Introduction

Welcome to the Using Animals for Teaching, Testing, and Research at UAB (AU_UA) Module Three Course Material. The goal of this module is to make you aware of IACUC’s Standard Operating Procedures (SOP’s). All individuals listed on an IACUC Protocol should familiarize themselves with the approved procedures and never perform procedures not listed on the protocol!

Objectives

At the conclusion of this module, participants will be able to:

1. Recognize the importance of and locate the Integrated Research Administration Portal (IRAP).
2. Implement all IACUC Standard Operating Procedures (SOP’s).

Policies and Guidelines

Integrated Research Administration Portal (IRAP)

What is it?

IRAP at UAB is the system (when fully functional) that supports electronic submission of funding applications, compliance forms, and will connect the operations of the Office of Sponsored Programs (OSP), Institutional Review Board for Human Use (IRB), Institutional Animal Care and Use Committee (IACUC), Institutional Biosafety Committee (IBC), Chemical Safety Committee, Radiation Safety Committee, Conflict of Interest Review Board (CIRB), Material Transfer Office (MTO), and the UAB Institute for Innovation and Entrepreneurship (IIE).
Who has to submit information to IACUC through IRAP?

You must submit an application to the IACUC through IRAP if you are:

- Working with live, vertebrate animals at UAB
- Directing work with live, vertebrate animals at another institution
- Working with invertebrate animals that are housed in the Animal Resource Program (ARP) facilities or having contact with vertebrate animals
- Registering a project that provides money for training or salary support only but is related to animal work

Animal Use Request/Registration (AUR) eForm

Although the form is self-explanatory, additional guidance on completing the form is also available on the IACUC’s website. Remember, you are encouraged to ask the ARP Veterinarian Staff for help when planning your research protocol. Help is also available throughout the e-form. Look for the question icon located throughout the e-form. The IACUC office staff can assist with filling out the AUR eForm and can perform pre-reviews before submission.

AUR eForm Topics

The AUR e-form requests details of the proposed animal use not usually included in the funding application or study plan. These details include but not limited to an overview of the study and proposed experiments, procedure details, and justification for the proposed animals and animal use.

Project Objectives and Purpose

This non-technical description should explain why the study is being proposed, how the proposed work advances scientific knowledge, and benefit human or animal health. Since the IACUC includes representatives from the general public, it is crucial that you write this information so that a non-scientist can understand the importance of using animals.
Procedure Overview and Procedure Sections

The Overview of Procedures is a summary of the proposed animal manipulations for the project. This summary should be a sequential flow of planned procedures, interventions and study endpoints. It is not necessary to include detailed descriptions in this section. As you continue through the form, individual procedure sections will ask questions specific to the performance of procedures, administration of materials, and final disposition.

Justifying Species

The rationale for using animals must be clearly and accurately described. Note that cost savings may be a factor, but it cannot be the only justification! The justification for using a particular species should take into account:

- Previous work that validates the species as an animal model.
- Anatomic, physiologic, behavioral, or other characteristics that make the species well-suited for the proposed action.
- The lowest phylogenetic species that can be used to answer your scientific questions.

Justifying Animal Numbers

The IACUC must review the number of animals needed for a study. Statistical analysis should be used to justify animal numbers whenever possible. It is acceptable to request small numbers of animals for pilot projects to assess feasibility or perfect techniques.

If generating animals by breeding, don’t forget to include breeders, replacements, and all offspring in your animal number justification.
Preventing or Minimizing Pain or Distress

The researcher and the IACUC are responsible for ensuring that animals experience the least amount of pain or distress possible while considering the research or teaching aims. The form requires the following:

- Description of planned procedures and what will be done to prevent or minimize pain and distress.
- Scientific justification for withholding analgesics, anesthetics, or tranquilizers.
- Alternatives to potentially painful or distressful procedures that you considered.
- Assurance that the proposed animal work is not an unnecessary duplication of previous research.
- Description of planned study endpoints.
- Description of humane endpoints or the clinical criteria used to determine when animals are removed from a study. The parameters should be specific and assure that an animal will not be subject to prolonged pain and distress.

