

<b>Version: 1.6</b> <b>Effective Date: 4/1/2022</b>	<b>TRAINING AND EDUCATION</b>	<b>Supercedes</b> <b>Document Dated:</b> <b>11/18/2020</b>
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I. Background

U.S. Animal Welfare Regulations (AWR) and Public Health Service (PHS) Policy require institutions to provide training for all personnel engaged in animal research. In addition, the Guide for the Care and Use of Laboratory Animals states, “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.” The content of general training is specified by federal regulations, policy and must include training relevant to the species with which personnel are responsible:

1. Humane methods of animal maintenance and experimentation, including:
  - a) The basic needs of each species of animal;
  - b) Proper handling and care for the various species of animals used by the facility;
  - c) Proper pre- and post-procedural care of animals; and,
  - d) Aseptic surgical methods and procedures.
2. The concept, availability, and use of research or testing methods that limit the use of animals or minimize animal distress.
3. Proper use of anesthetics, analgesics, and tranquilizers for any species of animals used by the facility.
4. Methods whereby deficiencies in animal care and treatment are reported including deficiencies in animal care and treatment reported by any employee of the facility. No facility employee, committee member, or laboratory personnel shall be discriminated against or be subject to any reprisal for reporting violations of any regulation or standards under the Act.
5. Utilization of services (e.g., National Agricultural Library, National Library of Medicine) available to provide information:
  - a) On appropriate methods of animal care and use;
  - b) On alternatives to the use of live animals in research;
  - c) That could prevent unintended and unnecessary duplication of research involving animals; and,
  - d) Regarding the intent and requirements of the Act.

II. Policy

UC Berkeley requires that all individuals listed on an Animal Use Protocol must complete a basic online training course “Working with the IACUC (all animal users)” if they intend to conduct research, testing and/or use animals in teaching. The Animal Care and Use Committee (ACUC) is charged with ensuring that all personnel working with and/or around animals are appropriately trained and qualified, and if applicable,

may require additional specific training. The Office of Laboratory Animal Care (OLAC) or Environmental Health and Safety (EH&S) staff or other designated individuals may be responsible for certifying completion of specific training as determined by the ACUC as well as safety training to enter animal facilities. In addition, the online “Working with the IACUC (all animal users)” refresher training must be done every 5 years based on initial completion date. There are also a variety of other online modules related to animal care and use.

Note - See Appendix for current information on training requirements.

### III. Applicability

- A. This policy applies to all Principal Investigators (PIs), technicians, laboratory personnel, research fellows, students, other staff, and visiting scientists. Even PIs who do not themselves work directly with animals are required to have basic and refresher training in animal care and use because of their ultimate responsibility for the personnel listed on their animal use protocols and the use of animals in their research, testing and/or teaching. In addition to the above personnel, appropriate training must be provided by PIs to volunteers or visitors who are exposed to live vertebrate animals or their unfixed tissues.
- B. The ACUC members and staff of the Office of Animal Care and Use (OACU) must also receive education and training on regulations and institutional policies as well as the conduct of site visits to ensure the highest standards in Berkeley’s program of animal care and use. Continuing education for ACUC members and OACU staff is provided as needed.

### IV. Responsibilities

- A. ACUC – Establishes the minimum training requirements relative to general care and use of animals in teaching and research at UCB and to permit access to animal facilities. Personnel on protocols may be required to have additional training and/or certification of competency as appropriate.
- B. PIs – Ensure that appropriate training is provided, completed and documented for everyone listed on their protocol. Initial, basic training must be completed prior to working with any animals or gaining authorized entry to specific buildings or areas. Specific procedural or husbandry training may be provided by an experienced member of the lab and/or by the OLAC Trainer. Ensure that required certifications have been obtained for all applicable lab members and maintain all training documentation to be provided to ACUC or other site inspectors as requested.
- C. OLAC – Provides species, procedure, and housing specific training as per PI request or as required by ACUC relative to granting approval of a protocol. Documentation of training will be provided to the PI or ACUC as required. Develop and/or revise online course content for the Safety and Care of Research Animals at UC Berkeley course.

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- D. OACU – Ensures online training is initially completed with a passing score, that online renewal training is done (as applicable every five years), and any additional protocol specific training is completed. Educational outreach is available upon request as it pertains to compliance for the use of animals in teaching and research.
- E. EH&S – Responsible for the hosting management and training records of the course Safety and Care of Research Animals at UC Berkeley via the UC Learning Center. Other required or optional training (e.g., Controlled Substances, etc.) may be related to research and teaching with animals.

V. References

- A. Animal Plant Health Inspection Service (APHIS). United States Department of Agriculture (USDA). Code of Federal Regulations, Title 9 (Animals and Animal Products), Chapter 1, Subchapter A (Animal Welfare), Part 2 – Regulations, Subpart C – Research Facilities, §2.32 Personnel Qualifications.
- B. Office of Laboratory Animal Welfare. (2002). *Public Health Service Policy on Humane Care and Use of Laboratory Animals*.
- C. University of California Policy, Laboratory Safety Training. (effective October 31,2013): <https://policy.ucop.edu/doc/3500598/LabSafetyTraining>
- D. Institute of Laboratory Animal Research (ILAR). National Research Council (2011). *Guide for the Care and Use of Laboratory Animals* (8th edition). Washington, D.C.: The National Academies Press.

