Health Status Monitoring Programme- Rodents

Purpose

The purpose of this Standard Operating procedure (SOP) is to monitor health status of laboratory rodents within animal holding facilities at Charles Sturt University, ensuring that appropriate veterinary services are available and that there is access to diagnostic services, to establish written procedures for prevention, diagnosis and treatment of disease; and maintain adequate records to allow effective management of the breeding stock including the detection of the origin and spread of disease. This SOP should be viewed in conjunction with SOP046 for Sentinel Husbandry.

Responsibility

Facility veterinarian, Facility manager, Facility supervisors, animal care staff, veterinary care staff, Animal Care and Ethics Committee members.

Procedures

3.1 All breeding colonies and Animal Facility areas used for long term housing of animals will undergo quarterly testing for:

3.1.1. All major mouse and rat viruses;
a. Mouse: FEL-MQ – FELASA Quarterly Panel or equivalent
b. Rat: FEL-RQ - FELASA Quarterly Panel or equivalent
Sample: Serum

3.1.2 Bacteria and parasites:
a. Mouse: eg FEL-MA Panel or equivalent
b. Rat: eg FEL RA Panel or equivalent
Sample: Whole live Animal

For detail of panel components refer to https://www.cerbernet.net.au/OnlineSubmissionForm/PanelsList

3.2 Animals requiring disease investigation following observation of ill health, unexpected death or inconclusive autopsy results will be sent for diagnostic testing;
a. Mouse: As recommended by pathologist.
b. Rat: As recommended by pathologist.
Sample: Serum, Whole Animal and/or tissue as requested by pathologist.

3.3 New animal arrivals with marginal health reports, missing or incomplete serology, and known infection with unexpected results and/or having originated from ‘weak’ barrier conditions will be quarantined.

3.4 Sentinel animals will be introduced for a minimum of 3-5 weeks exposure to potential pathogens.

3.5 A standard minimum of 4 sentinel animals (or more to increase statistical validity) is required per area/animal colony. The number should be increased depending on;
a. Numbers of animals in the holding area/colony.
b. Disease incidence in the colony.
c. Type of housing.
d. Exposure time to pathogen.

3.6 Sentinel’ animals will be chosen from existing breeding and stock animal colonies (where available).

3.7 Alternatively, dedicated ‘sentinel’ animals supplied at age 5wks with a current health certificate will be purchased and maintained in conventional cages and/or micro isolator cages (as appropriate) in the designated Animal Facility area and/or with the selected breeding colony for a period of no less than 8 weeks.

3.8 ‘Sentinel’ animals’ will be provided with normal environmental enrichment and ad-lib food and water. Small portions of ‘dirty’ bedding from 10 randomly selected animal cages will be added weekly to the ‘sentinel’ animal cage after changing.

3.9 Serum samples are to be frozen, labelled using waterproof markers, double-contained and shipped overnight using 2-4 ice packs in a sealed Esky via a professional animal tissue transport service or other dedicated carrier using OGTR specifications to Cerberus Sciences, Serology and Molecular Diagnostics, Adelaide or other recognised and accredited diagnostic laboratory.

3.10 Live animals will be transported in appropriate rodent proof boxes with food and gel packs via a professional animal transport service using OGTR specifications to Cerberus Sciences, Live Animal Submissions, Melbourne.