Institutional Animal Care & Use Program - UTEP	
Title: Acclimation, Stabilization & Quarantine of Research Animals	
Policy#: 010	**Date in Effect**: 21 November 2014
Version #: C	**Rev Date**: 24 February 2020 28 February 2025
In Effect ☒ **Rescinded** ☐	**Date Rescinded**:

A) RESPONSIBILITIES

It is the responsibility of all personnel using animals at The University of Texas at El Paso (UTEP) to abide by this policy. If an exception is needed it is the responsibility of the Institutional Animal Care & Use Committee (IACUC) to review for approval such requests for an exception to this policy.

B) APPLICATION

This policy applies to all protocols.

C) BACKGROUND

The *Guide for the Care and Use of Laboratory Animals* (the *Guide,* NRC 2011) states: "newly received animals should be given a period for physiologic, behavioral, and nutritional acclimation before their use." (p. 111) The length of time for this acclimation period will depend on multiple factors, including the duration and distance traveled, the species, and the intended use of the animals. Transportation can lead to significant changes in the cardiovascular, hematologic, endocrine, immune, nervous, and reproductive systems that can impact research data.

In addition, the *Guide* states that quarantine measures are a component of preventive medicine. Quarantine is important for the effective management of animal biosecurity and surveillance and should be routinely implemented. An effective quarantine program minimizes the potential for pathogen introduction into the animal population, which is of particular concern when the stress of transportation may cause animals harboring subclinical infections to become ill and/or shed the causative pathogens. The duration and other conditions of the quarantine period can typically be determined by information supplied by health reports and other information supplied by animal vendors and investigators.

D) DEFINITIONS

1) Acclimation Period – Period of time during which newly shipped animals are given a rest period for physiological, psychological, and nutritional stabilization

before use in research projects. This allows animals to recover from shipping stress and permits them to adapt to their new surroundings.

2) Quarantine – As noted in The Guide: "Quarantine is the separation of newly arrived animals from those already in the facility, in a way that prevents potential spread of contaminants." This period typically entails procurement of samples that will be tested to determine health and/or pathogen status of newly arrived animals and prescribe and implement any measures that might be required to ensure biosecurity for these animals and those in the general population.

E) PROCEDURES

1) Acclimation:

The following are the minimum IACUC-required acclimation periods based on species and procedure. If shorter acclimation periods are needed for study purposes, they must be **scientifically justified** and approved in the protocol.

Species	**Procedure type**	**Minimum acclimation**
Non-mammalian vertebrates (birds, aquatics, reptiles)	Non-survival	1 day
	Survival	2 days
Rodents (rats, mice, guinea pigs, etc.)	Non-survival	1 day
	Survival	5 days

2) Quarantine:

a) Rodents arriving to UTEP from sources other than the approved commercial vendors (such as other universities) must undergo a quarantine period. This protects the existing colony of rodents at UTEP from inadvertent introduction of diseases.

b) The Laboratory Animal Resources Center (LARC) Office should be contacted to coordinate the importation of animals from non-approved sources. Requests to receive animals from non-approved sources may be denied based on the health records received from the shipping institution. In these cases, LARC will work with the laboratory to find alternative solutions to obtain the animals (rederivation, other sources).

c) Animals that are removed from a facility, or from a room of higher health status to an environment of unknown or lower health status with intent to return may need to be held separately from the colony of origin until their

health status can be determined and any necessary measures enacted. Removal and return of animals must be approved in the protocol.

F) REFERENCES

1) Institute of Laboratory Resources Commission on Life Sciences, National Research Council. *Guide for the Care and Use of Laboratory Animals.* Washington, DC: National Academy Press; 2011:111.

2) Capitanio JP, Kyes RC, Fairbanks LA. 2006. Considerations in the selection and conditioning of Old World monkeys for laboratory research: Animals from domestic sources. ILAR J 47:294-306.

3) Conour LA, Murray KA, Brown MJ. 2006. Preparation of animals for research: Issues to consider for rodents and rabbits. ILAR J 47:283-293.

4) Kagira JM, Ngotho M, Thuita JK, Maina NW, Hau J. 2007. Hematological changes in vervet monkeys (*Chlorocebus aethiops*) during eight months' adaptation to captivity. Am J Primatol 69:1053-1063.

5) Landi MS, Kreider JW, Lang CM, Bullock LP. 1982. Effects of shipping on the immune function in mice. Am J Vet Res 43:1654-1657.

6) Obernier JA, Baldwin RL. 2006. Establishing an appropriate period of acclimatization following transportation of laboratory animals. ILAR J 47:364-369.

7) Prasad SB, Gatmaitan R, O'Connell RC. 1978. Effect of a conditioning method on general safety test in guinea pigs. Lab Anim Sci 28:591-593.

8) Sanhouri AA, Jones RS, Dobson H. 1989. The effects of different types of transportation on plasma cortisol and testosterone concentrations in male goats. Br Vet J 145:446-450.

9) Tuli JS, Smith JA, Morton DB. 1995. Stress measurements in mice after transportation. Lab Anim 29:132-138.