

UC Davis Policy and Procedure Manual

Chapter 290, Health and Safety Services

Section 30, Care and Use of Animals in Research and Teaching

Date: 4/14/14

Supersedes: 3/19/07

Responsible Department: Institutional Animal Care and Use Committee (IACUC) Office

Source Document: University Policy on the Use of Animals in Research and Teaching

I. Purpose

The University of California recognizes the importance of the use of animals in its research and teaching missions. Animals are vital for understanding basic biological processes, for improving animal management, and for the development of treatments for human and animal diseases. This section describes policies for the approval of Animal Care and Use Protocols and the procurement, handling, care, and treatment of animals used in research and teaching.

II. Policy

- A. The University is committed to maintaining high standards for the care and use of animals in research and teaching, and adopts as its own principles the "[U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training.](#)"
- B. The University, including investigators, research staff, and instructors, accepts responsibility for assuring that research and teaching involving the use of all vertebrate animals is conducted in accordance with these principles.
- C. All teaching and research activity involving live vertebrate animals must have an approved Animal Care and Use Protocol. No activity shall take place without an approved protocol.

III. Animal Care and Use Protocols

- A. Requirements
 1. An Animal Care and Use Protocol must be completed and approved before any teaching or research activity involving vertebrate animals is initiated. Any changes to this protocol must be approved by the IACUC in advance of implementation.
 2. All personnel working on teaching or research projects involving live vertebrate animals must:
 - a. Be listed on the protocol roster (not required for unpaid students in the laboratory for under one quarter or students in the classroom),
 - b. Participate in the campus Occupational Health Program (see Section 290-25),
 - c. Be trained per requirements defined in the IACUC-02 Policy, "Training Requirements for Personnel Exposed to Live, Vertebrate Animals" (<http://safetyservices.ucdavis.edu/ps/a/IACUC/po/trpelva/trpelvainfo>).
 3. Students exposed to vertebrate animals as part of a class activity must be provided with information from their instructor about the potential risks associated with, and proper handling of, animals in classes.
 4. All research and teaching activities using live vertebrate animals are reviewed annually. Each investigator or instructor with an approved Animal Care and Use Protocol is required to send an annual update to the IACUC indicating whether the project is still active and whether there have been any changes in the personnel, teaching activity, or experimental procedures with respect to the use of animals. A complete new review and resubmission is required every three years.

5. IACUC approved activities may be subject to further review and approval by university officials; however, those officials may not approve an activity involving the care and use of animals if it has not been approved by the IACUC.

B. Exemptions

The following activities are exempt from the requirement for an Animal Care and Use Protocol:

1. Noninvasive observation of wild animals in their natural habitat. (Field studies that involve killing, trapping, banding, darting, or implementation of telemetry devices are not exempt.)
2. Trials in non-university owned animals as defined under IACUC Policy 23 (http://safetyservices.ucdavis.edu/ps/a/IACUC/po/trials_NonUniversityOwned).
3. Veterinary medical attention provided by veterinarians and veterinary staff at the Veterinary Medical Teaching Hospital to client owned animals.

C. Procedure

1. The Principal Investigator (PI) must complete and submit an Animal Care and Use protocol to the IACUC Office, via the online protocol system (<https://iacuc.ucdavis.edu/protocol/index.cfm>). In order to maintain active protocols the PI must submit annual renewal request in a timely manner. Protocols can remain active for up to three years and then the PI must submit a new protocol to replace expiring protocols. Replacement protocol must be submitted in a timely manner to allow for IACUC review prior to expiration.
2. Staff in the IACUC Office and the Office of the Attending Veterinarian pre-review the submitted protocol, obtain any additional information that may be required, and distribute the protocol to members of the IACUC.
3. The IACUC reviews the protocol and approves, withholds approval, or requires modifications to secure approval in accordance with the IACUC's charge (see IV.A., below). Active protocols must be reviewed annually. The IACUC will conduct a de novo review of three year replacement protocols as required by the AWA and PHS policy.
4. The IACUC Office notifies the PI of the IACUC's decision via email. For funding agencies that require documentation that a project has been reviewed and approved by the IACUC, the IACUC Office will provide a signed letter upon request.
5. Investigators may request that the IACUC reconsider a negative decision by contacting the IACUC Office. The IACUC may reconsider its decision, with documentation in the IACUC minutes, based on the information provided by the PI.
6. A copy of the first page of the approved protocol must be displayed in the area where the animals are housed. For indoor housing, this is typically on the door of each animal room. In barns or outdoor facilities, the protocols may be placed in a central area where they are accessible at all times to the IACUC and staff of the Attending Veterinarian.

