

University of Louisville
Institutional Animal Care and Use Committee
Policies and Procedures

Required Training

Policy: The IACUC verifies the appropriate training and experience of research personnel working with animals via four mechanisms: 1) reviewing a description of each protocol participant's training and experience and/or periodically reviewing an individual's "IACUC Participant Training Log," 2) providing didactic sessions to inform all animal users of their roles and responsibilities, 3) confirming two-step enrollment in the Occupational Health and Safety Program, and 4) coordinating "hands-on" interaction with veterinary or other specialists, as needed. Review of "Level I" documents authorizes individuals to work with animals only under direct supervision and does not confer unsupervised access to animal facilities. All research personnel who wish to work independently with animals must complete "Level II Training" in order to receive approval as a participant on a *Protocol*. Completion of Level II Training is also a prerequisite for access authorization to RRF animal facilities. As a condition for continued authorization to work with animals, individual animal users are expected to complete a Level II Training refresher course every three years and maintain an IACUC Participant Training Log that outlines training on all procedures for which they are expected to perform.

Euthanasia Training Requirement (effective February 1, 2019): All laboratory personnel responsible for euthanasia must attend a hands-on euthanasia training session with RRF faculty and/or staff or laboratory personnel that have been RRF-certified as euthanasia trainers. The RRF offers training monthly, as well as on an individualized basis, which can be arranged through the IACUC Office. All new *Proposals*, 3-year renewal *Proposals*, and study participant additions will be subject to this euthanasia training requirement.

Rationale: Regulatory agencies require the University, through the oversight of the Institutional Animal Care and Use Committee (IACUC), to ensure all personnel working with laboratory animals possess appropriate experience and training. The training available to scientists, animal technicians, and other personnel involved in animal care, treatment, observation, or use is designed to ensure that these individuals understand the principles of humane animal care and are qualified for their specific role. Individuals who have not met training requirements are informed of the need to do so during the *Protocol* review process and animal use privileges are contingent upon meeting the IACUC training requirements. Furthermore, the Research Resources Facilities (RRF) requires facility-specific training before access is granted into animal vivaria.

Procedures, Guidelines, and Exceptions:

1. Level I:

- a. Periodically, individuals must be exposed to laboratory animals or research facilities on single occasions with no intention of working independently (*e.g.*, students involved in a teaching exercise involving animals, project sponsors wishing to review or participate in a procedure). Although these individuals must understand their responsibilities and limitations, as well as the hazards associated with research animal contact, the depth of training necessary is minimal. "Level I Training" consists of the informative brochures entitled, "The Use of Animals in Biomedical Research at the University of Louisville," and "Introduction to Occupational Hazards Associated with the Care and Use of Laboratory Animals."

Original Approval: July 1, 2005

Revised: April 19, 2007; 2 February 2012; 20 February 2013; 16 July 2015; 17 November 2016; 14 August 2018; 16 January 2019

Latest Approval: 17 January 2019

- b. These handouts are provided by the RRF to visiting personnel who *must remain under the supervision of a Level II trained staff member*. Posted notices and sign-in sheets to document receipt of this information will be maintained at RRF entrances.
- c. To ensure a basic level of understanding the animal welfare responsibilities and occupational health risks associated with animal use, documented receipt and review of Level I Training materials is also required for individuals prior to IACUC approval as project participants until Level II Training is completed. *This includes the requirement for supervision by a Level II trained staff member during all animal use.*

