Guidelines on Animal Studies

General principles

1. The MRI Unit may be used by HKU researchers for animal studies with prior approval by the Scientific Committee of the MRI Unit.

2. Scheduled animal research procedures may have to be rescheduled should an urgent need for patient use arise.

3. All studies must be approved by HKU Laboratory Animal Unit with detailed procedures made available to the MRI Unit.

4. Invasive procedures shall not be performed in the MRI Unit.

5. Radiographers or authorized research staff of the MRI Unit will operate the MRI machine.

6. To prevent cross-infection between animals and people, strict infectious control measures must be observed by the researcher and his/her assistants.

Responsibilities of Researchers

1. The researcher shall comply with all rules and regulations of the HKU Laboratory Animal Unit and any local laws concerning Animal Studies.

2. The researcher shall apply to and obtain the approval for the study.

3. The researcher is responsible for returning the facility to its usual state of cleanliness and availability for patients.

4. The researcher shall comply with all applicable local laws and regulations concerning medical waste disposal, protection of the environment, and pollution control to dispose animal waste, trash, and debris.

5. Researchers and assistants shall follow all other appropriate procedure requirements of the MRI Unit.

6. Failure to comply with the guidelines may lead to suspension and termination of the studies concerned.
Application and Scheduling

1. In addition to the standard scanner access application procedure and general operational procedures established by the MRI Unit, a completed application form (Appendix I) with the schedule of proposed animal studies shall be submitted to, and must be approved by the scientific committee, at least 7 days before the study.

2. The studies shall be initiated and completed within an agreed upon time frame.

3. Animal studies performed in the MRI Unit should not be scheduled during the hours of patient care.

4. Ensure at least 1-2 hours of downtime occurs in the examination room between animal and human use to permit the complete exchange of air from the room and to minimize any potential for transmission of zoonotic illnesses.

Transportation of animals

1. Animal(s) transported to the clinic area must be accompanied by the Lead Researcher and/or his/her designee.

2. As required, the animal(s) shall be prepared (i.e., anesthetized etc.) in the Laboratory Animal Unit or researcher's laboratory and shall remain totally anesthetized during the transfer to the MRI Unit. Any initial surgery should be accomplished before transfer to the MRI Unit. The animals shall remain anesthetized during the course of the experimentation.

3. Animal excessive hair removal should be performed in the Laboratory Animal Unit or researcher's laboratory and completed prior to arrival in the MRI Unit. Excessive fecal or other organic material should be removed/cleaned from the skin prior to arrival in the MRI Unit.

4. Animals shall be transported in clean cages with clean bedding. These cages shall be covered with a sheet so that the animal(s) shall not be visible to the public during the transport. Larger animals especially primates need to be transported in covered/filtered transport cages to reduce the risk of infected aerosols.

5. The transport must follow a predetermined, precise route from the Laboratory Animal Unit or researcher's laboratory to the MRI Unit to minimize contamination of patient areas.

6. Precautions shall be taken during the transport to prevent the loss of feces, urine, blood and secretions into the environment. Large animals shall be diapered to prevent loss of urine.
Infectious Control Measures

1. The researcher shall bring his/her own supplies for the study.

2. No food or beverages shall be consumed or stored within the examination area.

3. The researcher and assistants shall wear clean laboratory coats when entering the MRI Unit. Laboratory clothing worn in the Laboratory Animal Unit shall not be worn in the MRI Unit.

4. All equipment and facility surfaces that may come into contact with animals shall be completely covered with impermeable drapes prior to and during the studies.

5. Personnel shall wash their hands after handling the animals, before entering the MRI Unit, and before leaving the MRI Unit.

6. Precautions shall be taken during the study to prevent the loss of feces, urine, blood and secretions into the environment. Large animals shall be diapered to prevent loss of urine.

7. Patients and non-essential employees must not be present in the immediate vicinity when animal procedures are ongoing.

8. Facility doors shall be left closed when any experiments are in progress.

9. After the studies are finished, the researcher is expected to comply with all applicable local laws and regulations concerning medical waste disposal, protection of the environment, and pollution control to dispose animal waste, trash, and debris. All non-sharp disposables shall be placed in a leak-tight plastic bag. This shall include all drapes, waste, disposable equipment, and other materials and drugs used during the course of the studies. The researcher shall seal the bag and remove it from the MRI Unit. The researcher shall place all sharps in a ‘sharps collector’ brought along for this purpose, and shall remove it from the MRI Unit at the end of the study.

10. After the studies, all surfaces including countertops, floors and walls, equipment, and/or other exposed surfaces, e.g. door and light handles, light switches of the examination room must be thoroughly cleaned and disinfected with a freshly prepared disinfectant (Cidex OPA or equivalent).

11. Visible organic material such as blood or body fluids must be removed prior to the application of the disinfectant. The disinfectant should be applied to all contact areas and should be applied according to manufacturer’s recommendations. Following disinfection, housekeeping staff may clean horizontal surfaces and mop as usual.

12. An Infection Control Checklist (Appendix 2) documenting the required procedures, shall be used by the researcher in preparing for, and conducting, the study, and in the subsequent cleanup.

   a. A copy of the completed checklist shall remain at the facility to be used by the radiographer to determine that the facility is ready for subject use.
   b. If the radiographer determines that the facility is not left by the researcher in the appropriate condition for subject use, the radiographer shall immediately notify the Nursing Officer.
   c. The Nursing Officer shall immediately contact the researcher to clean up the facility and, if necessary, coordinate the appropriate cleanup with other personnel.
Research Services Request Form

Project Information:

Project Title: ____________________________

Project Supervisor/PI: ____________________________

Department/Centre: ____________________________

Name of University: ____________________________

Tel. no.: ____________________________ Fax no.: ____________________________

Email: ____________________________ Ethics Committee Approval: Yes□ No□

Funding Source (if available): ____________________________

Please attach project summary including references, total no. of scanning subjects and hours for approval

Person of contact / in charge:

Name: ____________________________ Title: ____________________________

Tel. no.: ____________________________ (office) ____________________________ (mobile)

Fax no.: ____________________________ Email: ____________________________

Charging Information:

Account No. ____________________________

Name of Account Holder: ____________________________

Note: Scan time is charged on a 15-minutes basis

Submitted by Project Supervisor/PI: ____________________________

Approved by: ____________________________

Print name: ____________________________ Print Name: ____________________________

Title: ____________________________ Title: ____________________________

Date: ____________________________ Date: ____________________________
Appendix 2

Infection Control Checklist for Animal Studies

Date : 
Researcher : 
Protocol No. : 
Animal Species : 

1. Bring the following items with you to the MRI Unit: 
   a) Plastic Bags  
   b) Sharps collectors  
   c) Change of Lab coats  
   d) Drapes and diapers  
   e) Disinfectant

2. Make sure animals are totally contained, shaved, anesthetized (where applicable) and covered before transporting them to the MRI Unit.

3. Wash your hands after working with the animals in the Animal Facility before entering the MRI Unit.

4. Change your lab coat before entering the MRI Unit.

5. Make sure the door to the MRI Unit is closed and no food or drink is brought into the MRI Unit.

6. Cover all surfaces in the MRI Unit in contact with the animal.

7. When leaving the MRI Unit, disinfect all surfaces thoroughly and take everything with you.

8. Before leaving the MRI Unit, make sure to wash your hands and inform the on-duty Radiographer that you are leaving.

The above procedures have been followed by the researchers and assistants.

Name of Researcher / Assistant ___________________________ Signature of Researcher / Assistant ___________________________

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