



Division of Research

SUBJECT: Personnel Training in the Care and Use of Animals	Effective Date: 12/13/2019	Policy Number: 10.4.22
	Supersedes: 9/27/2019 9/30/2016 2/1/2015 2/29/2008	Page of 1 7
	Responsible Authorities: Vice President, Research Institutional Animal Care and Use Committee Director, Research Integrity Director, Comparative Medicine	

I. Background

The privilege of using animals in research is subject to three Congressional Acts: the Health Research Extension Act, the Food Security Act, and the Animal Welfare Act (AWA). The AWA details requirements for the care and use of animals in research, testing and teaching, specifically in Subpart C, Section 2.32, "Personnel Qualification". The Guide for the Care and Use of Laboratory Animals, 8th Edition, based on the PHS Policy on Humane Care and Use of Laboratory Animals also emphasizes proper training. Both, the AWA and the Guide, agree that it is the responsibility of the research facility to ensure that all scientists, research technicians, animal technicians, and other personnel involved in animal care and use are adequately educated, trained, and/or qualified in basic and study-specific principles of laboratory animal science. Furthermore, it states that "Training and instructions shall be made available, and the qualifications of personnel reviewed, with sufficient frequency..." This applies to IACUC members as well. The Guide stipulates that "it is the institution's responsibility to ensure that IACUC members are provided with training opportunities to understand their work and role".

II. Purpose

To establish a policy that provides guidance to all stakeholders in FAU's animal care and use program regarding adequate training necessary to use and care for animals and/or oversee compliance in the conduct of animal studies with the goal of achieving excellent research quality and protecting the welfare of the animal subjects. To assist the stakeholders in determining training resources available and required by the IACUC.

III. General Statement

An appropriate training program is an essential component of any Institutional Animal Care and Use Program (ACUP). All personnel involved in the animal care and use program at

FAU must be adequately trained in the principles of laboratory animal science and the ethical concerns surrounding animal use. The depth of training required will be determined based on the tasks performed by each person, e.g. whether the person is part of the oversight committee, performs hands-on experimental and/or care procedures, or is responsible for supervision of personnel handling animals. The purpose of the ACUP training program is to foster a philosophy of compassion and respect for the animals used in research and teaching. Furthermore, it should provide participants with the necessary knowledge and technical skills to perform required procedures to promote quality science based on appropriate use of animals while preserving animal welfare.

IV. Policy

1. All personnel must have adequate knowledge and experience to perform their duties of animal care, use, treatment and regulatory oversight.
2. Stakeholders (i.e. all personnel) in FAU's animal care and use program requiring training include research personnel, animal care personnel, IACUC members, IACUC support personnel in the Research Integrity office and the Institutional Official (IO).
3. All personnel must be sufficiently familiar with the pertinent regulations such as the AWA, PHS Policy and Guide for the Care and Use of Laboratory Animals as well as IACUC Policies including methods to report animal welfare concerns to ensure the care, treatment and use of animals is in accordance with these principles and regulations.
4. Personnel working with animals must be enrolled in FAU's Medical Monitoring Program for Animal Users (i.e. occupational health program).
5. All personnel working with animals must be listed on the IACUC protocol or amendment and have completed both the required in-person training and the CITI online training before approval to work with animals.
6. Species and procedure specific training will be provided to individuals using particular animal models and techniques, which can be identified by either the IACUC during the protocol review process, requested by the PI or by the Training Coordinator during the initial hands-on training. Such training involves, but is not limited to, topics like anesthesia and analgesia, surgical training including aseptic technique and post-operative care, recognition of pain/distress, and appropriate euthanasia methods.
7. Access to animal facilities will only be granted to research personnel who have completed the in-person, facility and online training and are authorized by the IACUC to participate in an animal study.
8. Experimental procedures specific to a study or a research lab (e.g. rodent behavioral tests, capture methods for animals in field studies) will be taught by the PI or his/her designee and documented.
9. New Principal and Co-Investigators, and other research personnel with a significant history of work with the species/animal-model to be used, which has been documented by the publication of multiple, peer-reviewed reports of such research, are required to provide a copy of their curriculum vitae and/or other supporting information to document this prior experience in order for the IACUC to assess their experience and eventually waiving some of the mandatory training for new personnel.
10. Training will be provided as a combination of on-line courses, didactic sessions and hands-on workshops. The online courses and in-person didactic sessions are mandatory requirements of the IACUC. The IACUC may also decide what additional components of the training program are applicable depending on the individual's involvement in the study. Proficiency of particular procedural techniques (e.g. surgical skills) must be demonstrated to the Attending Veterinarian (AV) or designee

independent of the seniority of the research or animal care personnel. This proficiency will be assessed after the initial training requirements detailed above.

