



| McMaster University                   |                 |                                  |  |  |  |
|---------------------------------------|-----------------|----------------------------------|--|--|--|
| Centre for Microbial Chemical Biology |                 |                                  |  |  |  |
| Synthesis Lab                         |                 |                                  |  |  |  |
| MDCL-2326                             |                 |                                  |  |  |  |
| MANDATORY LAB SAFETY TRAINING         |                 |                                  |  |  |  |
| CMCB2326safety.pdf                    | Revision No.: 4 | Effective Date: January 19, 2016 |  |  |  |

#### 1.0 SCOPE

This document applies to all individuals who wish to work in the Synthesis lab, MDCL 2326 and 2327 (hereafter MDCL 2326). This document must be followed and signed by the trainee's supervisor, and handed into the CMCB Research Manager at which time an appointment for lab safety orientation and site-specific training will be scheduled.

## 2.0 REQUIRED TRAINING

- 2.1 The following <u>mandatory safety training</u> must be completed and up-to-date prior to site-specific training and working in MDCL 2326:
  - 1. WHMIS training (updated annually online)
  - 2. EOHSS Fire safety training (updated annually online)
  - 3. Asbestos Awareness
  - 4. Chemical Handling and Spills
  - 5. Ergonomics
  - 6. Slips, Trips and Falls http://cll.mcmaster.ca/eohss/

Please bring proof of completion of the above listed courses to this orientation. This can be obtained from the safety office.

- 2.2 The Synthesis lab <u>safety orientation</u> will be conducted by a CMCB Research Technician or designate, and will review the location of emergency devices: eyewash station, safety shower, fire extinguisher, fire pull alarm, fire blanket, telephone, single stage alarm, evacuation route, and other safety related items.
  - See Appendix II: Location of Emergency Devices and Emergency Evacuation Route
- 2.3 <u>Site-specific training</u> will be given for the individual pieces of equipment/instruments in the lab and will be conducted by a CMCB Research Technician or designate. The training form must be completed and signed before the trainee is permitted to use the equipment.
  - See Appendix I: Equipment Training Completion Form

Only after the above-mentioned training is completed may an individual work in the Synthesis Lab.

#### 3.0 RELATED DOCUMENTS

- 1. Standard operating procedures (SOPs) available for laboratory equipment and processes are located in the Synthesis lab safety binder.
- 2. Working alone policy after the above training is completed you are authorized to work in MDCL 2326 during normal working hours, Monday to Friday 9am-5pm. In order to work outside these hours, you must review and sign the working alone policy with the CMCB lab designate for your area. A copy of this policy will be provided for your records. Working alone without proper training could result in suspension of lab privileges.

### 4.0 RESPONSIBILITY

PI/Advisor Address and Extension

It is the responsibility of the trainee not to use any piece of equipment without proper training, and to ensure that all appropriate safety standards are adhered to while working in the lab. It is also the responsibility of the trainee to report any broken or malfunctioning instrumentation or safety equipment to a CMCB Research Lab Technician, the CMCB Research Manager, or designate. Access to the lab could be suspended if equipment is used without proper, documented training.

| ow PhD student Masters student                                                          |
|-----------------------------------------------------------------------------------------|
| Signature                                                                               |
| Date                                                                                    |
| knowledges that the trainee is aware of his or herepts the user fees as billed monthly. |
| Signature                                                                               |
|                                                                                         |

Date

| To be signed by the lab supervisor once the safety orientation has been completed. |                                                                  |  |  |  |
|------------------------------------------------------------------------------------|------------------------------------------------------------------|--|--|--|
| CMCB Supervisor Name                                                               |                                                                  |  |  |  |
| Signed                                                                             |                                                                  |  |  |  |
| Date                                                                               | Employee/student number  Swipe access card number  Approval date |  |  |  |
|                                                                                    |                                                                  |  |  |  |

## Appendix I: CMCB Synthesis Lab Equipment Training Completion Form

The trainee acknowledges that they have fulfilled the introductory safety training requirements and they must receive additional training before they can use the following pieces of equipment listed below.

The trainee also acknowledges that they may not use or possess the following items in the synthesis lab: hydrofluoric acid; substances which may liberate HF or HCN upon standing, or treatment with acid (ie: NaCN) or decomposition; hydrochloric acid cylinders, perchloric acid.

The trainee also acknowledges that they are not permitted to work after hours until the working alone policy has been reviewed and signed.

| Equipment                           | Date trained | Trainee signature | Synthesis Research<br>Technician signature |
|-------------------------------------|--------------|-------------------|--------------------------------------------|
| Chemspeed Systems                   |              |                   |                                            |
| CombiFlash Purification Units A & B |              |                   |                                            |
| CombiFlash Purification Unit C      |              |                   |                                            |
| Dionex ASE 350 Solvent Extr.        |              |                   |                                            |
| Fume Hood Vacuum Line               |              |                   |                                            |
| Genevac 1                           |              |                   |                                            |
| Genevac 2                           |              |                   |                                            |
| Laborota 20 – Large Rotovap         |              |                   |                                            |
| Large-scale Chrom. Columns          |              |                   |                                            |
| Lyophilizer 1                       |              |                   |                                            |
| Lyophilizer 2                       |              |                   |                                            |
| Rotary Evaporators A & B            |              |                   |                                            |
| Rotary Evaporators C & D            |              |                   |                                            |
| Waters Autopure LC/MS               |              |                   |                                            |
| Savant and Lyo-centre               |              |                   |                                            |

# **Appendix II: Location of Emergency Devices and Emergency Evacuation Route**

# **Emergency Devices**

# emergency Devices

Eyewash Station

Safety Shower

Fire Extinguisher

Fire Pull Alarm

Fire Blanket

Telephone

# **Emergency Evacuation Route**

Primary Route
Secondary Route