**Appendix A – Course Descriptions**

Updated 3/9/2022

**1. Mandatory Basic Online Training**

Collaborative Institutional Training Initiative (CITI) online program includes instruction in the five required subject areas as specified by the regulations. CITI training may be accessed directly at <https://citiprogram.org>. Individuals must complete the *Working with the IACUC* (all animal users) module, which details regulatory responsibilities and is required for all PIs and all individuals listed on an AUP for teaching, testing or research. Other training modules such as *Working with Mice in Research* are also available on this web-site but are optional. After passing the initial CITI mandatory modules with a score of 80% correct; refresher training must be completed every 5 years by the anniversary date of the original passing date.

**2. Other Required Training**

- A. All individuals working with or around non-human primates (NHP) require *Working Safely with Non-Human Primates* training. The training is scheduled as needed by the OLAC Training Coordinator and/or OLAC Veterinarian for all new personnel, and covers basic principles of working safely with NHPs. Safety issues regarding Herpes B virus, in particular, are covered. Visitors (including inspectors) who are accompanied by OLAC personnel may have an abbreviated training to include basic safety practices. This training must be received prior to entering a room with NHPs present. Contact the OLAC Training Coordinator for more information.
- B. All individuals working with or around bats require *Bat Safety* training. The training is scheduled as needed by an OLAC veterinarian or the OLAC Training Coordinator for all new personnel, and covers basic principles of working safely with bats. Safety issues regarding rabies virus, in particular, are covered. Visitors (including inspectors) who are accompanied by OLAC personnel may have an abbreviated training to include basic safety practices. This training must be received prior to entering a room with bats present. Contact the OLAC Training Coordinator for more information.
- C. All researchers, staff and students working in any of the animal facilities must complete – an online course, *EHS 205-Safety and Care of Research Animals at UC Berkeley* (on the UC Learning Center platform) and attend an in-person facility orientation (register at <https://www.olac.berkeley.edu/training>) prior to facility access. In-person training is generally conducted by the facilities' Assistant Supervisor.
- D. All students enrolled in classes where students utilize freshly euthanized vertebrate animals or perform class-room supervised activities under direct supervision using live vertebrate animals as a component of the course syllabus and curriculum must view *Ethics in Animal Research* training. *Ethics in Animal Research* training is a short PowerPoint presentation with versions adapted for field courses or lab courses usually given by the course instructor at the beginning of the course covering the basic principles of animal welfare regulations, ethics

and protocol compliance as they relate to animal care and use at UC Berkeley. These presentations on *Ethics in Animal Research* are made available by the OACU staff to PIs with teaching protocols.

- E. All students enrolled in classes where independent research using live vertebrate animals is part of the curriculum must receive CITI training as described above under Section VII and be covered by a PI's animal use protocol (AUP) to do the work.
- F. Other AUP procedure specific training will be provided by the PI or their designee. Training done within a PI's lab must be documented by the PI and be available for ACUC review at the time of lab inspections. However, all new lab personnel who will be performing anesthesia, surgery and euthanasia must be observed and certified by the Office of Laboratory Animal Care (OLAC) veterinary staff or OLAC Training Coordinator before they are allowed to perform these procedures independently.
- G. In addition, EH&S may require a variety of other training be completed online or in-person (e.g., ABSL2 or 3 Safety training) prior to an individual beginning to do work under an AUP. See <https://ehs.berkeley.edu/training> for more detail.

### 3. Optional Online Training

- A. *CITI* also offers a variety of training modules that are specialized species or model specific courses.
- B. *AAALAS* also offers training through their programs but the cost of this is borne by the user.

### 4. ACUC Member Training

All ACUC members must complete and pass the CITI online course *Essentials for IACUC Members* prior to beginning their term of service. In addition, all new members must attend a live/real-time training session conducted by the ACUC Chair and/or Director of OACU or their designee/s. Continuing education is provided to ACUC members on an ongoing basis as determined by the ACUC Chair and Director of OACU with input from the Attending Veterinarian. These brief educational topics are presented at meetings and cover such areas as new or revised regulations and/or guidance; inspections; or, other timely topics germane to the ACUC's responsibilities.

### 5. OACU Staff Training

OACU staff must complete and pass all the mandatory and optional IACUC and animal online modules currently offered by CITI. In addition, the Director and/or a senior staff member provides orientation and continuing education to ensure that staff are well trained, competent and efficient. Continuing education through webinars or at conferences, workshops or seminars off-campus will be supported as needed contingent on budget limitations.

6. OLAC Staff Training

All OLAC employees receive training specific to the facility in which they work and/or the animals with which they work. This facility specific training includes classes such as: proper microisolator technique, guinea pig or bat husbandry, working safely with nonhuman primates (NHP) (i.e., bite/scratch management), Biosafety Level Three (ABSL- 3) Safety, Hazardous Materials Safety Training, Basic Safety Training, and Ergonomics for Animal Care Staff.