Standard Operating Procedure

USE OF CMRI EQUIPMENT BY VISITING SCIENTISTS

1. Document Control

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2. Hazards

Hazards	Risk Rating
Postural injury	High
Electric shock	Low
Hot equipment	Low
Toxic chemical exposure	Low
Biohazard exposure	Low
Radiation exposure	Low

The hazards listed above are six of the commonest hazards that workers at CMRI may encounter when they walk through the building. Similar hazards will apply for visiting scientists who are using CMRI equipment. However, the hazards encountered by any one individual will vary, depending on the location of their work and the type of work being performed.

Postural injury can develop as a result of sitting, standing or maintaining a set posture for long periods while using equipment. Don't forget to take breaks and stretch to relieve your muscles!

3. Equipment or Procedural Risk Assessments

CMRI has developed written risk assessments that address hazards commonly encountered in the building (see list above) and hazards associated with shared equipment. Risk Assessments, and other safety documents written by CMRI workers for general use, are typically found on the CMRI intranet (ChromoZone). If you do not have access to ChromoZone, copies can be provided on request.

4. Must Read – Material Safety Data Sheet (MSDS)

A Safety Data Sheet (SDS) – previously known as a Material Safety Data Sheet (MSDS) – is required for each hazardous substance at CMRI. SDS documents are accessed using an online subscription to ChemWatch. If you do not have access to ChemWatch, SDS information can be provided on request.

5. Protocol

5.1 Aims and Scope

This document is written for visiting scientists who are competent to work in a research environment, but need to know how to access and use equipment in accordance with CMRI requirements.

The document includes some general comments about safety and security. However, CMRI's *Safety and Security Induction SOP* is the primary resource on these topics. All visiting scientists are provided with a copy of the *Safety and Security Induction SOP* as part of the visiting scientist induction.

If you have completed the visiting scientist induction and would like to read any further safety information, please ask your CMRI Contact (the staff member who acts as your point of contact when using CMRI equipment). Safety documents can be viewed on the CMRI intranet (ChromoZone).

5.2 Before Using CMRI Equipment

There are three things you need to do before you can use CMRI equipment.

Step One: Assess the risks associated with your samples.

All research materials have risks, depending on the nature of the sample and what you do with it. Some samples are known to be hazardous substances e.g. radioactive substances or hazardous chemicals. Biological samples are potentially hazardous, due to genetic modification or the presence of an infectious agent. You must perform a risk assessment before bringing any samples into CMRI.

Research samples may be hazardous for many reasons, including infectious agents in biological samples (biohazard), radiation, or hazardous chemicals.

Work with genetically modified organisms (GMOs) must be approved by the Office of the Gene Technology Regulator (OGTR) via an Institutional Biosafety Committee (IBC). If you are bringing in a GMO into CMRI, you will be asked to list your IBC approval; your IBC approval must list a CMRI PC2 Facility as an intended place of use.

The following questions may also help to assess biological risk:

- Does the sample contain or produce any microorganisms, viruses or other pathogens?
- Does the sample contain a biological product that could potentially cause harm to humans?
- Is the sample genetically modified i.e. is it a GMO?
- Does the sample contain or produce GMOs?

Step Two: Decide if you need to apply for access to the CMRI building.

If you are using equipment infrequently, and you are accompanied by a CMRI staff member while using equipment, you do not need to ask for extended access to the building. You must sign in at Reception when you arrive and sign out when you leave. While in the building, you must carry a Visitor tag and be accompanied by a CMRI staff member.

If you are using equipment frequently, need access out of hours, or wish to use equipment unaccompanied, you need to apply for extended access. CMRI has developed an electronic process to apply for access, starting with an online induction. A Mindflash course provides essential information on CMRI's Work Health and Safety (WHS) requirements ("CMRI Access Application and WHS Training – Visiting Scientists"). The course link is provided in the References section at the end of this SOP.

Once the Mindflash course has been completed, you will be asked to fill out an application form to determine the level of access you will need. You must complete both the Mindflash course and application form before you can be granted access to the CMRI building.

We require that all visitors to the building comply with CMRI policies. Policies and safety documents that are most relevant to visiting scientists are included as part of the WHS induction.

In most cases, if access is required for equipment use or research purposes, you will need to complete an on-site induction with CMRI's Safety Officer prior to receiving your access card.

Step Three: Discuss your use of CMRI equipment.

