Application for Vertebrate Animal Use (AVAU) APPLICATION INSTRUCTIONS

West Texas A&M University
IACUC Guideline

06.04.2020

The following are specific, page-by-page instructions on completing the AVAU form. Numbers refer to the numbered items of the AVAU form. The form can be downloaded into PDF. If you have issues with the document, then please contact AR-EHS for assistance. (806.651.2270 or AR-EHS@wtamu.edu)

Cover Page:

ID#: A research compliance administrator will assign a specific number, unique to each protocol. *Do not write in this space.*

This application applies to: (choose teaching or research)

If requesting a teaching authorization, then indicate the course number and section(s) and include a syllabus with the proposal.

Title of Project: This can be grant title, course title, a pilot project, etc.

Submitted to: Give the name of the funding agency to which the proposed study will be submitted. Also provide the deadline for submitting proposals to the specific agency. Leave blank if not applicable.

New, Renewal: For renewals, provide previous IACUC protocol number and expiration date. Leave blank if not applicable.

The AVAU form has two major sections: the Confidential Section and the Non-Confidential Section. Both sections must be completed. The Confidential Section contains information which will not be disclosed during a public information request.

Confidential Section:

1) Provide all required information about PI; verify that all personnel have completed the online CITI training (Contact AR-EHS for specifics); verify that all personnel have completed the initial risk assessment survey (linked in the application); verify animals are free of disease associated to health risk to workers; choose the type(s) of animal(s) used; and provide one-paragraph summary of project.

    1a. There are occasions in which the PI will not require animals to remain in a research setting such as those animals used in field studies and client-owned animals that will remain with their owners throughout the study. Locations of field studies must be specific.

1b. For animals that will remain at the research facility, provide the name of the facility and the physical address.

1c. List locations where procedures will be performed. Location of surgery areas should also be included here. This should include a physical address, as well as a building name and room number, if applicable. (Examples: 1. Rat ovariectomy, NSB room 216. 2. Oral dosing of cats, KRC, room 186G.)

1d. Provide the location of the investigator's lab or the off-campus site and the duration of the animal's stay. Facilities must be inspected prior to animal use by at least two IACUC members.

1e. Transportation of animals must conform to all federal regulations and guidelines. Transporting animals from their domiciliary area requires proper containment of the animal in a secure cage, pen, etc. with appropriate supplies, as necessary, for trip. Method of transport (hand-carry, car, airplane, etc.) must be listed.

2) All PIs and other individuals listed on the AVAU form who work with animals unsupervised must undergo WTAMU IACUC training. For individuals involved in animal care and use, years of experience with the animal listed and years of experience performing the procedures described must be included, as well as a contact email.

3) Complete #3 if individuals have been consulted in regards to the proposed animal activity. This will avoid releasing information in non-confidential sections of the form, such as Section G.

Assurance: Several assurances are required of the PI as set forth by federal regulations and guidelines. Review carefully to be sure that these assurances are being met. Contact the IACUC Office (phone: 806-651-2270, e-mail: AR-EHS@wtamu.edu) or the IACUC Chair if you have questions. Contact Academic Research and Environmental Health and Safety (phone 806-651-2270) for more information regarding Occupational Health & Safety issues.

Your **signature** indicates that you have read and agree to comply with the assurances. The AVAU will not be processed if it is not signed.

There must be a **page break** after the Confidential Section. The Non-Confidential Section must be started at the top of a new page.

Non-Confidential Section:

Section A. Animal Care and Use

1. The purpose and importance of the animal use activity should be written in language that can be understood by laypersons and non-scientists. The purpose and importance should demonstrate a correlation to the procedures and/ or manipulations. For those teaching a class, summarize the class and expected goals for the students. Abbreviations and acronyms must be defined.

2. Procedures and manipulations that are being performed on the animals must be described in detail from the time the animals enter the study until they are euthanized or otherwise terminated from the study. Again, language must be used that can be understood by laypersons or non-scientists. Surgery should be described in Section E.

3. Consideration of Alternatives - If there are procedures that could cause more than momentary pain or stress, explain why live vertebrate animals must be used in the proposed activity. Address why computer models, visual aids, or other non-animal techniques cannot be used.

3a. Literature search should include key words that are likely to address the issue of alternatives. In many databases, a literature search with keywords such as "in vitro models," "alternative," "animal models," etc. will provide information on the use of non-animal alternatives in research. List any other service used for information concerning alternatives to the proposed animal use procedures. Although the literature search is recommended, other methods may serve as a basis for obtaining information on alternatives.)

3b.This area can include awareness of the literature due to attendance at various seminars, etc. It also can include one's own expertise in the field of the proposed animal use activity.

3c. Indicate any other methods or sources used to identify possible alternatives.

3d. Explain how the methods have assisted you in identifying alternatives or conclude alternatives are not efficient.

4. Fill out table using the guide above the table for reference. No animal should be listed more than once.

Species and strain: Latin name is not necessary, but the common name must be provided. In field studies be sure to indicate non-target species as such.
Age and/or weight: Give either, or both if known. Alternately, ranges may be used.
Source: Self-explanatory. Do not give specific vendor names!
Categories of use: Based on the proposed activities that may cause pain or distress
Total number of animals: Include the maximum number of animals that are needed for the three-year life of this specific protocol. Do not use ranges of numbers such as 10 to 15. (Field studies using observations and trapping for population counts may use expected ranges of captures and should be discussed in the application.

