

## LABORATORY SAFETY SELF-INSPECTION CHECKLIST

|   |  | Contact Information (Principal Investigator) |                          |                     |                          |                 |                          |
|---|--|--|--------------------------|---------------------|--------------------------|-----------------|--------------------------|
| Last Name:  |  | First Name:                                  |                          | Extension:          |                          |                 |                          |
| Department:   |  | Building:                                    |                          | Rooms:              |                          |                 |                          |
|   |  | Date/Time of Inspection                      |                          |                     |                          |                 |                          |
| Date / Time of Inspection:  |  |  |                          |                     |                          |                 |                          |
| Section A: Hazard Identification                                    |  |  |                          |                     |                          |                 |                          |
| Please check all hazards that apply to your lab                     |  |  |                          |                     |                          |                 |                          |
| Compressed Gas  | <input type="checkbox"/>   | Oxidizers                                    | <input type="checkbox"/> | Corrosive Chemicals | <input type="checkbox"/> | Laser           | <input type="checkbox"/> |
| Flammable Chemicals   | <input type="checkbox"/>   | Reactive Chemicals                           | <input type="checkbox"/> | Biohazard           | <input type="checkbox"/> | X-Ray           | <input type="checkbox"/> |
| Toxic Chemicals   | <input type="checkbox"/>   | Poisonous Chemicals                          | <input type="checkbox"/> | Radiation           | <input type="checkbox"/> | Liquid Nitrogen | <input type="checkbox"/> |
| Section B: General Laboratory Work Practices                        |  |  |                          | Yes                 | No                       | N/A             | Comments                 |
| Applicable Yes <input type="checkbox"/> No <input type="checkbox"/> |  |  |                          |                     |                          |                 |                          |
| 1   | Signs on laboratory doors (Caution Placards) and storage areas are consistent with the hazards within (appropriate signage for biohazard level 2, radiation, laser...etc.) |  |                          |                     |                          |                 |                          |
| 2   | Access to lab is restricted to authorized lab personnel and students only  |  |                          |                     |                          |                 |                          |
| 3   | No evidence of food or beverages being consumed or stored in the lab   |  |                          |                     |                          |                 |                          |
| 4   | No recapping of needles is performed   |  |                          |                     |                          |                 |                          |
| 5   | Laboratory surfaces are clean; disinfected or decontaminated after work is performed (proper disinfectant present)   |  |                          |                     |                          |                 |                          |
| 6   | Aisles and exits are free from obstruction and tripping or slipping hazards (e.g. loose cords secured to floor where employees walk)                                       |  |                          |                     |                          |                 |                          |
| 7   | Heavy objects are confined to lower shelves  |  |                          |                     |                          |                 |                          |
| 8   | Tops of cabinets and shelves are free from stored items  |  |                          |                     |                          |                 |                          |
| Section C: Personal Protective Equipment (PPE)                      |  |  |                          | Yes                 | No                       | N/A             | Comments                 |
| Applicable Yes <input type="checkbox"/> No <input type="checkbox"/> |  |  |                          |                     |                          |                 |                          |
| 1   | Lab coats and safety glasses are worn in the laboratory. Lab coats are removed before entering non-laboratory general use area   |  |                          |                     |                          |                 |                          |
| 2   | Various protective gloves are available, including cryogenic where applicable  |  |                          |                     |                          |                 |                          |
| 3   | Additional adequate PPE available for the hazards in   |  |                          |                     |                          |                 |                          |

|  |  |            |           |            |                 |
|--|--|------------|-----------|------------|-----------------|
|  | your lab (includes masks and hearing, foot and head protection)  |            |           |            |                 |
| 4  | Closed toe shoes worn  |            |           |            |                 |
| 5  | Respirators are provided when necessary, and users are trained and fit tested  |            |           |            |                 |
| <b>Section D: Chemical Hazard Control &amp; Storage</b>                    |  |            |           |            |                 |
| <b>Applicable</b> Yes <input type="checkbox"/> No <input type="checkbox"/> |  | <b>Yes</b> | <b>No</b> | <b>N/A</b> | <b>Comments</b> |
| 1  | Incompatible materials are segregated (acid, bases, flammable, oxidizers etc.)                                       |            |           |            |                 |
| 2  | Primary and secondary chemical containers are labeled with identity and appropriate hazard warnings                  |            |           |            |                 |
| 2  | Chemical containers are in good condition (not leaking, lids not cracked)  |            |           |            |                 |
| 4  | No storage of glass chemical containers on floor   |            |           |            |                 |
| 5  | Corrosives and flammables are stored below eye level   |            |           |            |                 |
| 6  | Unused or outdated materials are removed from laboratories and chemical storage areas                                |            |           |            |                 |
| 7  | Safety carriers are available and in use while transporting chemicals  |            |           |            |                 |
| 8  | All personnel working in lab know how to access WHMIS, or have access to printed inventory in the lab                |            |           |            |                 |
| <b>Section E: Flammable Liquid Storage &amp; Handling</b>                  |  |            |           |            |                 |
| <b>Applicable</b> Yes <input type="checkbox"/> No <input type="checkbox"/> |  | <b>Yes</b> | <b>No</b> | <b>N/A</b> | <b>Comments</b> |
| 1  | Flammable liquids are stored away from heat or other ignition sources (combustible chemicals, oxidizers)             |            |           |            |                 |
| 2  | Flammable liquids not in use are stored in approved flammable solvent cabinets, maximum 3 flammable cabinets per lab |            |           |            |                 |
| 3  | Maximum of 250L flammable and 250L combustible materials stored in each cabinet                                      |            |           |            |                 |
| 4  | Explosion safe or explosion proof refrigerators used for volatile and flammable liquids                              |            |           |            |                 |
| <b>Section F: Compressed Gas Cylinders</b>                                 |  |            |           |            |                 |
| <b>Applicable</b> Yes <input type="checkbox"/> No <input type="checkbox"/> |  | <b>Yes</b> | <b>No</b> | <b>N/A</b> | <b>Comments</b> |
| 1  | Gas cylinders are properly chained / secured   |            |           |            |                 |
| 2  | Cylinder caps are in place when the cylinders are not in use or being moved  |            |           |            |                 |
| 3  | Gas cylinders are stored away from excessive heat or ignition sources  |            |           |            |                 |
| 4  | Fuel gas cylinders are at least 6 m (20') away from oxygen cylinders   |            |           |            |                 |
| 5  | Gas cylinders are properly labeled as to their content   |            |           |            |                 |

|   |   |            |           |            |                 |
|---|---|------------|-----------|------------|-----------------|
| 6   | Full and empty cylinders are stored separately  |            |           |            |                 |
| 7   | Empty gas cylinders are labeled "EMPTY"   |            |           |            |                 |
| 8   | Hoses, tubing and regulators are in good working condition  |            |           |            |                 |
| <b>Section G: Waste Handling: Hazardous, Non-Hazardous &amp; Biological</b> |   |            |           |            |                 |
| <b>Applicable</b> Yes <input type="checkbox"/> No <input type="checkbox"/>  |   | <b>Yes</b> | <b>No</b> | <b>N/A</b> | <b>Comments</b> |
| 1   | Waste material is not allowed to accumulate on the floors, in corners or under shelves/tables in laboratories                             |            |           |            |                 |
| 2   | Containers of hazardous waste are labeled properly (date and lab number) and have closed lid  |            |           |            |                 |
| 3   | <b>Biological or Radioactive Wastes</b> are appropriately marked  |            |           |            |                 |
| 4   | No evidence of liquid waste disposal in sinks or the sewer  |            |           |            |                 |
| 5   | Syringes and other sharp wastes are disposed of into a sharps container   |            |           |            |                 |
| 6   | Broken glass containers are in use for disposal of broken glass   |            |           |            |                 |
| <b>Section H: Tools, Machinery &amp; Equipment</b>                          |   |            |           |            |                 |
| <b>Applicable</b> Yes <input type="checkbox"/> No <input type="checkbox"/>  |   | <b>Yes</b> | <b>No</b> | <b>N/A</b> | <b>Comments</b> |
| 1   | Tools and equipment are in safe working condition   |            |           |            |                 |
| 2   | Standard operation procedures (SOPs) are available for all equipment in the lab   |            |           |            |                 |
| 3   | Regular maintenance provided for all equipment  |            |           |            |                 |
| 4   | Electrical cords are in good condition (no frayed wires or broken insulation)   |            |           |            |                 |
| <b>Section I: Doors &amp; Emergency Exits</b>                               |   |            |           |            |                 |
| <b>Applicable</b> Yes <input type="checkbox"/> No <input type="checkbox"/>  |   | <b>Yes</b> | <b>No</b> | <b>N/A</b> | <b>Comments</b> |
| 1   | Exits are clearly marked and free from obstruction  |            |           |            |                 |
| 2   | All fire doors are self-closing and are kept closed   |            |           |            |                 |
| 3   | Doors and windows operate, close and lock properly  |            |           |            |                 |
| <b>Section J: Safety Equipment</b>  |   |            |           |            |                 |
| <b>Applicable</b> Yes <input type="checkbox"/> No <input type="checkbox"/>  |   | <b>Yes</b> | <b>No</b> | <b>N/A</b> | <b>Comments</b> |
| 1   | Fume hoods are available and have an inspection label (performance tested within past 12 months)  |            |           |            |                 |
| 2   | Fume hoods are not being used for storage   |            |           |            |                 |
| 3   | Hoses or cords are not inserted through the face of the fume hood (they must run underneath the airfoil so the sash can close completely) |            |           |            |                 |
| 4   | Biological safety cabinets certified within the past 12 months  |            |           |            |                 |
| 5   | Safety showers and eye wash stations are located within 10 second walk (approx.55') of all laboratories (ANSI Std. Z-358.1-2009)          |            |           |            |                 |
| 6   | All showers and eye wash stations are clean and   |            |           |            |                 |

