Title: Ultrasound imaging of small animals in Small Animal Imaging Facility
SOP Number: 1
Effective Date: September 7, 2007
Review Date:
Approval: ____________________
Director

I. Purpose: The purpose of this SOP is to outline the procedure for ultrasound imaging of small animals in the Small Animal Imaging Facility.

II. Responsibility and Scope:
* It is the responsibility of all investigators to read the following SOP. A copy is also available from the ultrasound website----Google word: Penn Ultrasound Research Lab.
* It is the responsibility of all investigators to have completed their animal hands-on training from IACUC. Only those researchers listed in the protocol may handle animals during imaging session.
* No radioactivity is allowed during imaging sessions. Animals with radioactivity related to other protocols are not allowed and injections of animals with radioactive substances are not permitted in this facility.
* Animals are not allowed to remain in the ultrasound imaging facilities for housing purposes after an imaging session is finished unless prior arrangements have been made for longitudinal studies.
* It is the responsibility of the researchers to provide the imaging facility with the following documents prior to their 1st imaging session:
  • Animal Protocol (including any amendments)
  • Approval letter (must include permission to transport animals to imaging facility and perform imaging)
  • Grant Account number for billing purposes
* It is the responsibility of the researchers to follow the SOP for the Transportation of Animals for Imaging Studies (refer to “SAIF-Radiology-01”)
* It is the responsibility of the investigators to care for animals in a humane way in accordance with IACUC protocols.
* It is the responsibility of the researchers not to bring animals to the imaging facility if:
  • Animals are sick.
  • Animals are distressed.
  • Animals are bearing large tumors that bring discomfort or pain to them.
  • Animals are residing in a room that is under quarantine for viral infection, pinworms or fur mites.
When animals are found in distress or discomfort, the Technical Director of the facility will ask researchers to remove the animals immediately from the imaging facility, transport them to their animal facility, and see a veterinary doctor.

* It is the responsibility of the researchers to have IACUC approval for repeated animal transportation between the imaging facility and their animal housing facility if researchers plan to image the same animals more than once within a 24 hour period.

* It is the responsibility of researchers to remove animals and see a veterinary doctor in the event that animals die during the imaging session.

* It is the responsibility of the Technical Director of the imaging facility to supervise researchers on animal sedation and animal handling. Upon request, the Technical Director may provide animal anesthesia service to users.

* It is the responsibility of the researchers to arrive at the imaging facility at the scheduled time. In the event that a researcher is late or does not show up, he will still be charged for the scheduled time. When reserving imaging session time slots, researchers must include 10 minutes in their imaging session for cleaning and sterilization.

* It is the responsibility of the researchers to clean and sterilize all equipment used during the imaging session.

* Data acquired during the imaging session(s) will be held for a maximum of 3 months. It is the responsibility of the investigator to obtain the data and make any back ups necessary for long term storage of the data.

III. Definitions:

IV. Procedures:

1. Put on protective clothing prior to entering the animal facility rooms (gown, gloves, mask, shoe covers, and bouffant cap). Protective clothing will be located just outside the animal preparation room.

2. Spray disinfectant on all the cages that will be transported from the animal facilities (i.e., Stemmler, CRB, Richards).

3. Disinfect the animal imaging table. Cover the table with absorbent pads and tape to avoid any movement of absorbent pads. Turn on the light near the surgery table.

4. Place animal cage on table. Remove animal for anesthesia.

5. Perform procedure.

6. Return animal to cage. Monitor animal until it is fully recovered.

7. Dispose of absorbent pads and any other waste in the appropriate container.

8. Clean and sterilize all equipment used.

V. Directions:
VI. Safety Considerations:
Reminder: drinking, eating, applying cosmetics and open-toe shoes are not allowed under any circumstances in the presence or absence of live animals in the Small Animal Imaging Facility. Wearing safety glasses is strongly recommended in this area.

VII. References:
A. Guideline #16 (6/23/99): Penn-IACUC Guideline for Transportation of Laboratory Animals- Philadelphia Campus

VIII. Attachments:

IX. Document History:

<table>
<thead>
<tr>
<th>Version Number</th>
<th>Effective Date</th>
<th>Author</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>November 15, 2005</td>
<td>Sehgal</td>
<td>New</td>
</tr>
<tr>
<td>2</td>
<td>September 7, 2007</td>
<td>Sehgal</td>
<td>Revised</td>
</tr>
</tbody>
</table>