## Mouse Quarantine Health Monitoring

## **Standard Operating Procedures**

All mice entering a Purdue University animal facility from non-approved sources will be required to remain in quarantine until the health status of the animals can be verified. This requirement is for facilities participating in the centralized management effort.

Non –approved sources would include collaborating universities, colleges or other institutions that may wish to donate mice to an investigator at Purdue University. Approved sources would include commercial vendors such as Envigo, Taconic, Charles River and Jackson Laboratories. Mice from approved sources would not be required to go through the quarantine process.

- Sentinel serology and parasitology information is required for the past year for mice coming from non-approved sources. This information should include tests for the same pathogens and parasites excluded from Purdue University's animal facilities. A Purdue University Laboratory Animal Program Veterinarian will review that information and approve/disapprove the shipment.
- Mice from non-approved sources will be housed in VPTH quarantine. They will be fed
  fenbendazole diet and Mite Arrest will be placed in the cages for at least 6 weeks.
   Alternatively, ivermectin diet may be fed to mitigate both pinworms and fur mites.
- Options for confirming the health of the mice are as follows:
  - Sentinel mice will be exposed to dirty bedding from the incoming mice. After six weeks of exposure the sentinel mice will be sampled for serology and parasitology. In addition, the colony animals will have fecal and fur swab PCR performed for parasitology at 6 weeks.
  - 2. Accelerated quarantine. Fecal samples will be collected on arrival, frozen, then pooled with fecal samples taken 2 weeks after arrival for PCR testing. Live bleeds will performed on a percent of the animals for serology and fur swabs will be taken from each cage for PCR 2 weeks after arrival. Fenbendazole diet and Mite Arrest or ivermectin diet will continue after quarantine release for a total of 6 weeks.
  - Rederivation and subsequent serology, parasitology and necropsy on foster moms after any pups are weaned. Rederivation through the Purdue University Transgenic Mouse Core Facility would be arranged by the principal investigator.
- Samples for testing will be sent to VRL.

Serology- Purdue Mouse Complete Serology: MHV, MVM (MMV), NS1, MPV, MNV, TMEV, EDIM, Sendai, *M pulmonis*, PVM, REO3, LCMV, Ectro, MAV1, MAV2, Polyoma, *E. cuniculi*, CARB, *C piliforme*, MCMV, K Virus, Hantaan, LDV, MTV

- o Parasites- Pinworms/fur mite PCR
- o Fecal PCR- Purdue Mouse Fecal PCR Panel
  - Includes MHV, MVM, MPV, MNV, EDIM
- Mice will be released from quarantine pending approval of all test results by a Laboratory Animal Program Veterinarian.
- All costs for shipping animals, per diems while in quarantine and serologic testing will be the responsibility of the Purdue University principal investigator importing the mice.
- All IACUC requirements i.e. an approved IACUC protocol and Animal Requisition Form must be on file with the IACUC office prior to shipment of any animals.