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| | General Facility Guidelines Location: Preclinical Imaging Research Centre, Room 3232 | |

1. Introduction

- 1.1. Robarts Preclinical Imaging Research Centre (“PIRC”), located on the third floor of the Robarts Research Institute, houses specialized Micro-Ultrasound (Micro-US), IVIS Bioluminescence (BLI) and Fluorescence imaging system, and Micro-Computed Tomography (Micro-CT) equipment for high resolution *ex vivo* imaging of biological specimens, and *in vivo* imaging of small animals.
- 1.2. In addition, the PIRC houses a dedicated surgical suite for small animal manipulations and surgical interventions.
- 1.3. The PIRC is a shared core facility designed for simultaneous use by multiple groups performing scientific studies involving the use of research animals and specimens.
- 1.4. The purpose of this document is to describe general guidelines for the use of PIRC.


2. Facility Access

- 2.1. The PIRC is a shared core Robarts facility designed for use by Robarts scientists, collaborators, and their research staff. Access to the facility is limited to facility managers, equipment operators, investigators, necessary research personnel, and essential building services personnel, collectively "Facility Personnel".
- 2.2. All Robarts personnel wishing to gain security access to the PIRC must review and complete PIRC-SOP-200.02 (Safety and Operator Training Procedures) and receive approval from the Director or the Facility Manager.
- 2.3. All Facility Personnel and Visitors wishing to enter the PIRC must have been given basic facility hazard awareness by a Facility Manager and have reviewed and accepted PIRC-FORM-100A.02 (Hazard Awareness Form).
- 2.4. All Visitors must be accompanied by at least one Facility Personnel with security access while in the PIRC.
- 2.5. The Facility Managers may at any time grant or deny entry to the PIRC under the discretion of the Director.

3. General Conduct

- 3.1. The PIRC has been designated a Biosafety Containment Level 2 (CL2) work area. All personnel and visitors entering the facility will adopt standard laboratory procedures consistent with a CL2 laboratory and Western Guidelines for Good Laboratory Practice¹.

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- 3.2. The PIRC is a shared core facility. Extra care and consideration must be taken to minimize the risk of activities that could jeopardize research carried out by other groups while conducting experiments within the facility. As such, other than the Facility Managers and/or equipment operators, use of the PIRC should be limited to performance of experiments utilizing the facility's equipment, and not for deskwork or general congregation.
- 3.3. In accordance with Western Guidelines for CL2 laboratories, **NO FOOD OR DRINK IS PERMITTED** in the PIRC at any time. At no time should food or beverage waste be found in Facility waste containers.
- 3.4. All PIRC personnel and visitors are required to wear clothing appropriate for the duties they perform at CL2 laboratories and must take necessary personal sanitation and health precautions designed to avoid contamination and reduce the risk of personal injury or infection.
- 3.5. Anyone noticing violation of the above guidelines or who have questions as to their application should immediately contact either the Facility Manager or the Director of the PIRC facility.

4. User Operational Responsibilities

PIRC user operational responsibilities include²:


- 4.1. Completing all applicable training,
- 4.2. Reporting all accidents/incidents and hazards, to their PIs and the facility director and to seek appropriate medical treatment if applicable.
- 4.3. Wearing appropriate personal protective equipment (PPE), at minimum laboratory coats, protective eyewear. Additional PPE may be required depending on activities within the facility.
- 4.4. Following safety procedures recommended by the OHS office at Western.

5. Supervisor Operational Responsibilities

PIRC supervisor operational responsibilities include^{2, 3}:

- 5.1. Processing PIRC access application requirements of new users and approving access to qualified applicants,

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- 5.2. Ensuring new users complete their required training including WHMIS, Biosafety, and Animal Handling,
- 5.3. Giving orientation tour of the PIRC facility to new facility users. During this tour, the supervisor will show the new user the location of the following:
 - 5.3.1. Eyewash,
 - 5.3.2. Fire extinguisher.,
 - 5.3.3. Cleaning supplies,
 - 5.3.4. Biohazard bags,
 - 5.3.5. Safety glasses, goggles, etc.,
 - 5.3.6. Lab coats,
 - 5.3.7. Standard Operating Procedure documents,
 - 5.3.8. Data Safety Sheets,
 - 5.3.9. A sheet of paper showing how to clean a spill,
 - 5.3.10. A sheet of paper containing emergency contact numbers, and
 - 5.3.11. First Aid equipment.
- 5.4. Ensuring that Personal Protective Equipment (PPE) is worn appropriately as required,
- 5.5. Completing an Accident Illness and Incident Reporting Form (AIIR) if an accident or incident occurs,
- 5.6. Completing a Hazard Communication Form,
- 5.7. Organizing the annual calibration/certification of the Biological Safety Cabinets in the PIRC facility.
- 5.8. Organizing the annual calibration of the isoflurane vaporizer machines in the PIRC facility.
- 5.9. Ensuring that full biohazard bags and full sharp containers are disposed of according to Western's guidelines.

6. Revision History

| Version Number | Date | Changes | Author |
|-----------------|---------------|--|-----------------------|
| SOP#100 | June 15, 2011 | Initial version | Hemanth Varghese, PhD |
| PIRC-SOP-100.02 | Oct 15, 2024 | Included IVIS machine, changed "Robarts" guidelines to Western", | Joseph Umoh, PhD |

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| | | added user and supervisor operational responsibilities, used PIRC logo, renamed SOP #100 as PIRC-SOP-100.2, used PIRC logo, etc. | |
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7. References

- ¹ Western University **Biosafety Guidelines and Procedures Manual For Containment Level 1 & 2 Laboratories**, Section 6.2: Containment Level 2—Physical and Operational Requirements. Approved by Biosafety Committee, October 2019. Available from: https://www.uwo.ca/hr/form_doc/health_safety/doc/manuals/biosafety_manual.pdf
20 September 2024.
- ² Western University **Laboratory Safety and Hazardous Waste Management Training Course Notes: Roles and Responsibilities of Supervisor and Worker**. Available from: <https://owl.uwo.ca/portal/site/432c539d-edd0-4567-ad9f-b451482d7263>.
cited 12 August 2024.
- ³ Western University **Hazardous Materials and Waste Management Handbook**. Section 2: Hazardous Waste. Available from: https://www.uwo.ca/hr/form_doc/health_safety/doc/manuals/hazardous_handbook.pdf.
20 September 2024.