D. Criteria for Review of Protocols

The criteria for review of protocols are listed in the Animal Welfare Act regulations, PHS Policy, the "[U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training](#)," the [Guide for the Care and Use of Laboratory Animals](#), and the [Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching](#).

IV. Responsibilities

A. IACUC

1. The IACUC is required by the Animal Welfare Act, *Guide for the Care and Use of*

Laboratory Animals, the Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching, and PHS Policy to oversee the UC Davis Animal Care and Use Program.

2. The IACUC's responsibilities include, but are not limited to:
 - a. Reviewing, at least once every six months, the University's program for the humane care and use of animals and the status of the institution's animal facilities, including satellite facilities, laboratories, and areas where survival surgery is conducted.
 - b. Reviewing and approving, requiring modifications (to secure approval), or withholding approval of Animal Care and Use Protocols and Amendments.
 - c. Developing procedures and guidelines based on Federal, State, and University policies.
 - d. Investigating reported animal care and use concerns.
 - e. Advising the Institutional Official regarding all aspects of the UC Davis Animal Care and Use Program.
3. The IACUC acts as a liaison between the campus and various animal care regulatory and oversight authorities.
4. The IACUC may suspend an activity only after review at a convened meeting and with the suspension vote of a majority of the quorum present. The Investigator is notified by the IACUC following the suspension vote. If the IACUC suspends an activity involving animals, the Institutional Official, in consultation with the IACUC, shall review the reason for the suspension, take appropriate corrective action, and report that action with a full explanation to the Animal Health Inspection Service (APHIS) for USDA covered species, any Federal agency funding the suspended activity, and the Association for the Assessment and Accreditation of Laboratory Animal Care (AAALAC), International AAALAC.

B. IACUC Office

The IACUC Office provides the support staff to the IACUC and serves as the technical advisors to the committee. The IACUC staff is responsible for implementing IACUC training programs and ensuring campus compliance with IACUC policies.

C. Attending Veterinarian

The Attending Veterinarian has direct or delegated authority for activities involving animals on the UC Davis campus. The Attending Veterinarian is responsible for the campus veterinary care program and has the authority to immediately suspend an activity that causes significant animal welfare or health concerns. The Attending Veterinarian will immediately notify the IACUC of any such situation.

The Animal Welfare Act regulations hold the Attending Veterinarian directly responsible for the oversight of animal disease control and prevention, euthanasia, the appropriate use of pain-relieving drugs, and other aspects of veterinary care. The Attending Veterinarian is an *ex officio* voting member of the IACUC.

D. Institutional Official

The Institutional Official is the individual authorized on behalf of the University to assure all programmatic and regulatory requirements are met. The Institutional Official is appointed in writing by the Chancellor.

E. Principal Investigator (PI)

1. The PI is the individual responsible for research and/or teaching project(s) using live,

vertebrate animals and must have a career position at UC Davis. See IACUC policy 24 regarding the Use of UC Davis Facilities by Non-UC Davis Personnel (<http://safetyservices.ucdavis.edu/ps/a/IACUC/po/useOfFacilitiesByOtherInstitutions>).

2. PIs are responsible for preparing and submitting an Animal Care and Use Protocol, and verifying approval, prior to any teaching or research activity, and for adherence to the approved protocol by everyone listed on the protocol.
3. PIs are responsible for knowing the requirements of the agencies from which they seek funding, and submitting approved Animal Care and Use Protocols to their funding agencies as required.
4. PIs are responsible for ensuring that the personnel working on their protocols are appropriately trained and qualified for the procedures they are performing. See Principal Investigators Training Responsibilities for Animal Care and Use (<http://safetyservices.ucdavis.edu/ps/a/IACUC/po/tres/trainingResponsibilities>).

PIs and their department may be held responsible for paying fines resulting from citations that occur as a significant failure to comply with animal welfare laws and regulations such as conducting work not approved in an IACUC approved protocol.

