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**UC Davis  
Institutional Animal Care and Use Committee (IACUC)**

**Title: *Training Requirements for Personnel Working with Live, Vertebrate Animals Used in Research and/or Teaching***

**I. Purpose:**

To establish the training policy for personnel working with live, vertebrate animals in the Animal Care and Use Program. This includes the Animal Care and Use 101 (ACU 101) on-line course and additional training for all persons listed on an Animal Care and Use Protocol or working with live, vertebrate animals.

**II. Background:**

The Guide for the Care and Use of Laboratory Animals and Animal Welfare Regulations requires training for personnel working with live, vertebrate animals:

*“All personnel involved with the care and use of animals must be adequately educated, trained, and/or qualified in basic principles of laboratory animal science to help ensure high-quality science and animal well-being.”*

*“It shall be the responsibility of the research facility to ensure that all scientists, research technicians, animal technicians, and other personnel involved in animal care, treatment, and use are qualified to perform their duties.”*

**III. Policy:**

**A. All persons working with animals must be listed on an Animal Care and Use Protocol and must meet the following requirements:**

1. Complete the ACU 101 on-line course.
2. Receive job specific training and information on the species they will be working with and the techniques and procedures they will be performing from the Principal Investigator (PI) or their designee for the Animal Care and Use protocol (see section V).
3. Read and understand the Animal Care and Use protocol prior to performing any work on the protocol. The PI or designee is responsible for maintaining documentation of this training.

**B. Undergraduate Students**

1. Undergraduate students performing procedures on an Animal Care and Use protocol either under supervision or independently, must be added to the research protocol roster, take the ACU 101 on-line course, and receive study-specific training (see section V).
2. Undergraduate students in courses involving animals covered by a teaching protocol must be provided the Information for [Students in Classes](#).

### **C. Re-training:**

1. All personnel listed on an Animal Care and Use protocol must take the UC Davis IACUC ACU 101 on-line course every three years.
2. Re-training notifications are sent to individuals and the PI beginning at 90 days prior to the individual's training anniversary date. Notifications will continue to be sent every 30 days until the Three-Year Re-training Exam or ACU 101 on-line course has been completed.
3. If the Three-Year Re-training Exam **OR** the ACU 101 on-line course has not been completed by the individual's training anniversary date, notification will be sent to the individual and PI indicating removal from the Animal Care and Use Protocol roster. Once re-training has been verified, the individual's privilege to conduct research will be reinstated after an amendment to add the individual back to the protocol has been received. If the PI has not completed the ACU 101 re-training, their protocol(s) may be suspended until the re-training has been completed.

## **IV. Procedures:**

### **A. Campus/IACUC Office Responsibilities:**

1. Information Dissemination
  - a. The ACU 101 course includes information on:
    - Laws and regulations pertinent to animal care and use.
    - The UC Davis Animal Care and Use Program for teaching and research animals.
    - The Occupational Health Program for individuals working with animals.
  - b. The IACUC Office ensures that the ACU 101 on-line course is available to all individuals listed on an Animal Care and Use Protocol. [The ACU 101 on-line course](#) is hosted by the campus Learning Management System and a link is available on the Office of Research website [Training Resources page](#).
    - Attendees can access and print their certificate of completion on the [Learning Management System](#)
  - c. The IACUC Office will inform PIs of any new policy, guidelines, or changes related to the care and use of animals.
2. Required Animal Care and Use Training

