Institutional Animal Care & Use Program - UTEP	
Title: Acclimation, Stabilization & Quarantine of Research Animals	
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In Effect ☒ **Rescinded** ☐	**Date Rescinded**:

A) RESPONSIBILITIES

It is the responsibility of all personnel using animals at UTEP to abide by this policy. If an exception is needed by an employee or visiting scholar it is the responsibility of the IACUC to review for approval such requests for an exception to this policy.

B) APPLICATION

1) This policy applies to research protocols. Exempted protocols are those for teaching, demonstration and research protocols where the only procedure performed is euthanasia for the collection of tissues (unless research integrity is affected by the lack of acclimation or stabilization).
2) In general, all newly arrived rodents at UTEP are quarantined for 6-14 days and tested for adventitious agents prior to their release into the general colony. However, if it can be adequately and scientifically justified that rodents cannot wait to complete the Veterinary Services quarantine period, the Attending Veterinarian may specify conditions and approve modifications to this policy. The Attending Veterinarian may extend quarantine to ensure the health and well-being of the UTEP colony.

C) BACKGROUND

1) Quarantine

According to the 8th Edition of the Guide for the Care & Use of Animals (2011), 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.

2) Acclimation & Stabilization

The 2011 Guide for the Care & Use of Animals states, "… newly received animals should be given a period for physiologic, behavioral, and nutritional acclimation before their use… The need for an acclimation period has been demonstrated in mice, rats, guinea pigs, nonhuman primates, and goats, and time for acclimation is likely important for other species as well." Conour et al (2006) stated, "Failure to plan for acclimation and stabilization of the animals may result in a need for increased animal numbers to determine statistically significant differences in experimental results and may place collected data at risk for inaccuracy and irreproducibility (Furudate et al. 2005)."

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) <u>Acclimation</u>:
   a) Based on the Guide's requirements and the references listed in this policy, UTEP's IACUC requires a minimum of a 6-day acclimation period for all newly inter-institutionally or vendor-transported animals. Certain models and

research projects may require longer acclimation times. Please consult the Attending Veterinarian for acclimation times.

b) Investigators should be aware that acclimation periods may overlap with quarantine periods, but are encouraged to consider these timeframes to meet their specific research needs.

c) Animals may not be used for research purposes until completion of the acclimation period.

d) Exceptions to this policy must be justified in the IACUC protocol and approved by the Attending Veterinarian in advance of the arrival of the animals in question.

e) Urgent requests to use animals before completion of the 6-day acclimation period must be requested in writing to the Attending Veterinarian.

2) Quarantine:

a) Animals from separate shipments will be handled independently of animals from other shipments and segregated from one another on the basis of species and/or health status to avoid potential pathogen transfer between them.

b) 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.