxes*)

| | | | | | | | |
|--|-------------------------------------|------------------|-------------------------------------|------------|--------------------------|-----------|--------------------------|
| Guarding | <input checked="" type="checkbox"/> | Extraction (LEV) | <input checked="" type="checkbox"/> | Interlocks | <input type="checkbox"/> | Enclosure | <input type="checkbox"/> |
| Other relevant information (incl. testing frequency if appropriate): | | | | | | | |

3.0 Personal protective equipment (PPE): Identify all necessary PPE (*Tick relevant boxes*)

| | | | | | | | |
|--|-------------------------------------|-----------|-------------------------------------|-----------------|--------------------------|-------------|--------------------------|
| Eye / Face | <input checked="" type="checkbox"/> | Hand /Arm | <input checked="" type="checkbox"/> | Feet / Legs | <input type="checkbox"/> | Respiratory | <input type="checkbox"/> |
| Body (clothing) | <input checked="" type="checkbox"/> | Hearing | <input type="checkbox"/> | Other (Specify) | | | |
| Specify the grade(s) of PPE to be worn: Lab coats and disposable gloves | | | | | | | |
| Specify when during the activity the item(s) of PPE must be worn: Lab coats and gloves to be worn at all times | | | | | | | |

Non-disposable items of PPE must be inspected regularly and records retained for inspection.

4.0 Persons at risk: Identify all those who may be at risk (*Tick relevant boxes*)

| | | | | | | | |
|-------------------|--------------------------|-----------------|-------------------------------------|---------------------------|-------------------------------------|---------------------|--------------------------|
| Academic staff | <input type="checkbox"/> | Technical staff | <input checked="" type="checkbox"/> | P'Grad students | <input checked="" type="checkbox"/> | U'Grad students | <input type="checkbox"/> |
| Maintenance staff | <input type="checkbox"/> | Office staff | <input type="checkbox"/> | Cleaning staff | <input type="checkbox"/> | Emergency personnel | <input type="checkbox"/> |
| Contractors | <input type="checkbox"/> | Visitors | <input type="checkbox"/> | Others: Service Engineers | <input checked="" type="checkbox"/> | | <input type="checkbox"/> |

5.0 Additional information:

Identify any additional information relevant to the activity, including supervision, training requirements, special emergency procedures, requirement for health surveillance etc.

Training MUST be given in the correct use of the microtome before unsupervised work is allowed.



Users must be familiar with manufacturers instructions and follow all relevant safety requirements therein.

Staff members and P'Grad Students should make themselves familiar with Parts Two, Three, Four, Five and Six of the University Health and Safety Policy at: <http://www.ed.ac.uk/schools-departments/health-safety/policy-cop/policy>

6.0 Assessment carried out by:

| | | | |
|-------------------|------------------|---------------------|------------|
| Name: | Melanie McMillan | Date: | 17/11/2014 |
| Signature: | | Review Date: | Annual |

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7.0 Review of assessment:

A suitably trained person should review this assessment at regular intervals and immediately if there is reason to suspect that it is no longer valid (for example after any accidents or incidents) or if there is a significant change in the work to which it relates. If so, a new assessment form must be completed and any original signatories covered by the modified assessment should sign again.

| Name (authorised): | Signature: | Date: |
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