- a. Information on the experience and training of each individual listed on a protocol roster must be provided in the Animal Care and Use Protocol. Individual qualifications are reviewed and approved by the IACUC staff. The information provided on the qualifications must be specific to the procedures and species listed on the protocol and should be updated as necessary to reflect additional training/skills.
- b. The IACUC Office will provide guidance to PIs in developing training documentation upon request.
- c. The IACUC will inspect PI's training program documents during laboratory inspections, post-approval monitoring, and/or facility inspections to verify that personnel have received required training. These inspections will take place and be performed in accordance with the IACUC Inspection Program and documentation must be provided as described in section 3 below.
- d. All individuals performing survival surgery on laboratory animals must be trained in aseptic technique in addition to the specific surgery techniques required for the study.
- e. All personnel performing rodent survival surgery must take the [on-line Rodent Survival Surgery course](#).
- f. All personnel performing physical methods of euthanasia on adult animals without anesthesia (i.e., cervical dislocation or decapitation) must be trained on the technique and certified by one of the approved campus trainers. Please contact the IACUC Office if you need information on the Designated Trainer program or contact information for a Designated Trainer.
- g. The IACUC may mandate additional training, including species-specific training for individuals or a group of individuals, if:
  - During the initial protocol review process, the need for additional training is identified.
  - The procedure in the protocol changes substantially (e.g., changing from terminal to survival surgery).
  - Violations of the Animal Care and Use Protocol are identified due to lack of understanding of procedures or insufficient training.
- h. Species-specific training modules will be provided depending on need or at the discretion of the IACUC or Attending Veterinarian. At a minimum, the following courses will be offered:
  - Rat Handling and Lab Skills.
  - Mouse Handling and Lab Skills.
  - Rabbit Handling and Lab Skills.
  - Rodent Aseptic Technique.
- i. The Office of the Attending Veterinarian or the IACUC staff may provide additional training as needed.
- j. In some instances, the PI may need to provide or identify resources for specialized training, i.e. sourcing a trainer for a specific technique or providing animals or equipment.

## V. Principal Investigator's Training Responsibilities for Animal Care and Use

1. The PI is defined as the person on an IACUC protocol who has assumed the responsibility for all of the staff listed on the roster and the animals that are assigned under the protocol. Unless an IACUC approved exception is in place, the PI on a protocol must have a career appointment with UC Davis. The PI should be a faculty member, facility manager, or staff member in good standing at UC Davis. The PI must ensure that appropriate training is provided and documented for every individual listed on the Animal Care and Use Protocol before they work with live, vertebrate animals. Any training that is conducted on live animals must be described in the Animal Care and Use Protocol and accounted for in the animal numbers section. Training must be provided and documented for staff, volunteers, students, or visitors that work with live, vertebrate animals in teaching and/or research or when providing husbandry care. Training forms must be kept for three years after the person leaves the university. Some training may be performed annually.

The PI must also ensure that everyone listed on their protocol participates in the [Occupational Health Program](#) or is exempted according to IACUC policy [Animal Care and Use Occupational Health Program](#).

In addition, each person listed on the Animal Care and Use Protocol must have completed the ACU 101 course within the last three years.

***The PI must ensure that everyone listed on their Animal Care and Use Protocol has read the protocol and understands their responsibilities in relation to the protocol. Everyone working with live, vertebrate animals must be qualified to work with animals, informed of their responsibilities, and trained in the specific procedures described in the protocol and/or otherwise required by the IACUC.***

### 2. In-house Training:

The PI must provide training on the following:

- **Protocol specific training:** Training on procedures and techniques listed in the protocol.
- **Personal hygiene:** How to reduce the risk of contamination to the person as well as surfaces, other personnel, and animals.
- **Personal Protective Equipment (PPE):** How to properly select and use PPE such as gloves, eyewear, lab coats, and respirators (see [Personal Protective Equipment \(PPE\) When Working with Animals in Investigator Laboratories and Related Facilities](#)).
- **Animal bite instructions:** How to appropriately respond to an animal bite, scratch, or similar exposure, including immediate washing and first aid procedures, who to contact, and to whom to report the exposure. This

information must be posted in the laboratory or work area. [First Aid Procedures for Bites](#) is available on the Occupational Health website.