Your online application is shared with the Scientific Support team, a part of CMRI's Operations Unit. The Operations Unit is responsible for approving your request to access the building. The Scientific Support team needs to know about equipment use by visiting scientists, and approve use if any samples have a known risk.

When using CMRI equipment, you must also have a CMRI staff member as your point of contact. Your "CMRI Contact" should be familiar with the equipment you intend to use. They need to teach you how to use the equipment and/or assess whether you can safely use it without supervision. They also need to be able to help if you have questions or problems while using the equipment.

If you are requesting access to a Core Facility, the Facility manager takes on the role of your "CMRI Contact". If you are using a piece of general research equipment, your "CMRI Contact" will be confirmed by the Scientific Support team during your on-site induction.

Discuss your intended use of CMRI equipment with Scientific Support staff and/or your CMRI Contact. What samples you would like to bring in? What would you like to do with the equipment? Have you used similar equipment elsewhere? Do you need training before you use CMRI's version of the equipment?

Discuss any risks associated with your samples with Scientific Support staff and/or your CMRI Contact. They will need to decide if your samples can be handled safely and how to manage the associated risks.

5.3 When Using CMRI Equipment

CMRI's *Safety and Security Induction SOP* is the best place to find out how CMRI operates and how we manage safety and security concerns for workers and visitors.

The following points are important to remember when using CMRI equipment:

1. *Sign in at Reception whenever you arrive to use equipment, and sign out when you leave.*
2. *Wear your Visitor tag or ID badge whenever you are in the building.*
3. *Follow any safety announcements or directions. If a fire alarm sounds, evacuate the building when instructed and follow directions from CMRI's Wardens.*
4. *CMRI laboratory spaces are operated as Physical Containment Level 2 (PC2).*

   PC2 areas are clearly signposted – look for signs on walls or doors near laboratory areas. PC2 rules apply to all workers who enter PC2 areas. See the *Safety and Security Induction SOP* for details.
5. *You must wear appropriate footwear in PC2 areas.*

   At a minimum, footwear in PC2-rated areas must be enclosed around the toes. We recommend that footwear covers most of the foot towards the ankle and is made of nonporous, leak-proof material.

PC2 rules include wearing appropriate footwear,
no food or drink, washing your hands when you leave the area.

6. *Apart from footwear, protective personal equipment (PPE) is determined by the task and level of risk.*

   Eye protection (e.g. safety glasses), lab coats or tissue culture gowns, and gloves are usually worn when using equipment. Please see the *Lab Coats and Gowns Policy* and *Wearing Gloves Policy*.
7. *Do not use equipment unless you have been taught to use it correctly.*

   Talk to your CMRI Contact. There is also a list on ChromoZone for who may be able to help.
8. *Use the booking book or log book if there is one available.*
9. *Look for signs on equipment.*

   Shared equipment items should have a 2-page equipment SOP posted to remind you about their risks and what you need to know to operate the equipment safely. Follow any posted instructions.
10. *Clean up any spills – ask for help if you need it.*

    For large spills, you may need to use a Spill Kit. Chemical, Biological and Radiation Spill Kits are available depending on what hazardous substances are handled in each area. Read the Spill Kit instructions. Alert your CMRI Contact if you need help, and other workers if you need urgent help or the spill might affect them.
11. *When you finish work, make sure the equipment and surrounding area is clean and remove any waste so it is ready for the next user. Dispose of any waste appropriately.*
12. *Report any equipment problems to your CMRI Contact.*

    You may be asked to help fill out a Repair Form to make sure equipment problems are resolved. Repair Forms are submitted to CMRI's Scientific Support group.
13. *Report any safety concerns or incidents to your CMRI Contact.*

    You may be asked to help fill out an Incident Report Form to investigate those concerns. Incident reports are reviewed by CMRI's WHS committee.

6. References

CMRI Access Application and WHS Training – Visiting Scientists (Mindflash course)
https://cmri.mindflash.com/PublicCoursePage.aspx?c=1874057806
Short URL: http://bit.ly/2njcdoa

CMRI ChromoZone (intranet)
http://chromozone/ on CMRI computers (login access required)

Repair Forms and Incident Report Forms
http://chromozone/howdoi/Pages/Repair-Forms-and-Incident-Report-Forms.aspx

Safety and Security Induction SOP
http://chromozone/policies/Policies and Procedures/WHS-SOP-006-Safety and Security Induction.pdf

Who Can Help at CMRI
http://chromozone/howdoi/Pages/Who-Can-Help-at-CMRI.aspx