|   |   |                    |    |     |          |
|---|---|--------------------|----|-----|----------|
|   | free of obstruction   |                    |    |     |          |
| 7   | Safety showers and eye wash stations are tested and documented (ANSI Std. Z-358.1-2009)   |                    |    |     |          |
| 8   | All vacuum lines have a trap  |                    |    |     |          |
| 9   | Low oxygen alarms present for areas with cryogenics or NMR equipment  |                    |    |     |          |
| 10  | The 5-Gauss line is marked around the magnet in NMR laboratories  |                    |    |     |          |
| <b>Section K: Emergency Response / Safety Procedures</b>            |   |                    |    |     |          |
| Applicable Yes <input type="checkbox"/> No <input type="checkbox"/> |   | Yes                | No | N/A | Comments |
| 1   | Fire extinguishers are the appropriate type for the hazard in the work area   |                    |    |     |          |
| 2   | Fire extinguishers are unobstructed   |                    |    |     |          |
| 3   | Fire extinguishers are regularly inspected  |                    |    |     |          |
| 4   | Laboratory personnel are aware of the nearest: <ul style="list-style-type: none"> <li>First aid kit or first aid station</li> </ul>                     |                    |    |     |          |
|   | <ul style="list-style-type: none"> <li>Fire extinguisher</li> </ul>   |                    |    |     |          |
|   | <ul style="list-style-type: none"> <li>Spill kit</li> </ul>   |                    |    |     |          |
|   | <ul style="list-style-type: none"> <li>Evacuation route</li> </ul>  |                    |    |     |          |
| 5   | Laboratory personnel are familiar with: <ul style="list-style-type: none"> <li>Standard Operating Procedures (SOPS) for all equipment in lab</li> </ul> |                    |    |     |          |
|   | <ul style="list-style-type: none"> <li>Working alone procedures</li> </ul>  |                    |    |     |          |
|   | <ul style="list-style-type: none"> <li>Spill response plan</li> </ul>   |                    |    |     |          |
|   | <ul style="list-style-type: none"> <li>Accident reporting procedures</li> </ul>   |                    |    |     |          |
|   | <ul style="list-style-type: none"> <li>Emergency phone numbers (eg. Ext 911 on campus phone)</li> </ul>   |                    |    |     |          |
|   | <ul style="list-style-type: none"> <li>Lab specific emergency procedures (eg. audibility of fire alarm, equipment shut off procedures)</li> </ul>       |                    |    |     |          |
| <b>Section L: Training</b>  |   |                    |    |     |          |
| Applicable Yes <input type="checkbox"/> No <input type="checkbox"/> |   | Yes                | No | N/A | Comments |
| 1   | Documented WHMIS training is in place for all lab personnel   |                    |    |     |          |
| 2   | General training conducted for equipment / techniques unique to the laboratory (eg. drill press)  |                    |    |     |          |
| 3   | Lab safety training for end users completed by all students working in the lab  |                    |    |     |          |
| 4   | Compressed gas cylinder training completed (where applicable)   |                    |    |     |          |
| 5   | Laser safety training completed (where applicable)  |                    |    |     |          |
| 6   | X-Ray safety training completed (where applicable)  |                    |    |     |          |
| <b>Section M: Radiation &amp; Biosafety Permits</b>                 |   |                    |    |     |          |
| Applicable Yes <input type="checkbox"/> No <input type="checkbox"/> |   | Permit Information |    |     |          |
| 1   | For laboratories with radiation and/or biosafety  |                    |    |     |          |

|   |   |                       |
|---|---|-----------------------|
|   | permits, please provide your permit number                            |                       |
| 2   | Please provide the date of your last radiation / biosafety inspection |                       |
| <b>Section N: Optional - Notes / Questions / Comments (please add additional pages as required)</b> |   |                       |
| 1   |   |                       |
| 2   |   |                       |
| 3   |   |                       |
| 4   |   |                       |
| <b>Section O: Signatures</b>  |   |                       |
| Completed By:   |   | Title:                |
| Signature:  |   | Extension:      Date: |

**Lab Supervisors: Please complete and return to the CCC by Friday, March 14, 2014.**