V. Animal Procurement

- A. Animal procurement must be in accordance with IACUC Guidelines on the acquisition of animals and accounted for in the Animal Tracking System (<http://safetyservices.ucdavis.edu/ps/a/IACUC/po/animal-tracking-system-ats>).
- B. Animals shall not be procured for or transferred to investigators who do not have an IACUC approved protocol.

VI. Housing, Care, and Handling of Animals

- A. The housing and care of animals at UC Davis must conform to the Animal Welfare Act, the *Guide for the Care and Use of Laboratory Animals*, and/or the *Guide for the Care and Use of Agricultural Animals in Research and Teaching*, as appropriate for their research and teaching activities (http://safetyservices.ucdavis.edu/ps/a/IACUC/quicklinks/additionalSites_Resources). Exceptions will be considered by the IACUC with appropriate scientific justification.
- B. Animals must be housed only in facilities inspected and approved by the IACUC. Animals removed to other areas (e.g., laboratories) for research or teaching purposes must be returned to an approved holding facility at the end of the working day. Animals cannot be housed outside of approved facilities for longer than 12 hours unless such housing is specifically justified and approved by the IACUC (See IACUC policy 19 Laboratory Housing for Research Animals, <http://safetyservices.ucdavis.edu/ps/a/IACUC/po/labHousingforResearch>).
- C. No animals used for teaching or research shall be removed from or brought onto UC Davis property except in accordance with established campus procedures and prior approval by the IACUC.
- D. Animal carcasses shall be disposed of in a manner consistent with current EH&S requirements (<http://safetyservices.ucdavis.edu/snfn/safetynets/snml/sn3/sn3>). Disposal of pathogenic waste must be conducted in accordance with the EH&S Biological Safety Manual.
- E. The Attending Veterinarian has the authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

VII. Animal Care Regulatory and Oversight Authorities and Guides

UC Davis policies on animal care and use are based on several Federal and State government regulations. The following sections describe the major regulatory and oversight agencies.

- A. U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS)
- USDA-APHIS administers the Federal Animal Welfare Act (CFR Title 9 - Animals and Animal Products), which establishes standards for the care and use of laboratory animals as defined by the Animal Welfare Act. Compliance requirements include institutional licensing and registration, an IACUC, a veterinary care program, a semi-annual review of the Animal Care and Use Program, appropriate housing facilities, facility inspections, annual reports, and a defined chain of command. USDA Animal Welfare inspectors conduct periodic unannounced inspections.
- B. Office of Laboratory Animal Welfare (OLAW), National Institutes of Health (NIH), Public Health Service (PHS)
- OLAW is the compliance office of the NIH Office of Extramural Research. NIH is the major source of federal grants for research in the health sciences. OLAW publishes the "Public Health Service Policy on Humane Care and Use of Laboratory Animals." PHS policy requires the campus to file an Animal Welfare Assurance with OLAW, Office of the Director, NIH, in which the campus describes in detail the methods to be used, verifying compliance with PHS policy. The UC Davis Animal Welfare Assurance number is #A3433-01. PHS will not release funds for any approved research project until a letter of verification is received from the institution stating that the proposed research has received IACUC review and approval.
- C. Association for the Assessment and Accreditation of Laboratory Animal Care (AAALAC), International
- AAALAC, International, is a voluntary certification organization that certifies campus compliance with the provisions of the Federal Animal Welfare Act and the standards of animal care specified by Federal agencies and funding bodies, including the "Public Health Service Policy on Humane Care and Use of Laboratory Animals" (PHS Policy), The National Research Council *Guide for the Care and Use of Laboratory Animals*, and the Federation of Animal Science Societies *Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching*.
- Accreditation reviews are typically conducted every three years and include inspection of all animal facilities, research laboratories, study areas, and off-campus locations. Accreditation includes the review of all campus programs for the care and use of live, vertebrate animals in research and teaching. Compliance requirements include providing a detailed description of the UC Davis Animal Care and Use Program and details of campus actions taken to correct deficiencies identified during AAALAC site visits.
- D. California Department of Fish and Wildlife (CDFW)
- CDFW administers State law that regulates the importation and containment of non-indigenous wildlife species as well as the collection and use of California wildlife (California Code of Regulations, Title 14, Sections 671-671.4). A CDFW Research Restricted Species Permit is required for the importation and containment of non-indigenous species (<http://www.dfg.ca.gov/licensing/specialpermits/specialpermitsdescrip.html>). The Research Restricted Species Permit is procured by the Attending Veterinarian and maintained by the IACUC Office under the direction of the IACUC Administrator. A Scientific Collecting Permit is required for the collection and use of California wildlife. The Scientific Collecting Permit is obtained by the Investigator. The collection of some species requires a Memorandum of Understanding (MOU) from the CDFW, in addition to the Scientific Collecting Permit. Additionally, there are federal bird banding and endangered species permits and state and national park research permits that may be necessary. The applicant is required to determine the full extent of the permits needed to perform the requested work. Specific details regarding how to obtain a Scientific Collecting Permit, which species also require a MOU, and other permit requirements can be obtained from the CDFW webpage

