Animal Safety Training and Handling

1. Introduction

1.1 The static magnetic field in the CFMM MRI facilities is always present. It is essential that everyone entering the facility is aware of the presence of the magnetic field, since we cannot otherwise detect it (i.e. magnetic fields cannot be seen or felt).

1.2 Research involving animals presents unique hazards related to naturally occurring pathogenic organisms which may be transmitted from the animals and infect the people working with and caring for these animals. Similarly, humans may transmit diseases to animals. Personal Protective Equipment (PPE) is not always used to protect people; many species need protection from human pathogens as well.

1.3 The CFMM MRI facilities and animal preparation areas are suitable for both Level I and II animal studies as approved by Western’s Animal Care Committee.

1.4 All employees and students working with animals must be enrolled in the Medical Surveillance Program for Animal Handlers through Workplace Health. It is important to update your Hazard Communication Form with your Supervisor if your duties in the lab change, or if the species you are working with changes. Immunizations and testing may be required depending on the individuals risk group, as determined by contact. Examples include tetanus, rabies, hepatitis B, TB skin testing.

2. Hazards

2.1 Zoonotic Disease

2.1.1 Zoonosis relates to a disease of animals that may, under natural conditions, be transmitted to humans. The incidence of infection can be relatively low if the proper precautions are used. No eating or drinking is allowed in the prep area. PPE specific to the study and species must be used.

2.2 Laboratory Animal Allergy (LAA)

2.2.1 LAA may be the most prevalent occupational hazard facing people who work with research animals. The animal allergens are mostly small molecular weight proteins such as albumen. These proteins occur in the serum and tissues, but also in the saliva, urine and skin dander. The appropriate use of PPE such as good quality particulate masks, gloves and lab coats can significantly reduce exposure to animal allergens.

2.3 Anesthetic Gas

2.3.1 Isoflurane is provided for use in the CFMM. When used properly, it is a very safe and effective means to keep animals asleep during imaging. Safety precautions for isoflurane include: using a precision vaporizer for induction and maintenance; using an appropriately sized induction chamber; using the lowest flow of carrier gas possible to maintain anesthesia; filling the vaporizer in a well ventilated area; using and weighing charcoal scavenger canisters according to manufacturer.
2.4 Animal Bites

2.4.1 Personnel who have not been trained to handle animals, should not do so. Animals can be very unpredictable and proper training for each species is mandatory.

2.4.2 A bite from an animal can turn into a very serious matter. If you sustain an animal bite, follow the procedures outlined below. It is advisable to seek medical care in ALL bite cases.

3. Personal Protective Equipment (PPE)

3.1 Due to the variance of work conducted in the CFMM, the PPE necessary will depend on the specifics of each approved protocol. At a minimum, lab coats/long sleeves and gloves are recommended.

3.2 Fit testing for an N95 mask may be required. Please contact the appropriate Safety Officer or Western Workplace Health for further details.

3.3 Lab coats can be obtained from Room 0206, in the basement of Robarts Research Institute and can be exchanged for freshly laundered ones during daytime hours.

3.4 Ear protection is mandatory if personnel are required to stay inside the magnet room during a study. Foam ear plugs are available from CFMM staff.
4. **Training**

4.1 Western Human Resources ([https://myhr.uwo.ca](https://myhr.uwo.ca)) requires that anyone working in a research laboratory and in the presence of animals should complete the following:

4.1.1 Laboratory Safety & Hazardous Waste Management  
4.1.2 WHMIS  
4.1.3 Worker Health & Safety Awareness  
4.1.4 Personal Protective Equipment  
4.1.5 Biosafety

4.2 Individualized training for the use of animal equipment will be carried out on an as needed basis by the CFMM Veterinary Technician.
## Animal Safety Training and Handling

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### Revision Chronology

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**CFMM Director Signature:**

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