11. Principal Investigators can request that visiting scientist be granted escorted hands-on access to animals and/or animal facilities in order to collaborate, assist or instruct in the PI's IACUC-approved activities by filling out "Visitors (including Minors) in Animal Facilities and Research Areas Request Form". The visitor can provide documentation of enrollment in the occupational health program and relevant training completed at their home institution. The IACUC office, in consultation with the IACUC, will review these documents and make a final decision on a case by case basis to whether more training will be required.
12. All personnel working with animals, hazardous substances and/or infectious agents have to complete relevant training as required by FAU's Environmental Health & Safety department. Please find more information at <http://www.fau.edu/facilities/ehs/training/index.php>.
13. Refresher training is required via the online training for all personnel every three years. If appropriate to the circumstances, the IACUC may decide on more frequent or additional refresher training.
14. Changes in training requirements will be communicated to the stakeholders of the animal care and use program semi-annual informational meetings for research personnel, via email, DoR Newsletter, personal communications and other means of communication. More frequent meetings of animal care and use program stakeholders may be scheduled as appropriate.

V. Definitions

1. **Research personnel** includes anybody who is working with animals and listed on the IACUC protocol. It includes but is not limited to the following individuals:
 - a. Scientists
 - b. Research technicians
 - c. Fellows, residents and post-docs
 - d. Students including undergraduate and graduate students
 - e. Visiting scholars
 - f. Volunteers
 - g. PIs and Co-PIs on IACUC protocols, even if those individuals will not have direct animal contact
2. **Comparative Medicine personnel** includes all personnel in Comparative Medicine working with animals but not employees with strictly clerical duties and no need to visit animal housing facilities or otherwise having contact to animals. Included are:
 - a. Veterinarian(s) and other veterinary staff
 - b. Manager/supervisor(s)
 - c. Training coordinator
 - d. Animal care technicians
 - e. Student workers
 - f. Volunteers

VI. Accountability

The Principal Investigator (PI) will be responsible for:

- Assuring that procedures are performed as described in the corresponding IACUC protocol and if necessary submitting an amendment to the protocol and await approval before new method(s) will be introduced.

- Assuring that personnel are added to the relevant IACUC protocol, complete IACUC required training including refresher training, and the protocol/amendment is approved before the individual(s) can start working with animals.
- Ensuring appropriate training including hands-on workshop attendance for research/lab personnel changing or adding new tasks during the conduct of an already approved IACUC protocol that require training as per this policy.
- Training personnel in protocol specific experimental techniques approved in the relevant IACUC protocol(s), adequately supervise personnel and verify proficiency before individual(s) can perform such experimental techniques independently.
- Training in appropriate methods of euthanasia as outlined in the IACUC protocol.

The IACUC will be responsible for:

- Providing oversight for all animal care and use procedures conducted.
- Reviewing and approving, requiring modifications in (to secure approval) or withholding approval of IACUC protocols and/or amendments including addition of personnel.
- Developing and directing an appropriate training program, setting forth mandatory vs. voluntary training requirements based on skill/knowledge level of the individual(s) and involvement of personnel in particular animal models and experimental procedures.
- Assuring that all personnel conducting work with animals are appropriately trained.

The Research Integrity office will be responsible for:

- Administrative support of the IACUC members to facilitate their regulatory function
- Maintaining policy and assure regular review and update as necessary by the IACUC
- Coordinating with the CM Training Coordinator to keep relevant training records on file and provide to the IACUC for review

The Office of Comparative Medicine (CM) will be responsible for:

- Comparative Medicine personnel will abide by this policy and assure that all animal care personnel are appropriately trained.
- Develop, submit for IACUC approval, coordinate and implement didactic and hands-on workshops for specific procedures including but not limited to surgeries, aseptic technique, post-operative care, recognition of pain/distress, administering adequate analgesia/anesthesia.
- Documenting all training, maintaining records of such training and forwarding documentation to RI for documentation.

VII. **Procedures**

- A. All new personnel must attend ethics and regulatory training covering topics including ethics and regulatory requirements governing animals in research and teaching, IACUC function, reporting concerns pertaining to animal care and use at FAU, the 3R's, responsibilities of the PI and research personnel, occupational health program, and euthanasia.

