



## IMPORTING (FROM NON-COMMERCIAL SOURCES ) OR EXPORTING RODENTS

In some instances, an investigator may wish to obtain (import) rodents, such as a particular transgenic mouse strain, that are not commercially available. These animals may originate from an investigator located at a different institution. Conversely, an investigator may wish to ship (export) specific animals to a colleague at another institution. In such cases, it is important that approved procedures be followed to prevent the inadvertent introduction of pathogens into our existing animal colonies (or into the receiving institution's colonies). It is also important for accurately tracking animal numbers. The following describes the procedures that must be followed to import or export rodents.

**IMPORTING:** Importation of rodents to the BRF from sources (e.g. another university) other than approved commercial vendors requires prior approval from the BRF manager in consultation with a BRF veterinarian. In order to obtain approval, the PI first must provide the BRF manager with:

1. The approved RFUMS IACUC animal protocol number on which the animals will be used. (The appropriate species must be listed).
2. The number and complete strain identification of the animals being imported.
3. The contact information of the institution from where the animals will be shipped (i.e., the exporting facility) including address, phone number and email for the Attending Veterinarian and facility manager.
4. Key information regarding health records and monitoring reports from the exporting facility. Specifically:
  - Current (< 3 months) health status report on the colony / exporting facility
  - A 12-month history of the results of the exporting facility's sentinel testing program from rooms where the incoming animals have been previously housed
  - Description of the exporting facility's sentinel program and testing schedule
  - Description of the husbandry practices (e.g., sterile or non-sterile micro-isolation, use of change station, etc.) at the exporting facility
  - Medical history of the animals, if applicable

The BRF strives to maintain the highest quality and health of our rodent population. Toward that end, the veterinary staff has compiled an exclusion list of infectious agents. If animals are positive for any of these agents, they will typically need to be treated or possibly rederived. We do not offer rederivation services in house but animals can be sent to a commercial facility (e.g., Charles River Laboratories) for rederivation at the PI's expense.

### EXCLUSION LIST:

Viruses	Bacteria, Mycoplasma & Fungi
Ectromelia virus (agent causing mouse pox)	<i>Bordetella</i> spp.
GDVII (Theiler's mouse encephalomyelitis virus)	CAR bacillus
Haantan virus (hantavirus)	<i>Citrobacter rodentium</i> ( <i>Citrobacter freundii</i> 4280)

K virus	<i>Clostridium piliforme</i>
Lactic dehydrogenase elevating virus (LDEV)	<i>Cornybacterium kutscheri</i>
Lymphocytic choriomeningitis virus (LCMV)	<i>Corynebacterium bovis</i>

Mouse adenovirus (MAV)	<i>Mycoplasma pulmonis</i>
Mouse cytomegalovirus (MCMV)	<i>Salmonella</i> spp.
Mouse hepatitis virus (MHV)	
Mouse parvovirus (MPV)	<b>Other Parasites &amp; Protozoa</b>
Mouse thymic virus (MTV)	<i>Encephalitozoon cuniculi</i>
Pneumonia virus of mice (PVM)	Fleas, fur mites, lice
Polyoma virus	Follicle mites
Reovirus 3 (REO 3)	Pinworms
Rotavirus (Epizootic diarrhea of infant mice)	Roundworms and other helminths
Sendai virus	Tapeworms
Mouse Kidney Parvovirus	

Other, usually less serious infectious agents might also be cause for an importation request to be denied or delayed. If animals are positive for any of the agents listed below, they - as well as the shipping facility records - will be carefully reviewed by the veterinary and facility staff. Such rodents might be accepted under very strict conditions, which would include quarantine as well as possible medical treatment. The cost for this would be the PIs responsibility. Once animals are approved for import, the BRF manager will coordinate shipping arrangements with the exporting facility.

#### CONCERN LIST:

Viruses	Bacteria, Mycoplasma & Fungi
Mouse norovirus (MNV)	<i>Beta-hemolytic Streptococcus spp (non-group D)</i>
	<i>Helicobacter spp</i>
	<i>Klebsiella spp</i>
<b>Other Parasites &amp; Protozoa</b>	<i>Klebsiella pneumoniae</i>
Nonpathogenic protozoa (e.g., trichomonads)	<i>Pasteurella pneumotropica</i>
Opportunistic protozoa (e.g., <i>Giardia</i> , <i>Spironucleus</i> )	<i>Pneumocystis murina</i>
Fur mites	<i>Pseudomonas spp.</i>
Follicle mites	<i>Proteus mirabilis</i>
Pinworms	<i>Staphylococcus aureus</i>
	<i>Streptococcus pneumonia</i>

#### POST-IMPORTATION MANDATORY QUARANTINE:

All rodents imported from non-approved vendors or non-commercial sources are subject to **mandatory quarantine** before they can be housed in the BRF colonies. This is required regardless of the animal health screening information that is provided by the exporting institution. Since quarantine-housing space is limited, faculty intending to import animals that require quarantine must contact the BRF manager to discuss housing availability and procedures well in advance of any animal transfer. Quarantine consists of a 6 to 9-week sentinel animal exposure period plus time for subsequent evaluation of the sentinels by serology assessment, gross necropsy, endo/ectoparasite testing and possible microbiological testing. On occasion, diagnostic testing (performed by a reference laboratory) may also be required and this can take 1-3 weeks (in addition to the sentinel exposure period). Unless previously approved, no breeding or research procedures can be performed while animals are in quarantine.

**Mandatory routine treatment of quarantined rodents includes:**

1. **Two topical applications of moxidectin (Cydectin ®) will be applied between the animals' scapulae on days 1 and 14 of quarantine to prophylactically treat ectoparasites (mites).**
2. **Animals will be fed febendazole medicated rodent diet for prophylactic treatment of pinworms during the quarantine period. All treatment and examinations will be documented in the rodent quarantine log book.**
3. **If the investigator does not want the animals in quarantine treated, the routine treatments will be withheld after consultation with and approval by one of the veterinarians. These cages will be specially marked to distinguish them. In such cases sentinel animals will be sent out at 9 weeks (instead of 6).**

**EXPORTING:** When a PI wishes to export animals to another institution, other requirements may be encountered, depending on the particular policies of the receiving institution and whether this is an intra- or international shipment. Often this is a lengthy process and, as with importing animals to the BRF, PIs need to start the process as early as possible. The BRF veterinary staff will help with this process.