

GUIDELINES FOR ANIMAL USE IN HUMAN SUBJECT STUDY ENVIRONMENTS

I. ZOONOTIC DISEASE RISK OF SHEEP AND/OR GOATS

Sheep and/or goats may be imaged at the MRI Facility and these animals are associated with the zoonotic disease Q-fever. It is not possible to guarantee the purchase of disease-free animals as serologic testing is not accurate and other testing is not available. Q-fever is caused by the obligate intracellular pathogen *Coxiella burnetii*, a CDC/USDA Select Agent which forms unusual spore-like structure that is highly resistant to environmental conditions.

TRANSPORT OF SHEEP AND GOATS

Sheep and/or goats will be transported from the animal housing facility to the Animal Research MRI Facility in an approved HEPA-filtered cart or other approved method per the UofL Q-Fever Policy for Sheep and Goats.

PERSONAL PROTECTIVE EQUIPMENT – SHEEP AND GOATS

All personnel having animal and/or environmental contact for imaging assays are expected to follow the Q-Fever Policy for Sheep and Goats, including the use of appropriate PPE and respiratory protection as described in the UofL Q-Fever Prevention Guidelines: Personal Protective Equipment (PPE).

Required PPE (Sheep/Goats) includes:

- N-95 respirator
- Disposable or on-site laundered lab coat
- Water-resistant booties or dedicated footwear
- Disposable gloves

For large animals other than sheep and goats, lab coats and gloves may be sufficient however this would depend on the agent(s) involved in the research. Contact the Biosafety Program at biosafe@louisville.edu or 852-6670 for assistance.

II. ANIMAL PREPARATION PRIOR TO ENTERING MRI FACILITY

- Animal preparation, such as shaving of catheter/imaging sites, must be performed in the animal facility prior to entry into the imaging facility.

- The investigator is responsible for bringing supplies such as PPE, chucks pads or impervious drapes, biohazard bags, syringes, sharps containers, etc.

III. DECONTAMINATION PROCEDURE FOR ANIMAL RESEARCH MRI FACILITY

- Use disposable absorbent pads or impervious drapes whenever possible to minimize direct contact of animals to MRI surfaces.
- Feces, urine and other potentially contaminated wastes must be captured, contained, and properly disposed of.
- Disposable pads/drapes must be disposed in the biohazard waste at the end of each procedure.
- Ensure all portable and fixed equipment is cleaned and disinfected prior to and after each use and between procedures performed on animals from different groups (i.e. different cages, different racks and animals of different health status).
- All surfaces that come in contact with animals must be cleaned and disinfected.
- Decontaminate prior to use and between animal groups with 5% Microchem, 5% Enviro-chem or 10% (v/v) bleach prepared fresh daily. Rinse with 70% ethanol.
- After imaging the final animal of the day or group, the MRI technician will need to disinfect the equipment via application of 5% Microchem, 5% Enviro-chem or 10% (v/v) bleach for 30 minutes, followed by a rinse with 70% ethanol. *Note that this treatment may harm plastic.*
- Gloves must be removed before touching control panels, video equipment, telephones, doorknobs, elevator buttons, or other objects in shared spaces, including the control room.
- It is recommended that after imaging of sheep/goats, the MRI facility complete 99.9% air changes prior to entry of non-ovine/caprine species.
- The investigator is responsible for removing all biohazardous waste from the imaging facility after completing the imaging procedure. All contaminated materials must be placed in red-biohazard bags, tied with an overhand knot and sprayed with disinfectant prior to removal from the facility.