- **Allergies and Zoonotic diseases:** Inform individuals of allergens or zoonotic diseases associated with the species they are working with. The on-line [“Zoonosis Information by Species”](#) can be used for this instruction.
- **Animal care and husbandry:** Awareness of welfare procedures necessary for animal care and husbandry. This is generally for animal care staff and investigator-maintained animals only.
- **Euthanasia:** Procedures on the euthanasia method approved in the Animal Care and Use Protocol [Guidelines for Euthanasia of Research and Teaching Animals](#).
- **Pain and discomfort, anesthetics and analgesics:** How to recognize the signs of pain and discomfort in the species with which each individual will be working and the use of the anesthetics and analgesics approved in the Animal Care and Use Protocol. [Welfare Assessment: Grimace Scales](#) and [Post-Procedure Care of Mice and Rats in Research: Minimizing Pain and Distress](#).
- **Record keeping, monitoring procedures:** How to maintain the necessary records and the monitoring procedures for each project [Medical Records SOC](#) (i.e., [post-op monitoring records](#)).
- **Information contained in and purpose of the Injury and Illness Prevention Program:** Inform all personnel on the information contained in the [Injury and Illness Prevention Program](#), such as how to read Safety Data Sheets, the evacuation plan, and the availability of pertinent Safety Services [SafetyNets](#). The Injury and Illness Prevention Program is revised every year, and each person must be trained on the annual revision.
- **Bloodborne pathogens:** How to take the necessary precautions when working with [bloodborne pathogens](#) and what procedures to follow when a possible contamination has occurred.
- **Waste Anesthetic Gas:** Course in the Learning Management System (LMS) intended for researchers whose animal research involves the use of anesthetic gases. Those who complete this course should be able to: recognize potential risks associated with anesthetic gases, demonstrate the appropriate setup of a waste gas scavenging system, as well as demonstrate the use of best practices for animal procedures involving anesthetic gas, waste disposal, and emergency response. Also see the IACUC [“Inhalation Anesthesia Use Policy”](#).
- **Other hazardous materials:** Information regarding other hazardous substances such as chemicals and radiation used within the work area. This may include safety data sheets, personal protection, and other pertinent safety information [IACUC Protocols Involving Hazardous Materials and Standard of Care Medications](#).
- **How to report an animal concern:** As covered by the IACUC policy on [Reports of Animal Care and Use Concerns](#).

- **Emergency Action Plan:** For all areas housing animals as outlined in the Standards of Care <https://research.ucdavis.edu/wp-content/uploads/SC-20-102.pdf>
- **USDA Contingency Plan:** For all areas housing USDA covered activities: <https://www.aphis.usda.gov/sites/default/files/aphis7093.pdf>

### 3. **Documentation:**

Documentation of the above information must be maintained by the PI or designee and be readily accessible to the IACUC staff or other site inspectors (i.e., Cal OSHA, AAALAC) during area inspections. The training documents must include:

- Name of person(s) conducting training.
- Signature of person receiving training.
- Date of training.
- A brief description of subjects covered.

The [Individual Training Record](#) can be edited as needed and used as a method to ensure all training has been documented and acknowledged by the PI and employee/student/temporary affiliate/volunteer. Each item on the training record should be individually initialed and dated.

### 4. **Available Resources:**

The IACUC provides the ACU 101 on-line course as well as assistance with other training needs. For more information, please contact [iacuc-staff@ucdavis.edu](mailto:iacuc-staff@ucdavis.edu) or 530-752-2364.

The IACUC office provides classes for species-specific animal handling and techniques, anesthesia, euthanasia methods, and aseptic surgical techniques. For information, contact [iacuc-staff@ucdavis.edu](mailto:iacuc-staff@ucdavis.edu) or 530-752-2364. Class information is available on the [IACUC Training Resources web page](#).

UC Davis subscribes to the American Association for Laboratory Animal Science (AALAS) Learning Library. The AALAS library offers a wide variety of on-line training courses. Courses include training for the AALAS certification exams (ALAT, LAT, LATG), Continuing Education Units (CEUs) for AALAS certification renewals, training on techniques for working with a variety of species, and regulatory training. Some of the courses are within the Registry of Approved Continuing Education (RACE) program for Registered Veterinary Technicians (RVTs) needing CEU's to renew their license. A complete list of courses is available at <https://www.aalaslearninglibrary.org/>. We encourage all to take advantage of these training opportunities. If you would like access to these courses, please contact the IACUC Office ([iacuc-staff@ucdavis.edu](mailto:iacuc-staff@ucdavis.edu)) to obtain a login ID and password.

