



University of Maryland College Park Animal Care and Use Standard

Animal Care and Use Training Requirements

Purpose: This standard describes the available course offerings and training requirements for various groups of personnel involved in animal care and use at the University of Maryland College Park (UMD).

Background: The University is responsible for ensuring that all scientists, research technicians, animal technicians, Institutional Animal Care and Use Committee (IACUC) members and other personnel involved in animal care, treatment, and use are qualified to perform their duties. Proper training helps ensure high-quality science and animal well-being. The Animal Welfare Regulations (AWRs), *The Guide for the Care and Use of Laboratory Animals* (the Guide), and the *Guide for the Care and Use of Agricultural Animals in Research and Teaching* (the Ag Guide) detail basic training requirements for personnel involved in animal care and use.

Standards:

- All personnel involved with animal care and use at UMD must be qualified, through experience and/or training, to perform their research, teaching, husbandry and support responsibilities.
- Animal care and use includes husbandry (including non-contact feeding and observations), handling, manipulating, or performing procedures on vertebrate animals, whether in a laboratory, in the field or in an animal facility. It also includes touching dirty animal caging, dirty cage accessories, animal waste or carcasses.
- All Principal Investigators (PIs), regardless of their level of animal contact, must take PI/Animal User (AU) training offered by the Department of Laboratory Animal Resources (DLAR).
- Initial PI/AU training for all key personnel listed on the protocol is also prerequisite for approval of an animal protocol approval.
- All animal users must also complete any other required training PRIOR to starting work on the animal study. PIs and/or facility managers are responsible for ensuring the proper training and proficiency of all personnel assigned to their facility.
- Training should be specific to the species and animal use procedures.
- The University will provide didactic, hands-on, and on-line training for animal users.
- Visiting Researchers (grad students, postdocs, faculty, staff): Training is also available for visiting researchers and any other individuals who would benefit from training. PIs should add all visiting researchers to the appropriate research protocol if they are performing animal work. For researchers who will be visiting UMD for less than 3 months, PIs should also upload a copy of the visitor's CV or other evidence of adequate training (e.g., animal training course, technical certification, etc.) elsewhere to the protocol. If using animals for greater than 3 months, visiting scientists must complete University-specific training.
- All personnel training will be documented.

Methodology:

1. **The animal care and use training program** consists of the following: initial, refresher, and on-line PI/Animal User; in-lab, animal facility-specific, hands-on animal handling, surgery and

anesthesia, Biosafety Level 2, and IACUC Member training. The University Attending Veterinarian (AV) or designee will coordinate the animal care and use training program.

a. **Principal Investigator and Animal User (PI/AU) Initial Training.** The DLAR offers a classroom course for all individuals involved in animal care and use. Undergraduate students in classes that use vertebrate animals are exempt from taking this course; however, teaching assistants must complete the course. Scheduling is through the DLAR office.

b. **Principal Investigator/Animal User (PI/AU) Refresher Training.** Like the initial PI/AU training, the DLAR also offers a triennial refresher training for all individuals involved in animal care and use. DLAR recommends the didactic class but an on-line class, when available, will also meet the refresher training requirements. DLAR provides this training to ensure that all personnel are aware of recent changes and updates and to periodically retrain them on applicable animal welfare and animal care and use standards or other topics germane to animal use at the University of Maryland. Scheduling is through the DLAR office.

c. **On-line Training.** The DLAR office has assembled a list of acceptable courses meeting requirements. These on-line courses are provided through the American Association for Laboratory Animal Science Learning Library (ALL). The selected on-line training courses supplement the PI/AU and hands-on training. The specific courses will depend on the species used, experimental procedures, and trainee proficiency. Learning Library access is coordinated through the DLAR office.

d. **In-lab or Lab-specific Training.** This ad-hoc training may be conducted by anyone who is competent in a particular procedure such as the PI, post-doctoral associate, research technician or animal care personnel. This training is offered on an individual basis or as a group, hands-on or in a classroom setting. The training covers animal procedures not covered in other training courses and emphasizes animal procedures specific to the protocol or to the lab. In lieu of training proficient individuals, the PI or other qualified trainer may provide a short narrative detailing the person's proficiency and qualifications. The PI should coordinate with DLAR for assistance with invasive survival surgical procedures and any procedure in which an individual may need assistance.

e. **Animal Facility-specific Training.** This training is provided by facility managers or their designee for anyone including facility maintenance personnel who might enter a unit-run or PI-operated animal facility. Personal protective equipment, room access, alarm systems, and location of equipment and supplies are among the topics discussed.