4a through 4c:
Check the appropriate answer applicable to your study.

4d: Explain how it was determined to use the number of animals shown in Table 4, above. The numbers should be based on experimental design. Tables or flow charts can be used to show treatment groups and number of animals. Example: 10 animals in each group, 3 treatments (treatment A, treatment B, and control), and two replicates of each treatment. 10x3x2=60 (should be same number as "total" in 4). Explanation should include, when appropriate, a statistical justification for group size.

Section B: Invasive sample collection from live animals

Only include those sample collections that are invasive. Fill out provided table, as applicable. Example: Fecal collection from floor dropping does not need to be listed here. Fecal collection by fecal loop needs to be described here.

Section C: Substance Administration

This section should be used to address substance administration. Complete Sections D and F for anesthetics, analgesics, tranquilizers and euthanasia agents.

1. List all substances given to animals with dosage information. Contact AR-EHS (806-651-2270) for additional information. Contact the IACUC Chair for information on mouse antibody production testing, rat antibody production testing, and hamster antibody production testing.
2. Describe in detail the precautions taken to protect people and animals for each substance checked in C1.
3. Describe effects of agents on animal.
4. Verify you have a safety plan approved by AR-EHS.
5. Indicate if you think radiological approval will be needed.
6. Indicate whether or not the safety plan reflects the location and experimental protocol.

    6a.If not, explain why not.

Section D: Potential Pain and Distress

Proper use of animals including the avoidance of discomfort, distress, and pain when consistent with sound scientific practices is imperative. Unless the contrary is established, PIs should consider that procedures that cause pain or distress in human beings may cause pain or distress in other animals.

1. List each procedure or condition with potential for pain, distress, or discomfort, and give the species and number of animals affected. Describe the clinical signs or abnormalities that are expected or possible.
2. The plan for checking the animal's condition must be thoroughly outlined.
3. Describe how pain will be minimized. If animals cannot be euthanized, explain how the information derived from allowing the animals to die without intervention contributes to the proposed animal use purpose and importance.
4. Scientific justification must be provided on why pain relieving drugs or therapies are not acceptable in the proposed

activity for animal use.

5. Scientific justification must be provided when death is to serve as the experimental endpoint.

6. All drugs including anesthetics, analgesics, antibiotics, paralytics, etc. that will be given to animals should be listed here. Painful procedures in which paralytics are used also must include anesthetics. Refer to the IACUC Guidelines on Intra- and Post- Operative Monitoring and Record Keeping.

   a. On the table provided, list species, procedure/condition, agent used, dosage/route, frequency, and duration.

   b. Describe monitoring procedures to ensure safety of agents.

   c. Describe monitoring procedures for recovery from agents.

   d. Describe how it will be determined that analgesics are working.

7. Restraint for more than one hour: It is important that any restraint device be suitable in size and design for the animal being held. Prolonged restraint should be avoided unless essential to the study's objectives. The restraint device must be correctly operated to minimize stress and avoid injury to the animals. Any drugs used to facilitate restraint should be listed in Section D. Whenever possible, the animals should be conditioned to the restraint device.

8. Describe trapping or capture methods used. Explain how pain and distress are minimized.

9. Exceptions to standards: Contact AR-EHS (phone: 806-651-2270, e-mail: AR-EHS@wtamu.edu) or the IACUC Chair for questions. Federal regulations, guidelines, and standards for laboratory animals can be found in the *Guide for the Care and Use of Laboratory Animals*, the *Animal Welfare Act Regulations*, the *Public Health Service Policy on the Humane Care and Use of Laboratory Animals* and the *Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching*.

Section E: Surgery

1. Check the appropriate box. In non-survival surgery the animal is not allowed to recover from anesthesia, but is instead euthanized.

2. Describe surgical procedure.

3. Explain how long the animals are maintained for the proposed animal use after surgery.

4. Appropriate procedures for post-operative care of the animals, in accordance with established veterinary medicine and nursing practices, must be provided. Refer to the *IACUC Guidelines on Intra- and Post-Operative Monitoring and Record Keeping*.

5. This section should be used to address multiple survival surgery. A second surgery that is terminal does not require justification. Major surgery means surgical intervention that penetrates and exposes a body cavity or any procedure that produces permanent impairment of physical or physiological functions.

Section F: Euthanasia/Disposition

1. Provide species, method/agent and dosage/route for all euthanasia of animals in the table provided.

2. Scientific justification must be given if using methods that vary from those recommended by the most recent report of the American Veterinary Medical Association Panel on Euthanasia. The American Veterinary Medical Association (AVMA) has set forth guidelines on euthanasia; the panel has determined that cervical dislocation and decapitation should be used only “when scientifically justified by the user.” The WTAMU IACUC has determined that exceptions to the AVMA guidelines will be considered by the IACUC on a case-by-case basis.

3. If animals will not be euthanized, information on final disposition must be provided (i.e., transferred to another protocol, adopted, sold for slaughter, etc.). For animals entering the food chain, be sure to adhere to established drug withdrawal periods.