## **VI. Resources:**

1. ILAR, Guide for the Care and Use of Laboratory Animals  
<http://nap.edu/12910>

2. PHS Policy  
<https://olaw.nih.gov/policies-laws/phs-policy.htm>
3. Students in Classes Forms  
<https://research.ucdavis.edu/policiescompliance/animal-care-use/iacuc/students-in-classes/>
4. Learning Management System  
[lms.ucdavis.edu](https://lms.ucdavis.edu)
5. UC Davis Occupational Health Surveillance System (OHSS)  
<https://safetyservices.ucdavis.edu/units/occupational-health/surveillance-system>
6. UC Davis Safety Services  
<https://safetyservices.ucdavis.edu/>
7. Training Resources page
8. <https://research.ucdavis.edu/policiescompliance/animal-care-use/training-classes/>
9. Rodent Survival Surgery course  
<https://research.ucdavis.edu/policiescompliance/animal-care-use/training-classes/uc-davis-rodent-survival-surgery/>
10. UC Davis Zoonotic Diseases and Risk Assessment  
<https://safetyservices.ucdavis.edu/units/occupational-health/surveillance-system/zoonotic-diseases>
11. Occupational Health Program  
<https://safetyservices.ucdavis.edu/units/occupational-health/surveillance-system/zoonotic-diseases>
12. Animal Care and Use Occupational Health Program  
<https://research.ucdavis.edu/wp-content/uploads/IACUC-25.pdf>
13. Personal Protective Equipment (PPE) When Working with Animals in Investigator Laboratories and Related Facilities  
<https://research.ucdavis.edu/wp-content/uploads/IACUC-38.pdf>
14. Guidelines for Euthanasia of Research and Teaching Animals  
<https://research.ucdavis.edu/wp-content/uploads/IACUC-37.pdf>
15. Post-Procedure Care of Mice and Rats in Research: Minimizing Pain and Distress  
<https://aalaslearninglibrary.org/app/library/course/5345>
16. Welfare Assessment: Grimace Scales  
<https://www.nc3rs.org.uk/3rs-resources/grimace-scales>
17. Medical Records Standard of Care  
<https://research.ucdavis.edu/wp-content/uploads/SC-40-404.pdf>
18. Injury and Illness Prevention Program  
<https://safetyservices.ucdavis.edu/units/ehs/workplace-safety-industrial-hygiene/injury-prevention/iipp>
19. Safety Nets  
<https://safetyservices.ucdavis.edu/safetynets>
20. Bloodborne Pathogens  
<https://safetyservices.ucdavis.edu/units/ehs/biological-safety/bloodborne-pathogen>
21. IACUC Policy 57 "Inhalation Anesthesia Policy"  
<https://research.ucdavis.edu/wp-content/uploads/IACUC-57.pdf>

22. IACUC Policy 49 “IACUC Protocols Involving Hazardous Materials and Standard of Care Medications”  
<https://research.ucdavis.edu/wp-content/uploads/IACUC-49.pdf>
23. IACUC Policy 14 “Reports of Animal Care and Use Concerns”  
<https://research.ucdavis.edu/wp-content/uploads/IACUC-14.pdf>
24. Animal Care and Use Individual Training Record  
<https://research.ucdavis.edu/wp-content/uploads/training-record-2024.docx>
25. TAF Exemption Form  
<https://research.ucdavis.edu/wp-content/uploads/Attch-2-TAF-Exemption-Form-2022.pdf>
26. AALAS Learning Library  
<https://www.aalaslearninglibrary.org/>
27. UC Davis P&PM 290-30  
<https://ucdavispolicy.ellucid.com/documents/view/283>
28. SOC-20-102 Emergency Response Plan  
<https://research.ucdavis.edu/wp-content/uploads/SC-20-102.pdf>
29. USDA Contingency Plan  
<https://www.aphis.usda.gov/sites/default/files/aphis7093.pdf>