



OFFICE OF LABORATORY ANIMAL CARE

Working Instructions

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| WIN Number: | 107 | Rodent Quarantine Procedures | Revision #: | 0 |
| Date Effective: | 5/30/23 | | Supersedes: | 0 |

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PROCEDURE

All work instructions must be demonstrated by the trainer and performed by the trainee.

Import Schedule:

1. Import Coordinator:
 - a. The shipping coordinator will be notified of an approved import shipment by the exporting institution or the courier company.
 - b. Update the delivery date and assign the shipment to a quarantine room when confirming in Cayuse.
 - c. Update the Import/Export Requests spreadsheet/working document located on the Google drive.
2. When the animals arrive:
 - a. Spray animal transport containers with approved disinfectant and deliver them to designated quarantine housing room(s).
 - b. Transfer the mice from the shipping container to their new caging using strict microisolator technique.
 - c. Ensure no bedding or other materials from the container are transferred.
 - d. Transfer any cage cards, notes (on box, inside documents or on the bottom of the container) to the new cage (e.g., "Cage A", animal ID's, strain, etc.)
 - e. Receive the animals in Cayuse, print the cage cards for the number of cages needed and/or the number of animals.

- f. Place the entire shipping container in a regular plastic trash bag when finished.
 - g. Update the Research Service Calendar with the future quarantine testing date to ensure Vet Staff are aware of the work being done.
3. Animal Husbandry Staff:
- a. Adhere to any special instructions provided by the Import coordinator, PI, or the exporting institution and to the Rodent Microisolator Cage Change to ensure that shipments from different sources are separated so that infectious agents are not transferred between sources.

Diagnostics/Testing Procedures:

1. Direct testing of received animals:
 - a. Animals are tested 3-7 days post arrival by serology for infectious diseases, as well as PCR for fur mites, pinworms, and Helicobacter.
 - b. Samples are pooled for testing: See Sample Collection 1, 2 and 3
 - c. For every strain imported, choose 2 random cages to represent the group.
 - d. If the shipment contains strains of mice from different backgrounds, treat each strain separately for testing purposes. **Do not** pool samples from multiple strains.
 - e. Label the samples with room number, cage number and UCB PI name.
 - f. Strict micro-isolator technique should be used when handling the mice.
 - g. Include the submission form with the sample shipment and send samples to CRL/VRL via FedEx.

Sample Collect:

1. Blood Collection for Serology
 - a. Blood should be collected by an acceptable survival collection method (e.g. facial vein, submental, lateral tail vein)
 - b. The blood from up to two (2) animals can be pooled on one micro sampler.
 - c. Allow the blood to dry for one (1) hour prior to packing the sample.
 - d. The samples are sent to CRL or VRL at ambient temperature.
 - e. Storage of blood:
 - i. Micro samplers are good for up to four (4) days at room temperature or six (6) months refrigerated.
2. Fur Mite PCR
 - a. Samples are collected using a Sticky Swab (CRL) or Flocked Swab (VRL).
 - b. Swab the fur against the direction of hair growth, to include the dorsal neck, back, rump and inguinal area.
 - c. Use a single swab per animal.
 - d. Swab at least one mouse per cage.
 - e. Up to 6 swabs can be pooled in a single tube but vials should not be more than 75% full.
 - f. Only pool samples from mice of the same strain

3. Pinworm PCR

- a. Collect one or two fecal pellets from each cage,
- b. Pool up to 10 pellets from the same strain in the same tube.
- c. Collect fresh fecal pellets whenever possible.
- d. The vial should not be more than ~75% full.

List of excluded agents tested in quarantine:

| Species | Viruses | Bacteria/Fungus | Parasites |
|---------|--|--|--|
| Mice | EDIM, Ectromelia, LCMV, MHV, MVM, Polyomavirus, PVM, MPV, Reo-3 Sendai, TMEV | Mycoplasma pulmonis | Pinworms: Aspiculuris tetraptera, Syphacia obvelata, Furmites: Myobia, Myocoptes, Radfordia spp. |
| Rats | H1, Hantaan, KRV, LCMV, PVM, RCV/SDAV, Reo-3, RMV, RPV, RTV, Sendai | Mycoplasma pulmonis, Pneumocystis carinii, | Pinworms: Aspiculuris tetraptera, Syphacia muris, Syphacia obvelata Furmites: Myobia, Myocoptes, Radfordia spp. |

Testing Results:

1. When the results are received, complete the below guidelines.
 - a. Save all results in the Shared Drive > Rodent Health Surveillance Program > Sentinel results organized > QT results > year and report findings to the Veterinarian overseeing Import/Export.
 - b. If results are negative, email the PI/lab copying the veterinarian with the negative results.
 - c. Ask the lab which facility and room the animal should be transferred to.
 - d. If results are positive, the veterinarian should email the PI/lab so mitigation actions can be addressed.

Note: Positive results will **ALWAYS** be confirmed by a second testing modality, initiated by the testing laboratory. A false positive is considered if the sample is positive by a screening test and negative by the more specific secondary testing modality.

- e. If samples are positive, a plan will be formulated by the veterinarian for rederivation or euthanasia and will present the options to the PI.
- f. The exporting institution will be contacted regarding the positive result **IF** the result is different than indicated in the institutional sentinel report.

REFERENCE DOCUMENTS

| REVISION HISTORY | | | |
|--------------------|-----------|-------------------|-------------|
| REVISION NUMBER | AUTHOR(S) | EFFECTIVE DATE | REVISION(S) |
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