### 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 be allowed 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 research personnel working with animals must be listed on the IACUC protocol or amendment and have the IACUC mandated training completed before approval to work with animals.

6. Species and procedure specific training will be provided to individuals using particular animal models and techniques, which will be identified by the IACUC during the protocol review process. 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 all the required 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 IACUC decides what components of the training program are mandatory and what is applicable depending on the individual’s involvement in the study. Proficiency of particular procedural techniques (e.g. surgical skills) has to be demonstrated to the Attending Veterinarian or designee independent of the seniority of the research or animal care personnel.

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 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 for all personnel at least every three years or more often if necessary. The IACUC decides the depth of refresher training necessary.

14. Changes in requirements for training will be communicated timely to the stakeholders of the animal care and use program in regular informational meetings for research personnel (at least 2-3 times a year), via email, DoR Newsletter, personal communications and other ways of communication.

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. Animal care personnel includes all personnel in Veterinary Services 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
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.

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
- Keeping relevant training records and provide to the IACUC for review

The Office of Veterinary Services (VS) will be responsible for:

- Veterinary Services personnel will abide to this policy and assure that all animal care personnel is appropriately trained.
- Develop, submit for IACUC approval, 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 and maintaining records of such training.

VII. Procedures
A. **All new personnel** have to attend the introductory training class offered by the Attending Veterinarian (AV), which covers topics like 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. Specific training requirements for IACUC members, IACUC support staff and the IO will be addressed in another IACUC policy (i.e. FAU IACUC).

C. New **animal care personnel** have to complete pertinent on-line courses commensurate with their duties, and attend the AV’s training class before starting to 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 VS SOP001.

D. **Research and animal care personnel** are required to conduct on-line training through the Collaborative Institutional Training Initiative (CITI) website. At a minimum the course “Investigators, Staff and Students” have to be completed. CITI courses listed in Appendix A must be accomplished based on the species used and procedures/tasks performed.

E. **New research personnel** has to attend facility orientation provided by the VS Facility Manager or her designee, which will be specific to each of the VS managed vivaria. 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. This has to be documented.

F. **Principal Investigators** (PI) new to FAU’s animal care and use program have to meet with the AV and/or her designee during the time of study design and IACUC protocol completion. During this meeting experience with particular experimental procedures performed with/on animals will be discussed not only for the PI but all research personnel involved in the animal study. The PI can provide any evidence to support her/his assertion of experience. The AV or her designee will review the discussed and provided material. The IACUC delegates the authority to the Attending Veterinarian or her 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 research personnel** have to attend any of the relevant didactic or hands-on workshops listed in appendix B to become familiar with the species and comfortable performing biomethodological procedures pertaining to their approved IACUC protocol(s) and species used.

   b. **New research personnel** with documented experience can demonstrate proficiency to the AV or her designee in any animal experimental procedure. The PI of the relevant IACUC protocol is responsible in contacting the AV and scheduling the particular procedure(s) for observation by the AV or her designee before commencing with regular experiments including these procedure(s).
G. 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 one of the following has to be completed:

a. Demonstrate proficiency in the above mentioned topics to the AV or designee while performing a survival surgery.

b. Attend workshop(s) relevant to above stated topics listed on appendix B.

H. Euthanasia methods must be consistent with the AVMA Guidelines for the Euthanasia of Animals (see also IACUC Euthanasia Policy). One requirement is that people are trained in the euthanasia method used and proficient in particular methods that otherwise could lead to pain/distress in the animal to be euthanized. The following training requirements are set forth:

a. General training during the AV’s introductory class.

b. Rodent euthanasia via CO2 trained by VS 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.

I. 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 research personnel wanting to establish a rodent breeding colony have to attend the didactic training session “Managing a Rodent Breeding Colony”.

J. The IACUC has the authority to require any established research personnel to attend workshops pertaining to their research studies when deemed necessary.

K. 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 her 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.

L. 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.

M. 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.

N. 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 for working within the animal facility as well as disaster preparedness.
VIII. Policy Renewal Date

TBD

IX. References

POLICY APPROVAL

Initiated by:

Signature: ____________________________ Date: ____________________
Name: Dr. Sylvia Gografe, Director, Veterinary Services

Signature: ____________________________ Date: ____________________
Name: Elisa Gaucher, Director, Research Integrity

Approved by:

Signature: ____________________________ Date: ____________________
Name: Dr. Janet Blanks, Chair, Institutional Animal Care and Use Committee

Endorsed by:

Signature: ____________________________ Date: ____________________
Name: Dr. Daniel C. Flynn, Vice President for Research and Institutional Official

Executed signature pages are available in the Initiating Authority Office(s)
Appendix A Training Policy

1. **Mandatory CITI Training**
   
   Choose courses from the menu below based on the species and type of research you will be performing; for example if you are working with Mice in a lab and your work include surgery, please complete “Mandatory general training for all animal users”, “Working with Mice in Research Settings”, “Aseptic Surgery” and “Post-procedure care of mice and rats in research: Reducing pain”. If you are working with fish in a lab, please complete “Mandatory general training for all animal users” and Working with Fish in Research Settings”. If you are working with turtles, please complete “Mandatory general training for all animal users” and “Wildlife Research”.

   a. Mandatory General Training for All Animal Users
   b. Post-Procedure Care of Mice and Rats in Research: Reducing Pain
   c. Aseptic Surgery
   d. Working with Mice in Research Settings
   e. Working with Rabbits in Research Settings
   f. Working with Rats in Research Settings
   g. Working with Fish in Research Settings
   h. Wildlife Research
   i. Working with Amphibians in Research Settings

2. **Optional CITI Training**
   
   a. Working with Hamsters in Research Settings
   b. Working with Guinea Pigs in Research Settings
   c. Working with Gerbils in Research Settings
   d. Working with Zebrafish in Research Settings
<table>
<thead>
<tr>
<th>TRAINING MODULE</th>
<th>TYPE</th>
<th>TARGET AUDIENCE</th>
<th>FREQUENCY</th>
<th>STATUS 🌴 №</th>
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<tr>
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<td>All Personnel</td>
<td>Monthly</td>
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<td>Facility Orientation and Training</td>
<td>Hands-on</td>
<td>All Personnel *</td>
<td>prn</td>
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<td>Wet Lab</td>
<td>All Personnel *ǂ</td>
<td>prn</td>
<td>Mandatory</td>
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<tr>
<td>Mouse Injections/Gavage</td>
<td>Wet Lab</td>
<td>As indicated</td>
<td>prn</td>
<td>Mandatory</td>
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<tr>
<td>Mouse Genotyping/ID Techniques</td>
<td>Wet Lab</td>
<td>As indicated</td>
<td>prn</td>
<td>Mandatory</td>
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<td>Mouse Bleeding Techniques</td>
<td>Wet Lab</td>
<td>As indicated</td>
<td>prn</td>
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<tr>
<td>Rat Handling and Restraint</td>
<td>Wet Lab</td>
<td>As indicated</td>
<td>prn</td>
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<td>As indicated</td>
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<td>Wet Lab</td>
<td>All Personnel*</td>
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<td>Class Room</td>
<td>As indicated</td>
<td>prn</td>
<td>Mandatory</td>
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</table>

Prn = as needed;  
As indicated = as indicated by IACUC protocol and assessed by AV  
*= all personnel using animals in animal facilities  
ǂ= rodent users  
ǂǂ= mandatory for personnel working with animal models that require this training as indicated in the IACUC protocol and assessed by AV