SOP Title: Rodent Importation and Quarantine

Purpose: To prevent the introduction and spreading of pathogenic agents from other institution or vendors via the importation of rodents.

Responsibility: Technicians, Scientific Officers, Attending Veterinarian, and Animal Users

Related SOP: A-001 Sampling from Laboratory Animals for Infectious Agent Detection  
              C-004 Receive of Imported Mice  
              C-001 Handling of Imported Mice During the Quarantine Period

Written by: Dr. Siva Tsang (SO/APCF)  
Approved by: Dr. Anthony James (D/APCF)

1. Policy
   1.1. All importation of animals to any area of HKUST, including satellite facilities, individual laboratories and APCF, must be reviewed and approved by the director of APCF.
   1.2. Importation of animals from facilities within Hong Kong, except from SPF facility of Laboratory Animal Unit, Hong Kong University, must be initiated by submitting an Application for the Importation of Experimental Animals from Facilities Outside of HKUST to the Director of APCF for review and approval.
   1.3. Importation of animals from non-Hong Kong facility must be coordinated with a Scientific Officer of APCF.

2. Procedures
   2.1. Before the importation of rodents
       2.1.1. Health reports are obtained from the importing vendor, facility, or institution prior to receipt of the shipment, to ensure infectious agent which conflict with the current APCF health status will not be presented into the rooms where APCF animals are housed.
       2.1.2. Animals to be imported will be classified to Low Risk, High Risk or Unacceptable according to a risk assessment by APCF considering the following:
              2.1.2.1. The results of the health report from the importing animal facility; and
              2.1.2.2. The characteristic and quality of the health surveillance program of the importing animal facility
              2.1.2.3. The destination within HKUST if not the APCF, and period the animals to be held and/or used.
       2.1.3. Low Risk and High Risk, but not the Unacceptable rodent will be imported into any animal holding area in HKUST.
2.2. Importation of Low Risk and High Risk mice to APCF or other permitted satellite animal holding area

2.2.1. Mice are housed in a quarantine rack in 7H facility, satellite facility, or a third party laboratory capable of handling the specified quarantine procedures and the estimated risk.

2.2.2. The cages are controlled under negative pressure.

2.2.3. The animals are handled only in a nominated ATS/BSL2 cabinet.

2.2.4. Staff will not handle these animals or change cages until last thing for the day and if they have been handled will recuse themselves from handling any other animals until the next day.

2.2.5. Low risk rodent, but not High Risk rodent, can be bred and utilized by the user until the release of the animals from quarantine.

2.2.6. Pathogen screening

2.2.6.1. Low Risk Rodent

2.2.6.1.1. On the 3rd to 7th day after arrival, fecal, oral and fur samples will be collected and sent to a diagnostic laboratory for pathogen screening by PCR.

2.2.6.1.2. The process from the arrival of the animals to the return of the pathogen screening results will take up to two weeks.

2.2.6.2. High Risk Rodent

2.2.6.2.1. On the 3rd to 7th day after arrival, fecal, oral and fur samples will be collected and sent to a diagnostic laboratory for pathogen screening by PCR.

2.2.6.2.2. On the 3rd to 4th week after arrival, survival bleeding will be performed, in addition to a 2nd collection of fecal, oral and fur samples. The samples will be sent to a diagnostic laboratory for pathogen screening by serological and PCR tests.

2.2.6.2.3. The process from the arrival of the animals to the return of the pathogen screening results will take up to two weeks.

2.2.6.2.4. Only when both screening indicating the absence of excluded agents will be considered satisfactory.

2.2.7. Mice with satisfactory health status will be released to the animal rooms where they will be bred and/or used for experimentation.

2.2.8. The turnaround time from the date of arrival will be up to 2 weeks (Low Risk rodent) and 6 weeks (High Risk rodent), respectively.

2.3. Importation of Low Risk and High Risk rats

2.3.1. Rats are routinely procured from a local reliable source classified as low risk.

2.3.2. Upon arrival, they are kept in the ordinary rat holding room until they are sacrificed for experiment.

2.3.3. If rats are imported from another source with additional risk consideration, director of APCF will decide biosafety measures accordingly.
2.3.4. Samplings and screenings for microorganism concerned are done according to pt 1.2.

2.4. **Handling of rodents with positive results on infectious agent(s) to be excluded**

2.4.1. Rederivation of mouse strains
   2.4.1.1. Rederivation will be conducted by the Transgenic Services
   2.4.1.2. Surrogates receiving the washed embryos will be transferred into the quarantine rack in 7H or 7J whenever applicable.
   2.4.1.3. Upon weaning of the delivered animals, the surrogates will be sacrificed and samples are collected for infectious agent screening.
   2.4.1.4. The animals will be released only when there have been negative results from the surveillance procedures.

2.4.2. Medication
   2.4.2.1. Medication, if feasible, may be administrated (under the supervision of the attending veterinarian) followed by the corresponding pathogen monitoring.
   2.4.2.2. The animals will be released only when there have been negative results from another round of pathogen detection procedures.

2.4.3. Euthanasia
   2.4.3.1. Animals will be euthanized when:
      2.4.3.1.1. the risk posed by the pathogen to APCF animals is unacceptable;
      2.4.3.1.2. no treatment is feasible; or
      2.4.3.1.3. rederivation is not considered feasible.
   2.4.3.2. Animals may be imported again when
      2.4.3.2.1. the disease in the importing facility has been cleared;
      2.4.3.2.2. the animals has gone through a third party rederivation facility; or
      2.4.3.2.3. the same strains are imported from another facility with acceptable health status.

2.5. **Unacceptable Rodents**

2.5.1. Unacceptable rodents are those without an appropriate health report or reports showing excluded infectious agents

2.5.2. They are imported to animal holding area only after rederivation by commercial operators

2.5.3. In case of dispute about classification status of imported animals, APCF User Advisory Committee relying on the advice of the director of APCF, will make the final adjudication on the risk status of the imported animals.