(<http://www.dfg.ca.gov/about/wildlife.html>).

- E. California Occupational Safety and Health Administration (CAL-OSHA)
CAL-OSHA administers detailed regulations pertaining to employee occupational health and safety, including potential health hazards to persons who work with animals.
- F. California Department of Health Services (CDHS)
The CDHS interacts with campus animal care authorities in the investigation of reportable infectious human diseases that involve possible animal sources. Compliance requirements involve such activities as posting of potentially hazardous animal areas and monitoring of potential zoonosis by the Attending Veterinarian and/or the IACUC staff.
- G. The National Research Council *Guide for the Care and Use of Laboratory Animals*
The *Guide for the Care and Use of Laboratory Animals* provides guidance to institutions on the appropriate care and use of laboratory animals including institutional policies and responsibilities, animal environment, housing and management, veterinary medical care, and physical plant. Adherence is expected for institutions that acquire AAALAC accreditation or receive funds from NIH and most other public and private funding agencies. Deviations from the *Guide* can be considered by the IACUC with adequate justification.
- H. The Federation of Animal Science Societies *Guide for the Care and Use of Agricultural Animals in Research and Teaching*
The *Guide for the Care and Use of Agricultural Animals in Research and Teaching* provides guidance to institutions on the appropriate care and use of agricultural animals used in agricultural research and teaching including institutional policies, general guidelines for animal husbandry, agricultural animal health care, and physical plant. Adherence is expected for institutions that acquire AAALAC accreditation.

VIII. Further Information

- A. Contact the IACUC Office (530-752-2364, iacuc-staff@ucdavis.edu) or visit the IACUC Website at <http://safetyservices.ucdavis.edu/ps/a/IACUC> for information and assistance.
- B. The U.S. Government Principles can be found at:
<http://grants.nih.gov/grants/olaw/references/phspol.htm#USGovPrinciples>
- C. Specific IACUC and Attending Veterinarian policies, guidelines, training resources, references, and methods for reporting concerns can be found at
<http://safetyservices.ucdavis.edu/ps/a/IACUC/po/Master> .

IX. References

- A. Animal Welfare Act Regulations. U.S. Code of Federal Regulations, Title 9, Subchapter A (http://www.aphis.usda.gov/animal_welfare/awa_info.shtml).
- B. Institute of Laboratory Animal Resources: *Guide for the Care and Use of Laboratory Animals*, National Academy Press, Eighth Edition (http://www.nap.edu/catalog.php?record_id=12910).
- C. The Federation of Animal Science Societies: *Guide for the Care and Use of Agricultural Animals in Research and Teaching*, 2010 (http://www.fass.org/docs/agguide3rd/Ag_Guide_3rd_ed.pdf).
- D. Office of the President: University Policy on the Use of Animals in Research and Teaching, 10/15/84 (<http://policy.ucop.edu/doc/2500494/AnimalUse>).
- E. National Institutes of Health: Public Health Service Policy on Humane Care and Use of Laboratory Animals (<http://grants.nih.gov/grants/olaw/references/phspol.htm>).

- F. Report of the AVMA Panel on Euthanasia.
(http://www.avma.org/issues/animal_welfare/euthanasia.pdf).
- G. California Department of Fish and Wildlife (<http://www.dfg.ca.gov/about/resource-mgmt.html> l).
- H. UCD Policy and Procedure Manual Section 290-25, Health Services for Individuals Having Animal Contact (<http://manuals.ucdavis.edu/PPM/290/290-25.pdf>).