Valdosta State University Institutional Animal Care & Use Committee

Standard Operating Procedure Number 020

RODENT CARE

PURPOSE: This Standard Operating Procedure (SOP) specifies general husbandry procedures used by Valdosta State University (VSU) for routine maintenance of rodent populations housed in the Animal Facility in the Hugh C. Bailey Science Center. The specified activities are for the standard care and management of rodent species by faculty and animal care staff. Departure from these procedures will be permitted only when specifically approved by the Institutional Animal Care and Use Committee (IACUC). These husbandry procedures are in compliance with the National Research Council *Guide for the Care and Use of Laboratory Animals* (the "Guide").

DEFINITIONS:

<u>Atmospheric Conditions</u> – Air changes per hour, daily temperatures of animal housing rooms, relative humidity, lighting, and ambient noise

Breeding – Sexual propagation of animals

Feeding – Ad libitum (constant access) provisioning of food

Health Examination – Daily examination by IACUP staff to monitor general health of animals

<u>Husbandry</u> – Activities including but not limited to feeding, watering, macroenvironment and microenvironment cleaning, breeding, health examination, and atmospheric conditions

<u>Macroenvironment</u> – Space in which animal microenvironments are located

<u>Macroenvironment Cleaning</u> – Sanitization of the animal housing room, including washing walls, counter tops, sinks, floors, cage racks, and any other equipment located in the housing room

<u>Microenvironment</u> – Physical environment that immediately surrounds the animal and is bounded by the primary enclosure or cage in which the animal resides

<u>Microenvironment Cleaning</u> – Sanitization of animal housing, including cage washing, sterilization, and bedding changes

Watering – Ad libitum (constant access) provisioning of water

RODENT HUSBANDRY STANDARDS: The VSU IACUC has adopted the Guide, which includes the following standards.

1. Ongoing Macroenvironment Standards

- Fluorescent lighting is provided on a 12-hour on/12-hour off cycle
- Air changes will occur at least 10 times per hour
- Temperature is maintained between 64 and 79 degrees F (18-26 degrees C
- Relative humidity is maintained between 30% and 70%
- Ambient noise is an intrinsic artifact of the facility; a silent facility cannot be guaranteed.

2. Daily Activities

- Animal census and health assessments are conducted
- Temperature and humidity are monitored in the macroenvironments
- Food and water are provided as needed
- General sanitation is maintained
- Records are updated
- Biweekly (twice per week) activities:
- Bedding under hanging wire cages is changed
- Trays are sanitized

3. Weekly Activities

- Animals are changed to clean polycarbonate bin microenvironments with clean bedding
 - Floors are mopped

4. Fortnightly (Every 2 Weeks)

- Water bottles are changed out and sanitized
- Sinks are cleaned

5. Monthly

- Walls of macroenvironments are cleaned
- Vents and drains of macroenvironments are cleaned
- Hanging cage microenvironments are sanitized