

**Kennedy Krieger Institute
F.M. Kirby Research Center for Functional Brain Imaging
High-Field Preclinical MRI Facility**

Animal Handling Procedures

The F.M. Kirby Research Center High Field Animal Imaging Facility is a clean biosafety level 1 facility and thus procedures to minimize infections need to be strictly followed. Animals will be housed in Johns Hopkins core holding facilities and returned to core high risk return facilities after imaging: **there is no animal holding space associated with this facility.**

The following procedures for animal transport and disinfection need to be strictly followed by all users to prevent cross contamination and minimize the possibility of rodent infections:

1. All animals will be housed in specific pathogen free micro-isolator facilities (BRB or Ross).
2. Rodents will be transported in a clean filter-top micro-isolator cages. In addition, the transport cages will be closed in RAR-approved plastic transport containers.
3. Rodents will be transported in the IACUC-approved animal transport route to KKI.
4. Only authorized users are allowed to enter Kirby Center Animal Imaging Facility.
5. On entry, transport containers will be placed on the counter in the gowning area and will be sprayed with Virkon-S solution.
6. The designated gowning area will have a tacky mat. A disposable gown, shoe covers, and gloves will be worn at all times. Hair covers, sleeve guards and masks will be worn for animal preparation.
7. Inside the facility, users will use only the designated non-magnetic plastic carts, which will be placed at the entrance. No other carts will enter the facility. Carts with the transport animal container can be temporarily placed in the designated area nearby (see enclosed map).
8. Unless items are sterile or disposable, all materials and surgical instruments need to be autoclaved or disinfected with an RAR-approved high level disinfectant before entering imaging suite. All other equipment brought in by the users needs to be sprayed with Virkon-S solution upon entrance in the gowning area.
9. Once in the animal preparation room, cages will be removed from the transport container, placed in the biosafety hood, and the outside sprayed with chlorine dioxide disinfectant before opening the cages for animal anesthesia and preparation.

10. The biosafety hood will be sprayed and wiped down with chlorine dioxide based disinfectant before and after use.
11. The animals will be moved to the scanner room using the anesthesia induction chambers. The induction chambers will be washed after every use and returned to the hood.
12. The facility will provide standard disposable materials such as gloves, syringes, needles, biohazard bags for corpses, gauze and alcohol pads.
13. The facility will not provide any surgical equipment. Users are required to bring their own sterilized equipment.
14. Corpses will be placed in a designated biohazard bag and will be transport back to the designated corpse freezer in the High Risk Return Area in Ross.
15. No corpses will be left in the facility overnight.
16. After imaging procedures, rodents in survival experiments will be immediately placed back in their micro-isolator cages and the lid placed back on. The outside of the cages will be disinfected, and the cages will be placed in the transport container in the gowning area.
17. At the end of imaging session, ALL surfaces will be disinfected: Tables, benches, and the transport container will be wiped down and sprayed with Virkon-S. The biosafety hood will be sprayed and wiped down with chlorine dioxide disinfectant. Virkon-S is corrosive. Within 10 min of disinfection with Virkon-S, metals will be rinsed with water or cleaned with neutral disinfectant/Citriguard.
18. Animals will be returned in transport container to their assigned High Risk Return Area in Ross, using the approved animal transport route and procedures for that facility.
19. All empty cages will be returned to the Ross cage wash, dirty side, using the animal transport route.