

STANDARD OPERATING PROCEDURES
DIVISION OF COMPARATIVE MEDICINE
UNIVERSITY OF SOUTH FLORIDA

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TITLE:	Xenogen® Bioluminescence Imaging System Procedures
SCOPE:	All Animal Care and Research Personnel.
RESPONSIBILITY:	Facility Manager, Animal Care and Research Personnel
PURPOSE:	To Establish Minimum Duties Required to Use and Sanitize Xenogen Imaging Equipment.

I. PURPOSE

1. Describe access and sanitation procedures that ensure protection of rodent health status while sharing the Xenogen Imaging Unit among many research projects.
2. Establish an order of use criteria for all users to operate under to minimize exposure of transgenic or immunodeficient animals to other populations.

II. RESPONSIBILITY

1. Animal care and research staff are responsible for maintaining the health status of rodent colonies housed within the vivarium and ensuring equipment does not become a health concern for the animals used within the unit.

III. PROCEDURES

1. Prior to using the Xenogen Unit, all personnel must obtain training from Molecular Imaging personnel and the Training Coordinator, or their designees. This training will cover basic operation of the system, as well as outline the cleaning procedures below. Without this introductory training, no personnel will be allowed to reserve the equipment through the Facility Manager.
2. Staff members will check with the Facility Manager regarding order of room use. This order of room use is based upon introducing the cleanest "sample" (e.g., tissue culture) first and subsequently introducing samples that may harbor infectious agents as the day progresses. Only animals housed in rooms containing specific pathogen and viral antibody free colonies are permitted access to the Xenogen Imaging System. Staff members will don appropriate garb for the procedure (clean lab coat, booties and gloves are required when handling animals). In general, the following order has been established, but it may be altered in special circumstances:
 - a. Tissue cultures
 - b. Immunodeficient animals
 - c. Clean Transgenic animals
 - d. Clean Immunocompetent animals
3. Animals will be brought to the imaging room in a closed microisolator cage with filter top in place.
4. Only one cage will be opened at one time. Animals from different home cages should not be placed in the induction or imaging chambers at the same time.

5. Please note, all cleaning will be done by pre-moistening of paper towels with the cleaning agent and NOT by spraying of the agent onto surfaces. This will reduce possible introduction of cleaning agents inside equipment housing.
6. Prior to opening a new cage, the handler will change gloves and clean the equipment as follows:
 - a. Inside of the anesthesia induction chamber is wiped down with Clidox®.
 - b. Inside of the imaging unit is cleaned as above.
7. In addition to steps listed in item 4, whenever a *new group* of animals held on behalf of another primary investigator are to be imaged, the equipment will be cleaned as follows:
 - a. Wipe off counter area, keyboard, computer mouse, CPU, and outside of imaging unit with Clidox®.
8. The final user for the day, after removal of all caging and supplies, is responsible for equipment cleaning items as described in items 4 and 5 above.
9. At the end of the work shift animal care staff will sweep and mop the area, remove trash, and lock the room until the next morning. If the research staff is using the unit beyond this time, they are responsible for sweeping/mopping the area. Animal care staff will provide a mop, mop-bucket, and appropriate cleaning solution.

Approved:

Date: