

Version: 1.0 Effective Date: 1/1/2012	TRAINING AND EDUCATION	Supercedes Document Dated: <i>June 2008</i>
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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. The content of general training is specified by federal regulations and policy and must include:

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, *prior* to working with vertebrate animals, all individuals must receive basic training if they plan to conduct research with animals and/or use animals in teaching. The Animal Care and Use Committee (ACUC) is charged with determining and documenting that all personnel conducting procedures using 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. General refresher training on animal care and use and regulations affecting said use is required every five (5) years from the initial, basic training date.

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 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.
- 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 for 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 minimal training requirements relative to general care and use of animals in teaching and research at UC Berkeley. 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 and documented for everyone listed on his/her protocol. Initial, basic training must be completed prior to working with any animals or gaining authorized entry to specific buildings or areas.
- 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.
- D. OACU – Ensures online training occurs and is recorded, maintains documentation that required additional protocol specific training is complete, and provides educational outreach as it pertains to compliance for the use of animals in teaching and research.
- E. EH&S – Responsible for offering Northwest Animal Facility (NAF) Safety Training for personnel working in this facility and other required or optional training (e.g., Biosafety, Controlled Substances, etc.) as may be related to research and teaching with animals.

V. Required Training for Research and Teaching (see Appendix A)

- A. These are the categories of individual who need training:
 - 1. Mandatory, basic training via online course for all faculty, staff, students and research personnel who use live vertebrate animals in research or instruction
 - 2. Other *required training* as applicable: for species (including *Working Safely with Non-Human Primates* training), procedures (e.g., surgery, euthanasia, etc.), agents used (e.g., controlled substances) or housing location (e.g., NAF)
 - 3. *Students* enrolled in courses where animals are used *under direct supervision*
 - 4. *Students* enrolled in courses where *independent research* is conducted

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5. ACUC Member Training
6. OACU Staff Training

VI. 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): <http://policy.ucop.edu/doc/3500598/LabSafetyTraining>

Appendix A – Course Descriptions

1. Mandatory Basic Training

Collaborative Institutional Training Initiative (CITI) online training includes instruction in the five required subject areas as specified by the regulations. CITI training requires 3-5 hr to complete and may be accessed directly at www.citiprogram.org. Individuals must complete the “Working with the IACUC” module, which details regulatory responsibilities and is required for all PIs and all individuals handling live vertebrate animals in either teaching or research. Other training modules such as “working with mice in research” are also available on this web-site but are optional. Personnel anticipating using animals in the future may complete this training prior to their being added to an MAUP on the Berkeley campus.

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 an 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 an OLAC Veterinarian for this training.
- B. All researchers, staff and students working in the Northwest Animal Facility (NAF) must complete the *Combined Basic Safety, Hazardous Materials & BioSafety* training for new NAF Users. For this facility only, this basic laboratory safety training is required for users by the City of Berkeley. The seminar-style training sessions are offered once a month by EH&S. The current class schedule can be viewed on the OLAC website (www.olac.berkeley.edu) under Classes and Training. Pre-registration is not necessary for these classes. Please contact EH&S for questions.
- C. 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 receive *Ethics in Animal Research Training*. *Ethics in Animal Research* training is a short presentation 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. A powerpoint presentation on *Ethics in Animal Research* is available to instructors from the OACU (acuc@berkeley.edu).
- D. 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.
- E. Individuals performing stressful or invasive procedures must be properly trained to perform these procedures. This procedure-specific training will be required in addition to the training outlined above and will be based on procedures defined in

the approved MAUP. In general this training will be provided by institutional veterinarians or other OLAC personnel with appropriate expertise. For specific procedures where PIs or lab members have expertise beyond that of the OLAC veterinarians or staff, the veterinary or animal care staff will periodically evaluate the training to ensure compliance with federal policies and regulations. Required procedure-specific training will be detailed as a *Condition of Approval* in the approval letter from the ACUC Chair. The individual to contact for training will be included in the letter.

3. Optional Online Training

A. *CITI* also offers the following *optional* training modules that are specialized species or model specific courses:

1. Post-Procedure Care of Mice and Rats in Research: Reducing Pain and Distress
2. Working with Amphibians in a Research Setting
3. Working with Mice in Research Settings
4. Working with Rats in Research Settings
5. Working with Hamsters in Research Settings
6. Working with Gerbils in Research Settings
7. Working with Guinea Pigs in Research Settings
8. Working with Rabbits in Research Settings
9. Working with Cats in Research Settings
10. Working with Dogs in Research Settings
11. Working with the Laboratory Dog CD-ROM: Basic and Advanced Lessons
 - a) Streaming Videotape (Video CD)- Working With the Laboratory Dog
12. Working With Swine in Research Settings
13. Working With Nonhuman Primates in Research Setting
 - a) Streaming Videotape- Working Safely with Nonhuman Primates

4. ACUC Member Training

All ACUC members must complete, and pass the *CITI* online course "Essentials for IACUC Members". In addition, all new members must attend a face-to-face training session conducted by the ACUC Chair and/or Director of OACU. 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 IACUC's responsibilities.

5. OACU Staff Training

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OACU staff must complete, and pass all the mandatory and optional online modules currently offered by *CITI*. In addition, the Director provides orientation and continuing education to ensure that staff is 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.