2. **Level II:**

- a. The basic training program for personnel wishing to work independently with laboratory animals is known as “Level II Training,” which is composed of a set of online courses offered through CITI Program titled “Working with the IACUC” (<https://about.citiprogram.org/en/homepage/>). The courses are designed to meet USDA and OLAW requirements for basic training in the humane care and use of animals. The discussion includes an overview of pertinent animal welfare recommendations, regulations, and regulatory bodies, such as:
 - 1) Russell, WMS, and RL Burch, *The Principles of Humane Experimental Technique* (1959) and an introduction to the concept of “The Three R’s” (Replacement, Reduction, Refinement)
 - 2) Interagency Research Animal Committee, *U.S. Government Principles for the Utilization and Care of Vertebrate Animal Used in Testing, Research, and Training* (1984)
 - 3) Animal Welfare Act and USDA Regulations
 - 4) Public Health Service Act and *PHS Policy on the Humane Care and Use of Laboratory Animals*
 - 5) *Guide for the Care and Use of Laboratory Animals*
 - 6) Association for the Assessment and Accreditation of Laboratory Animal Care, International (AAALAC)
 - 7) A summary of the IACUC’s Policies and Procedures, with an emphasis on “Reporting and Investigating Animal Welfare Concerns.”
- b. The structure and function of the Institutional Animal Care and Use Committee (IACUC) is presented. Also discussed is utilization of services such as the National Agricultural Library and National Library of Medicine available to provide information on: 1) appropriate methods of animal care and use, 2) alternatives to the use of live animals in research, 3) prevention of unintended and unnecessary duplication of research involving animals.
- c. “Level II Training” also provides special focus on the following topics:
 - 1) Consideration of alternatives, including the concept, availability, and use of research and testing methods that limit the use of animals, minimize the number of animals required to obtain valid results, and limit animal pain or distress
 - 2) Recognition and alleviation of animal pain and distress, including the proper use of anesthetics, analgesics, and tranquilizers
 - 3) Use of controlled substances and neuromuscular blocking agents
 - 4) Conduct of survival surgery, including proper pre-procedural and post-procedural care of animals, and aseptic surgical methods and procedures
 - 5) Euthanasia
 - 6) Development of humane endpoints

Original Approval: July 1, 2005

Revised: April 19, 2007; 2 February 2012; 20 February 2013; 16 July 2015; 17 November 2016; 14 August 2018; 16 January 2019

Latest Approval: 17 January 2019

7) Introduction to the Occupational Health and Safety Program

3. *Level III*

- a. Special one-on-one or group training sessions provided by the RRF veterinary care staff or consultants (“Level III Training”) may also be requested by study participants or required by the IACUC to ensure that research personnel are adequately prepared for a particular methodology.
- b. Additional didactic and/or wet-laboratory sessions are sponsored by the RRF and may also be attended on a voluntary basis.

4. *IACUC Participant Training Log*

- a. To document procedure-specific training, each animal user must maintain an IACUC Participant Training Log. This Log should describe prior experience for which specific procedure proficiency was obtained and outline each newly-acquired training. IACUC Participant Training Logs must be made available to the IACUC upon request.
- b. *Principal Investigators are responsible for ensuring that training is obtained and documented prior to a Participant performing any animal-related procedures unsupervised.* Participants conducting procedures for which the Log does not record an appropriate level of training may also lose animal use privileges.
- c. The IACUC Office recommends that study personnel update their training logs any time they complete a new training session.

5. *Euthanasia Training* (effective February 1, 2019)

- a. All laboratory personnel responsible for performing euthanasia must attend a hands-on euthanasia training session with RRF faculty and/or staff or an RRF-certified euthanasia trainer.
- b. Implementation of this requirement will be for all new *Proposals* and three-year *Proposal* renewals, as well as to new additions of personnel to *Proposals*.
- c. Laboratory personnel may become RRF-certified euthanasia trainers by attending a euthanasia trainer certification course with RRF veterinary staff.
 - i. RRF-certified euthanasia trainers are qualified to instruct other laboratory personnel in the species-specific methods they have been certified to teach. Laboratory personnel who attend a training session with an RRF-certified euthanasia trainer will meet the hands-on euthanasia training requirement for the species-specific methods they have been trained in.
 - ii. RRF-certified euthanasia trainers should document any training sessions they conduct with the Euthanasia Training Sign-In Sheet and promptly email the IACUC Office after the sessions with sign-in sheet of participants and species-specific methods of euthanasia taught.
- d. Laboratory personnel should update their IACUC Participant Training Logs after any session they attend to include the method(s) of euthanasia they were trained in, the species, and the name of the euthanasia trainer.
- e. Laboratory personnel must be trained in all methods of euthanasia described in the *Proposal* that they have been given the responsibility for performing. Training should be recorded in the IACUC Participant Training Log; the specific methods of euthanasia that personnel are qualified to perform should be stated, along with the associated species.

Original Approval: July 1, 2005

Revised: April 19, 2007; 2 February 2012; 20 February 2013; 16 July 2015; 17 November 2016; 14 August 2018; 16 January 2019

Latest Approval: 17 January 2019