Animal Protocol Form [APF]
All personnel working with laboratory animals must be listed under the appropriate APF and must have received training or possess required skills for any techniques they are performing under the APF.

Vivaria Entrance Procedures
Most areas require a magnetic card swipe for entrance and the SDSU red ID card is programmed for authorized personnel to enter specific animal housing and procedure room spaces. Personnel should always use their own card for access and not cards of other lab personnel. Some areas require a key for entrance and keys will be issued to appropriate personnel only with OLAC authorization. Only personnel authorized by IACUC and OLAC are allowed entry to the vivaria.

Protective Clothing/Hygiene
Lab coats and shoe covers must be worn when entering animal housing and procedure rooms. Disposable gloves must be worn when handling animals and cages. Lab coats are provided by OLAC for use in the vivaria and are placed at the entrance of each animal housing room. Lab coats are dedicated to each room and should not be worn between rooms. Do not wear a coat from the research lab or your personal lab coat. Donning head covers and particle masks is not required in non-biohazardous areas but they may be provided by OLAC on request. Wash your hands after working in animal housing and procedure rooms. No eating, drinking, application of cosmetics or use of tobacco products is permitted in the vivaria.

Procedure & Survival Surgery Rooms
Procedure room 17E is available for lab personnel and OLAC use. Lab personnel should reserve the room for lengthy procedures to ensure availability of the space. BSC room 12 is the procedure space for survival procedures in the BSC vivarium. 17H is the rodent survival surgery room for NLS and is used primarily by cardiovascular research labs. Instructions for scheduling use of the room are posted on the door. All work surfaces and spaces including change stations in animal housing rooms should be kept neat and clean and must be wiped down after each use with disinfectant provided in spray bottles in the rooms.

Procedure room 17E
17E is available for general procedures and for rodent survival surgery if needed when the dedicated rodent survival room of 17H is in use. The room should be scheduled for use using the form found on the room door. The room contains a fume hood for use of volatile agents and a table for procedures. An isoflurane anesthesia machine in the room belonging to OLAC may be scheduled for use with labs providing their own isoflurane and oxygen tanks. The carcass refrigerator and freezer are also located in the room.
Standard Operating Procedures

Standard Operating procedures [SOPs] are in place for OLAC husbandry, animal health and administrative practices. SOPs are available upon request and sent to labs and given to students and lab personnel where applicable.

Animal Receiving & Quarantine/Isolation
Only animals from approved vendors with acceptable health reports and history may be received directly into colony housing rooms. Animals from other sources, usually other research facilities, are only accepted after veterinary review and must be housed in quarantine or isolation even for acute terminal use. If the goal is to place animals from a non-approved vendor source into the general colony, they must undergo a period of quarantine and diagnostic testing as specified by an attending veterinarian before introduction into the appropriate housing room.

Animal Movements
Animals may only be removed from the facilities of the NLS and BSC suites for terminal procedures in labs and live animals may not be returned to housing rooms without an approved exemption from a campus veterinarian. Cages must be covered with a polypad or other material to obscure the animals from public view when transporting to labs. Cages and animals must be transported in the employee only elevator and not in the public passenger elevators or stairwell to floors above. Animal and cage movements between rooms or facilities should be performed by OLAC personnel to ensure biosecurity and inventory tracking. See OLAC SOP Animal Movements/Shipping & Receiving for more.

Euthanasia/Carcass Disposal
OLAC and lab personnel may euthanize mice and rats by use of a CO2 inhalation chamber located in procedure room NLS 17E or in the biohazard mouse housing room of NLS 21. Animals are euthanized for various reasons if death is not the endpoint in a research, teaching or experimental procedure. Most labs label cages destined for euthanasia and OLAC performs this service for a small fee per animal. If lab personnel perform euthanasia using a CO2 chamber, they must note the number of animals euthanized on the specific investigator sheet in the housing room and note that euthanasia was performed by lab personnel. The SDSU Environmental Health & Safety department requires that all animal carcasses be placed in red biohazard bags in the carcass refrigerator or freezer for disposal even if those animals haven't been in a project with Animal Biosafety Level 2 [ABSL2] designation. See OLAC SOP Use of Carbon Dioxide Euthanasia Chamber for more details.

Cage Cards/Animal Identification/Special Instructions
Each cage must be identified with a cage card noting Principal Investigator, Animal Protocol Form (APF) Number, department, and description of mice or rats housed in the cage. Description includes species, stock/strain /line name, number of animals in cage, date of birth if known, date of receipt from vendor if not bred in-house, vendor source if applicable and other appropriate information as required. The two types of face cards for primary information on
cages are same sex stock cards and breeding cage cards and the appropriate type of card must be used to identify the mice in the cage. Other types of cards may be used on cages and are most often placed vertically behind the face card so as not to obscure primary information.

These cards include notations of IACUC approved deviations from routine husbandry and must be approved in the APF as part of the project. Examples are “Investigator Will Feed/Water” and “Special Instructions” for use if animals are fasted, fed a restricted, test or medicated diet, can’t be handled or have cage changed as part of regular technician room husbandry. A treatment card is placed on the cage if an animal or animals in the cage are observed with health issues whether the issue is enzootic or related to the research project or phenotype if genetically altered. The health issue and course of action are noted on the treatment card and an email observation is sent to the defined lab group, campus veterinarians and OLAC technicians noting the issue and treatment.

OLAC Responsibilities
OLAC technicians perform the daily husbandry and room checks in each animal room. They are responsible for cage changes, delivery of standard diets and water by the automated system or in water bottles and observing the animals for health, breeding management, adherence to APFs and compliance concerns. They may assist in lab personnel training also. Campus veterinarians provide animal health direction and clinical applications, APF review and lab consultation, assistance in compliance and administrative requirements and hands-on training where needed or required. The OLAC Manager supervises the husbandry program, performs orientations, training, and administrative tasks such as per diem billing and coordination of animal transfers to and from other research institutions.

Emergency Contact Information
Home and Cellular telephone numbers for OLAC personnel, campus veterinarians and Facilities Management are posted in the NLS suite, the BSC suite and the NLS 21 Biocontainment suite. In the event of an animal health emergency or urgent need after hours or on weekends/holidays, the OLAC Manager and/or one of the campus veterinarians should be contacted. In the event of a physical plant emergency or urgent need such as room temperatures too high or low, flooding or improper airflow causing failure of vivarium doors to self-close, the OLAC Manager and/or technicians and the SDSU Facilities should be contacted. OLAC personnel are here every day of the year including all weekends and holidays but are not here with full staff and schedule on those days.

Training/Educational Resources
OLAC provides training for lab personnel in the areas of animal handling, cages systems, euthanasia, breeding management, clinical techniques and other lab animal care and use practices and procedures. OLAC also has related texts and other training materials that may be checked out to lab personnel and can assist in direction to other educational resources.