For: Faculty, staff, students, and volunteers who work after hours in the Centre for Microbial Chemical Biology’s Bioanalytical, High Throughput Screening, NMR and Protein Biology Labs, MDCL rooms 2330 – 2335.

Emergency Contacts:

Supervisors:  
Susan McCusker  
Flavia Alves  
Tracey Campbell (Manager)  
Gerry Wright (Director)

Emergency Home Phone #:  
905-296-1535 or 905-923-4041  
905-466-0327 or 905-681-9219  
905-216-0131 or 289-776-5872  
519-624-1614

Expected hours during which staff and trainees may work alone:

Weekdays: 5:00 pm – 9:00 am  
Weekends: All hours

Emergency assistance:

In the event of an emergency, assistance will be provided by calling extension 88.

Closest individuals:

Individuals working closest to the lab are located in the Brown/Wright labs, room 2312, and can be contacted by calling extensions 24115, 22458 or 22459.

Security of the area:

During the hours that individuals may be working alone, the main lab doors are locked and are accessible only by swipe card by those previously authorized.

RISK ASSESSMENT:

The following table indicates the tasks, hazards and controls in place for tasks performed by the person working alone:

<table>
<thead>
<tr>
<th>Task</th>
<th>Hazard</th>
<th>Controls</th>
<th>Worst Case Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1 biohazard</td>
<td>Spill/contamination</td>
<td>Level 1 precautions</td>
<td>Illness – delayed onset</td>
</tr>
<tr>
<td>Level 2 biohazard</td>
<td>Spill/contamination</td>
<td>Level 2 precautions</td>
<td>Illness – delayed onset</td>
</tr>
<tr>
<td>-------------------</td>
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<td>-------------------------</td>
</tr>
<tr>
<td>Handling organic solvents</td>
<td>Spill/inhalation</td>
<td>WHMIS training; wear gloves, lab coat, glasses</td>
<td>Explosion</td>
</tr>
<tr>
<td>Handling screening compounds</td>
<td>Spill/inhalation</td>
<td>WHMIS training; wear gloves, lab coat, glasses</td>
<td>May be fatal if inhaled, swallowed or absorbed through skin</td>
</tr>
<tr>
<td>Use of hot plate, microincinerator or heating block</td>
<td>Burn, fire</td>
<td>WHMIS and fire safety training</td>
<td>Severe burn or fire</td>
</tr>
<tr>
<td>Use of dry ice</td>
<td>Burn, inhalation</td>
<td>WHMIS training; wear gloves, lab coat, glasses</td>
<td>Chemical burn</td>
</tr>
<tr>
<td>Use of electroporation equipment</td>
<td>Electrocution</td>
<td>Training in proper use of equipment</td>
<td>Burn or fatality</td>
</tr>
<tr>
<td>Use of robotic equipment</td>
<td>Impact or pinch</td>
<td>Training in the use of equipment; proper installation of guards</td>
<td>Impact or pinch injury</td>
</tr>
<tr>
<td>Use of mass spectrometry equipment</td>
<td>Electric Shock, Noxious, Hot Surface/Heat</td>
<td>Training in the use of equipment; proper installation of guards</td>
<td>Burn or fatality</td>
</tr>
</tbody>
</table>

**Protocols in place at the workplace for working alone:**

1) Identification badges must be worn at all times.
2) Three telephones are available with phone numbers for security and emergency contacts.
3) Workers must advise a family member, friend, or co-worker that they are going to be working alone and check in with their contact every two hours. Workers are provided with a *Working Alone Designate information sheet* (appendix I) to provide their contact with all necessary information. Alternately, staff may notify security at extension 24281 when working alone.
4) The biological safety level 2 (BSL2) robotic enclosure is equipped with an alarm in case of failure of the supply or exhaust air handling fans. Signs are posted on the enclosure itself when an experiment is running in the enclosure involving BSL2 organisms. If this alarm sounds when a BSL2 organism is being tested, everyone in the lab is to evacuate, and one of the emergency contacts listed above is to be called. No one is to re-enter the lab until the emergency contact says it is safe to do so.
5) The NMR room located in the CMCB Lab (MDCL-2335) is equipped with a low oxygen alarm. If this alarm sounds, everyone in the lab is to evacuate and telephone the NMR emergency contact, Dan Sorensen at 905-923-2233 or Steve Kornic at 289-237-7120. No one is to re-enter the lab until the emergency contact says it is safe to do so.
Are there known current physical disabilities or medical conditions, which may affect the health and safety of an individual working alone (do not provide names)?
No

REQUIRED TRAINING AND EXPERIENCE

Training which must be in place and up-to-date for the individual to work alone:
  1) WHMIS, EOHSS, Fire Safety Training, Asbestos Awareness, Chemical Handling and spills, Ergonomics, Slips Trips and Falls
  2) FHS Biosafety Awareness level 1 (MDCL 2330) and Biosafety level II (MDCL 2333)
  3) FHS Autoclave training (MDCL 2332)
  4) Review location of emergency equipment: eyewash station, safety shower, fire extinguisher, fire pull alarm, fire blanket, telephone, emergency evacuation route (appendix II)
  5) Review of and access to the lab’s safety manual and sop’s
  6) Lab equipment specific training

Staff is not permitted to work alone in the laboratory after hours without having been certified by a CMCB Research Technician for:
  1) Proper lab safety procedures
  2) Knowledge of proper use of relevant equipment
  3) *Demonstrated competency in all laboratory techniques intended to perform after hours*

High risk tasks which may NOT be performed by individuals working alone:
Working with highly flammable and/or explosive chemicals

Issues which are still of concern to staff/supervisors:
None
Appendix I: Working Alone Designate Information Sheet

The following information is to be left with individuals identified as designates (ie: person at home) for working alone procedures submitted to the Faculty of Health Sciences Safety Office under McMaster University policy RMM#304. It should be posted near a telephone.

McMaster University Campus (MDCL/IAHS)  905-525-9140 ext. 24281

This document must be completed by the individual working alone and reviewed with their designate. The designate must be aware of the information to be provided to Security Services if the individual working alone does not check in at the prescribed time.

| Individual’s name:_______________________ | ID#:_____________________________
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Room number:_________________________</td>
<td>Phone extension:__________________</td>
</tr>
<tr>
<td>Type of work area: □ Lab □ Clinic □ Office □ CAF □ Other:______________</td>
<td></td>
</tr>
<tr>
<td>Means of transportation to and from campus:____________________________________</td>
<td></td>
</tr>
<tr>
<td>Make:______________ Model:______________ License Plate #:______________</td>
<td></td>
</tr>
<tr>
<td>Any medical conditions to be aware of:__________________________________________</td>
<td></td>
</tr>
<tr>
<td>Normal Frequency of check-in: _________hrs</td>
<td>Length of time since last checked in:</td>
</tr>
<tr>
<td></td>
<td>_________________________________hrs</td>
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<tr>
<td></td>
<td>Details:__________________________</td>
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<td>________________________________</td>
</tr>
</tbody>
</table>
Appendix II: Location of Emergency Devices and Emergency Evacuation Route

**Emergency Devices**
- Eyewash Station
- Safety Shower
- Fire Extinguisher
- Fire Pull Alarm
- Fire Blanket
- Telephone

**Emergency Evacuation Route**
- Primary Route
- Secondary Route