f. **Hands-on Animal Handling Training.** This DLAR-sponsored training offers an overview of pertinent SOPs and handling and restraint of animals (primarily mice and rats) in a hands-on format. Participants have the opportunity to practice under the supervision of experienced trainers. The class is appropriate for both new animal users and current animal users who would like a refresher on animal handling and restraint. Registration is through DLAR at carftrainer@umd.edu or through available online training request forms. Animal handling training for other species may be requested on a case-by-case basis.

g. **Hands-on Rodent Techniques Training.** This DLAR-sponsored class provides an overview of the biotechnology and technical procedures (identification, injections, bleeding, sampling, tattooing, etc.) of mice and rats in a hands-on format. Participants have the opportunity to practice under the supervision of experienced trainers. The class is appropriate for both new animal users and current animal users who would like a refresher on biotechnology. Registration is through DLAR at carftrainer@umd.edu or through available online training request forms. Individuals may complete this course as well as Hands-on Animal Handling Training and the Certified Trainer Training (see below) in order to demonstrate competency for providing rodent training activities in their lab. Animal handling training for other species may be requested on a case-by-case basis.

h. **Certified Trainer Training.** This DLAR-sponsored train-the-trainer class certifies that experienced research staff are proficient, skilled and knowledgeable on DLAR SOPs, biotechnology, animal handling, restraint and technical procedures on mice and rats. These individuals typically have completed the **Hands-on Animal Handling Training** and the **Hands-on Rodent Techniques Training**. This class is appropriate for experienced animal users only. An individual who feels they are already proficient in techniques may take this training without completing **Hands-on Animal Handling Training and Hands-on Rodent Techniques Training**. Registration is through DLAR at carftrainer@umd.edu or through available online training request forms. Animal handling training for other species may be requested on a case-by-case basis.

i. **Surgery and Anesthesia Training.** DLAR or qualified personnel in the PI's lab will provide hands-on training on anesthesia and surgical techniques when survival anesthesia with or without surgery is to be conducted.

j. **Animal Biosafety Level 2 (ABSL-2) Training.** The Department of Environmental Safety, Sustainability and Risk (ESSR) will provide safety training for personnel who work with animals held at BSL-2. A 3-year refresher class is required.

k. **IACUC Member Training.** IACUC office personnel and the AV (or designee) will provide IACUC member training that consists of initial orientation, on-the-job training, the PI/AU class. Continuing education is available during monthly meetings and at external training workshops or seminars.

2. Summary of training requirements by User Group and Training Subject

	PI/AU Initial Training	PI/AU Refresher Q 3 years	In-Lab or Lab-specific	AALAS Learning Library	Hands-on Animal Handling	Hands-on Rodent	Certified Trainer	Animal Facility	Surgery/Anesthesia	IACUC Training
High school volunteer	✓		✓		*	*	*	*		
Undergraduate volunteer or employee	✓	✓	✓	*	*	*	*	*		
Undergraduate animal lab					*	*	*	✓		
Gemstone	✓		✓	*	*	*	*	✓		
Grad student	✓	✓	✓	*	*	*	*	✓	*	
Post Doc	✓	✓	✓	*	*	*	*	✓	*	
Animal facility employees	✓	✓	✓	*	✓	*	*	✓	*	
Animal facility manager	✓	**	✓	*	✓	*	*	✓	*	
Animal lab employee who uses animals	✓	✓	✓	*	*	*	*	✓	*	
Visiting scientist			✓					*		
Facility Maintenance			*					✓		
IACUC members	✓	✓								✓
PI no animal contact	✓	✓								
PI with animal contact	✓	✓	*	*				✓	*	

* Contact DLAR; training is recommended if not required. ** Animal Facility Manager of unit-run animal facilities (CARF, Clark, Biology, ANSC, CBMG, IBBR, Vet Med) must take the didactic version of the PI/AU refresher class.

3. Training Records/Documentation. The IACUC reviews training documentation during the semiannual program review and facility inspection and as the need arises. The DLAR maintains a database of participants in the PI/AU initial and refresher courses that is accessible by the IACUC Office; copies of participation letters generated by DLAR are maintained by the PI and animal facility. In-lab, on-line, hands-on animal handling and surgery/anesthesia training records are maintained by DLAR and/or the PI and/or animal facility manager. Personnel conducting such training must document the name of the trainer(s), name of the trainee(s), training topic(s) and date training was provided. Animal facility-specific records are maintained by the facility manager (or designee). IACUC member training records are maintained by the IACUC Office.