- B. Training of IACUC members, Research Integrity staff and the Institutional Official on animal care regulations are addressed in more detail in the committee policy.
- C. New animal care personnel must complete pertinent on-line courses commensurate with their duties, and attend classroom training class before starting work with animals. More detailed regulatory and job related training will be provided during the first couple of weeks and yearly refresher training offered as described in CM SOP001.
- D. Research and animal care personnel are required to conduct on-line training through the Collaborative Institutional Training Initiative (CITI) website. Please refer to the RI website for the list of CITI modules required.
- E. In addition to the online required training through CITI, all new research personnel must attend the applicable didactic / web lab training components, (refer to RI website for a list of the training modules):
 - a. Didactic training on the ethical use of animals, IACUC function and the 3R's – [applicable for ALL researchers].
 - b. Didactic and wet lab training on handling and restraint, substance administration methods and euthanasia [applicable for those using animals within central vivaria].
 - c. classroom training on animal facilities [applicable for those using animals within the central vivaria].
- F. If work will be performed in one of the PI managed satellite facilities the PI responsible for the facility will be in charge of providing orientation to any new personnel either of her/his own lab or any other research lab using the satellite facility. If applicable, this must be documented.
- G. Principal Investigators (PI) new to FAU's animal care and use program must meet with the AV and/or designee to discuss study design and IACUC protocol completion. During this meeting, experience with particular experimental procedures performed with/on animals will be discussed relative to the PI and all research personnel involved in the animal study. The PI is provided an opportunity during this meeting to discuss her/his experience in the protocol procedures. The AV or designee will review the material provided and details discussed and decide if additional training is needed. The IACUC delegates the authority to the Attending Veterinarian, or designee, to assess the experience of new research personnel in regards to animal related procedures and make a decision which of the two training tracks stated below research personnel have to follow.
 - a. New personnel must attend relevant in-person training as listed above. OR
 - b. New personnel (with documented experience) can demonstrate proficiency to the AV, or designee, in any animal experimental procedure. The PI of the relevant IACUC protocol is responsible for contacting the AV and scheduling the particular procedure(s) for observation by the AV or designee before commencing with regular experiments including these procedure(s).

- H. Training of personnel performing survival surgical procedures on animals is based on the requirements stated in the *Guide*: “Researchers conducting surgical procedures must have appropriate training to ensure that good surgical technique is practiced – that is, asepsis, gentle tissue handling, minimal dissection of tissue, appropriate use of instruments, effective hemostasis, and correct use of suture materials and patterns.” To fulfill the IACUC’s requirements for **new protocols**, one of the following has to be completed:
- a. Demonstrate proficiency in the above mentioned topics to the AV or designee while performing survival surgery, **OR**
Attend AV approved workshop(s) relevant to above stated topics before starting surgical procedures **AND** have CM personnel on site for two (2) of the first four (4) surgeries.
- To fulfill the IACUC’s requirements for **amendments** to an already existing protocol, the following has to be achieved:
- b. If new personnel is added to the protocol, describe their role in the study, and indicate whether the person will perform surgical procedures.
 - c. If new personnel will perform surgical procedures, they are to complete one of the steps described in part a. above.
 - d. If a new surgical procedure is added, arrange a meeting with a veterinarian before implementing the procedure to discuss details (surgical procedure, training methods) and obtain veterinary assistance, if necessary.
- I. Euthanasia methods must be consistent with the AVMA Guidelines for the Euthanasia of Animals (see also IACUC Euthanasia Policy). One requirement is that research personnel are trained and proficient in the euthanasia method being used. The following training requirements are set forth:
- a. General training related to ethical use of animals, the 3 Rs and the IACUC during the introductory ethics class.
 - b. Rodent euthanasia via CO₂ trained by CM staff in the vivarium.
 - c. Decapitation and cervical dislocation without anesthesia requires:
 - i. Attendance of a hands-on workshop or
 - ii. Demonstration of proficiency to the AV or designee.
 - d. Euthanasia methods utilized in field settings have to be trained by the PI, documented and reported to the AV and/or IACUC.
- J. Breeding colony management is a specific task that requires knowledge to assure that the principle of the 3R’s is followed, especially the reduction and/or optimization of animal numbers to be used. Each new PI and all research personnel wanting to establish a rodent breeding colony must attend the didactic training session “Managing a Rodent Breeding Colony”, unless the colony management will be provided by CM on a fee for service basis.
- K. The IACUC has the authority to require any established research personnel to attend workshops pertaining to their research studies when deemed necessary.
- L. Training attendance, topic of training, progress in training and specifically demonstrated proficiency have to be documented for each attendee participating in didactic or hands-on workshops by the AV or designee. Proficiency also has to be documented for each procedure performed by experienced personnel either new personnel with track record of experience or established research personnel.

- M. Refresher training will be required every three (3) years. All research and animal care personnel will receive an automated notice from CITI at their 3 year anniversary of the completion of CITI training to take the on-line refresher course. The retraining module will be designed to refresh already communicated knowledge as well as to address new, or changes in existing, regulatory or policy requirements.
- N. Training to teach new techniques will be offered as those become available and will be mandatory for research personnel based on the relevance to their approved IACUC protocol(s) and species used as assessed by the IACUC.
- O. Animal facility orientation refresher training will be provided as necessary and made mandatory as assessed by the IACUC. This course will train personnel in new practices and procedures within the animal facility as well as updates related to disaster preparedness.

VIII. Policy Renewal Date
12/13/2022

IX. References

POLICY APPROVAL

Initiating Authority: Vice President for Research and Institutional Official

Signature _____ Date: _____

Name: Daniel C. Flynn, Ph.D., Vice President for Research

Executed signature pages are available in the Initiating Authority Office(s)