Standard Operating Procedure’s (SOP)

UAB IACUC SOP’s are intended to ensure compliance with animal care and use regulations and federal policies. These SOP’s take into consideration animal facility design, equipment availability, the level of expertise of personnel, kinds of research conducted, and other factors specific to the UAB animal care program. This module covers just the main points of certain IACUC SOPs. Please review the Policies and Guidelines section of the IACUC website for a complete list of SOPs and all requirements associated with those procedures.

Reporting Deficiencies

If you think any aspect of animal care or use is improper, notify the IACUC office, ARP Staff or ARP Veterinarians immediately! In addition to the contact information posted at every entrance/exit to ARP housing facilities, you can use the following emergency contact numbers.

- Call the ARP Office at (205) 934-7856 or the IACUC Office at (205) 934-7692.
- After hours/weekends/holidays, call the UAB paging system at (205) 934-3411 and ask for either an ARP Veterinarian or the ARP Supervisor-On-Call.
• Reports, including anonymous reports, also can be made by calling the UAB Research Compliance Hotline at 1-(886) 362-9476.

**Handling Allegations**

When the IACUC receives an allegation of mistreatment, misuse, or non-compliance, the following process takes place:

1. The IACUC office assesses the complaint to determine whether it warrants further investigation. An initial review of the concerns is conducted and, if requested, persons expressing concerns are informed of actions taken.
2. The subject of a complaint receives notification of expressed concerns.
3. The IACUC reviews the complaint at a convened meeting.
4. Actions are taken based on the findings and committee recommendations.

The IACUC has the authority to suspend any animal activity to protect either animals or people. Please consult with the IACUC Office at (205) 934-7692 for additional information related to non-compliance or animal welfare issues.

**Animal Euthanasia**

*The Guide for the Care and Use of Laboratory Animals* states: “Euthanasia is the act of killing animals by methods that induce rapid unconsciousness and death without pain or distress.” The IACUC policy considers many factors when considering euthanasia. This policy includes the:

- Ability to induce loss of consciousness and death with no or only momentary pain, distress, or anxiety
- Reliability
- Non-reversibility
- Time required to produce unconsciousness
- Species and age limitations
- Compatibility with research objectives
• Safety and emotional effect on personnel
• Appropriate training of staff to perform euthanasia

**Do’s and Don’ts**

1. Animals awaiting euthanasia should not mix with unfamiliar or incompatible animals.
2. Animals must be observed during euthanasia to ensure that death is humane.
3. Death must be confirmed.
4. Euthanasia of fetuses or neonates (newborn animals) may require particular attention because of the resistance of young animals to hypoxia. Check with ARP Veterinary Staff if you have questions.

Animal euthanasia by the ARP Veterinary Staff may be requested by completing and submitting the proper [form](#). Please review the [Euthanasia Policy](#) and complete the training courses for each relevant species for additional information.

**Carcass Disposal**

All carcasses, regardless of whether the animal’s death is intentional or unexpected, should be handled in a manner that ensures the safety of personnel and other animals.

- All animals found dead, even if the death is thought to be due to the research, should be reported to the ARP.
- Animal morgues are available in all animal facilities.

Investigators should maintain records of animal disposition. For further details read the [Carcass Disposal SOP](#).

**Animal Transportation**

Transporting animals between rooms or buildings presents a potential risk to both the animals and people. Be sure to read the [Transportation of Animals SOP](#). Specific permission from the IACUC, relevant UAB Safety committees, and a building hospital administrator may be required to transport animals between rooms or buildings if the animals may expose people to hazards such as carcinogens, radioactive materials, or human pathogens.
When to Ask for Help

You should contact the ARP Animal Transportation Service for assistance moving animals around campus. ARP must perform transportation of animals the size of a rabbit or larger, or any animal transportation outside of campus.

Conclusion

This section concludes Using Animals for Teaching, Testing, and Research at UAB (AU_UA) Module Three Course Material. The passing score for the assessment is 80% or higher.