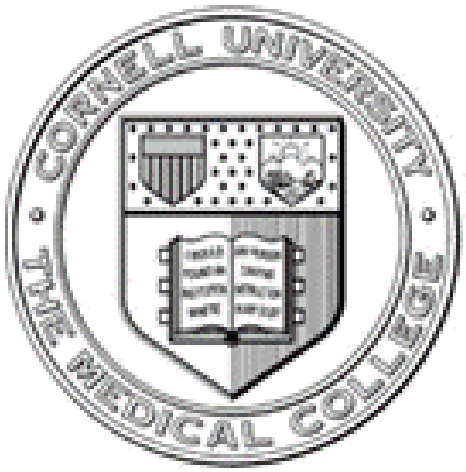
GUIDELINES FOR IMPORTING RODENTS FROM SOURCES REQUIRING QUARANTINE



RESEARCH ANIMAL RESOURCE CENTER
MEMORIAL SLOAN-KETTERING CANCER CENTER
WEILL CORNELL MEDICINE

CURRENT REVISION DATE: 5/9/16

Weill Cornell Medicine *Memorial Sloan-Kettering Cancer Center*

Research Animal Resource Center

GUIDELINES FOR IMPORTING RODENTS FROM SOURCES REQUIRING QUARANTINE

Procurement of rodents is highly scrutinized by the Research Animal Resource Center (RARC). Rodents procured from sources that do not have closed colonies with intensive health monitoring programs, which may include academic and research institutions (**non-commercial sources**), and small commercial breeding companies as well as select colonies maintained by approved vendors, e.g., contract breeding, (**commercial sources**). Animals from these sources pose the highest single risk of introducing infectious agents into RARC's colonies and therefore are subject to quarantine and intensive monitoring prior to release into established colonies. Investigators requesting rodents from these sources should allow 5-7 weeks for evaluation of the animals and final release from quarantine.

A $840.00 charge is imposed per importation to partially offset the cost of performing the diagnostic evaluation on imported animals. At MSKCC importation charges are fully subsidized by the NCI Core Grant. Procurement of rodents from international sources may also require involvement of a fee-for-service import broker to expedite clearing through customs, to coordinate the necessary USDA paperwork, and deliver the rodents to the facility. Costs for these services are paid for by the investigator. Additional requirements must be met when importing animals harboring agricultural animal pathogens or biological agents ($\geq$ BSL 2) from other countries. Specifically, an import permit must be submitted to and be approved by the USDA or the CDC. This process may take 4 to 6 weeks. Please contact a RARC veterinarian for additional information.

In order to obtain rodents requiring quarantine a requisition needs to be submitted using the *EnCCoMPass* Animal module. In most cases you will submit a *non-commercial requisition* (e.g., animals obtained from academic or research institutions); however, if you are obtaining animals that require quarantine from a vendor (e.g., non-approved colonies of an approved vendor) you need to submit a *commercial requisition*. In addition, investigators must request that the donating institution provide recent health information on the colony of origin, including: 1.) A description of the rodent health monitoring program of the supplying institution; and, 2.) A copy of the past year's health report(s) for the colony from which the rodents are to be imported. This health information can uploaded into the requisition in *EnCCoMPass* (this can be done after the request has been submitted) or e-mailed to the Biosecurity Veterinarian (contact information is provided in the health report section of the requisition in *EnCCoMPass* Animal). Animals **should not be shipped** until RARC makes the final arrangements with the source institution to order and receive the rodents. Shipping must be door-to-door as RARC does not have the capability of transporting animals from the airport.

If all animals in the requested importation group are **immunodeficient**, investigators may ascertain whether additional immunocompetent (wild type) animals can be provided from the colony of origin (2-4 animals). These animals will serve as sentinels for the shipment and will be tested as part of the initial quarantine evaluation allowing investigators access to their immunodeficient animals in second stage quarantine.

After review of the health information, rodents with appropriate health profiles are ordered and received into the *quarantine* facility located on the 9th floor of the Zuckerman Research Center. Access to this area is limited to RARC staff. **Breeding can be initiated one week after arrival** by providing appropriate instructions to the quarantine technician. One to four days after arrival, a subset of the shipment will be evaluated for bacterial, parasitic, and viral contamination. Approximately four weeks after the first samples are collected, a subset of the shipment animals will be sampled again. If results from the two testing cycles are negative for all excluded pathogens, the animals are released into established colonies.

The total time course from receipt of the rodents by RARC to release into the animal colony is typically 5-7 weeks. The investigator receives verification of the health status of the animals in writing upon completion of the quarantine period. Rodents are treated with ivermectin/fenbendazole-impregnated feed and weekly topical moxidectin & imidacloprid for the duration of quarantine to eliminate the possibility of mite or pinworm infection.

If the health profile of the desired rodents indicates that they may harbor an infectious agent (e.g., murine viruses), or if the animals are found to be harbor infectious agents during quarantine evaluation, the investigator will need to discuss potential options with a RARC Biosecurity Veterinarian. Rederivation options will be based on the pathogen and the genotype of the imported animals and may include regular quarantine, treatment, burnout, cross-fostering, embryo transfer or in vitro fertilization.

Rodents, regardless of health status, may be imported for **acute use in quarantine**. These animals will not be evaluated in quarantine and will never be released. They may be used in the quarantine facility for tissue collection, as long as there is no intention to administer harvested tissues to other animals, or short-term experiments. Access to these animals is restricted and no live animals may be removed from the quarantine facility. All acute use procedures must be discussed with a RARC Biosecurity Veterinarian prior to the animals' arrival.

Questions regarding acquisition of rodents from atypical sources may be directed to Dr. Rodolfo Ricart at 212 746-9265 or ricartar@mskcc.org.