University of Michigan Medical School Department of Radiology	Michigan Small Animal Imaging Resource In Vivo Cellular and Molecular Imaging Center Department of Radiology University of Michigan	Standard Operating Procedure	
Title: Procedure for Animals Entering the Center for Molecular Imaging (CMI) area			
of the North Campus Research Complex (NCRC) for Magnetic Resonance Imaging			
	Author: Amanda Fair		
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A. <u>PURPOSE:</u> It is sometimes essential to transport animals within or between campus buildings in order to facilitate viable research. To provide for the integrity and well being of the animals being transported into the imaging facility, a system has been devised that will facilitate the research while minimizing the risk of spreading a contaminant. It is critical that research personnel follow the procedures described in the *Guide for the Care and Use of Laboratory Animals* regarding the transportation of animals in order to reduce any undue stress and risk of Zoonosis to and from the animals. The following Standard Operating Procedure (SOP) outlines the steps required to maintain a sanitary magnetic resonance imaging environment for the research animals.

B. <u>**PROCEDURES:**</u> Please follow all procedures in place regarding the proper sanitation of carts and wheels and the proper transport of animals. You can visit <u>http://www.ulam.umich.edu/sops/AnimalTransport.pdf</u> if you have any questions on these procedures. Should it become necessary to image animals harboring chemical hazards please contact Amanda Fair at <u>awelton@umich.edu</u> for further information. The following guidelines have been devised to ensure the likelihood of a zoonotic pathogen being transferred between animals is minimized.

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- 1. If special precautions are required for your species you must provide all relevant information to Amanda Fair well in advance so that necessary safety measures can be put into place for CMI personnel. Safety precautions may be species-related or may be due to a known pathogen or hazard that the animal will harbor during imaging.
- 2. When animals come to the CMI facility for the first time they must be placed into a clean cage or transport cart prior to coming to NCRC CMI.
- 3. Animals must arrive anesthetized. Once within the MR imaging room the CMI has a dedicated MRI-compatible isoflurane vaporizer as well as a pulse oximeter that can be used and are included within the imaging rate.
- 4. All personnel entering the imaging area are required to don a disposable gown, hair bonnet and gloves before entering the MR imaging room. The PPE will be located in a cabinet within the CMI hallway.
- 5. Upon entering the CMI facility place transport carts outside of the imaging room.
- 6. Users must remove all magnetic items and electronic devices before entering the magnet room. There is a lockable cabinet within the hallway for your personnel belongings. Please refer to posted signs for proper safety procedures.
- 7. The coil table within the MR room should be prepared with absorbent/protective material sufficient for the size of the animal. The anesthetized animal can then be brought into the MR imaging room and placed directly onto the MR coil table at the front of the bore.
- 8. After imaging is completed, all contaminated materials (blue pads, etc) should be disposed of and all areas that have come into contact with animals should be sprayed generously with the provided Virex and allowed to sit for 10 minutes before wiping the areas clean. Please make sure that no animal wastes are present in the coil or on the coil table.
- 9. Discard of all PPE prior to leaving the imaging area.