Eastern Oregon University Institutional Animal Care and Use Committee (IACUC)

Animal Use Protocol Experiments (AUP-E) Application

Revised: 2/5/24

The term of an approved AUP is three years, however, annual IACUC renewal is required.

Please email completed forms to Brian Myers (bmmyers@eou.edu) for IACUC review.

For IACUC use only
Experiment Protocol #:
Submitted:
Revised:
Amended:
Approved:
Expires:

1.0 Investigator Additional contact

Last Name:
First:
Middle:
Email:
Department:
Campus phone:
Cell:
Last Name:
First:
Middle:
Email:
Department:
Campus phone:
Cell:

1.1 Project Title:

Previously approved AUP Yes: _____ No: _____
If yes, previous protocol #: _____

Is the project funded? Yes: _____ No: _____
1.2 Funding source: _____

1.3 Project type (Enter an "X" for all that are appropriate)
Research project: _____
Classroom teaching: _____
Field study: _____
Other (describe): _____
Animal housing location (if applicable): _____
If housing animals, who will maintain the animals? _____
If housing animals, will your existing space be sufficient? _____
Animal Husbandry Requirements. Describe the general requirements, include any special husbandry conditions; food, water, temperature, humidity, light cycles, caging type, and bedding requirements. Federal regulations require environmental enrichment for all laboratory animals, e.g., co-housing, tubes, hide boxes, foraging supplements, etc. However, the IACUC is aware that environmental enrichment may not be suitable for some research protocols. If environmental enrichment is not suitable for your research protocol, please justify below. Leave blank if this section does not apply.

If you are housing animals, please provide instructions for animal care staff: check applicable entries. Otherwise, leave blank.

Sick animals:

Call investigator	
Clinician to treat	
Terminate	
Necropsy	

Dead animals:

Call investigator	
Clinician to treat	
Terminate	
Necropsy	

Pest control:

Call investigator	
Clinician to treat	
Terminate	
Necropsy	

1.4 Procedures: provide a brief, one to two sentence layman's description of the procedures employed on the animals in this project.

1.5 Species (common name)	**Total # for AUP**	**Source**

1.6 What veterinarian or veterinary clinic will provide care for your animals?

Name: _____

Day phone: _____

Emergency phone: _____

Address: _____

Fax: _____

Email: _____

2.0 Hazardous Materials and Reagents. Please provide the following information about the use of hazardous materials and reagents in your AUP. Some types of hazards include infectious agents, wild caught animals that are potential carriers of Zoonotic disease, ionizing radiation, anesthetic gas, chemical carcinogens, toxic chemicals, and flammable materials. Complete section 9.0 in addition to this section, if hazardous materials and reagents are used in the AUP.

Enter "Yes" if a hazard is being used, or "No" if the hazard is not being used: _____

Describe the hazard(s) in the space below.

2.1 Minimum Personal Protective Equipment.

Enter "Yes" if Personal Protective Equipment (PPE) is required, or "No" if it is not: _____

Describe the required PPE and when it is required in the space below.

3.0 Objective and Significance: Please provide a brief description of the objectives and significance of the study, bearing in mind your target audience may be a faculty member or private citizen from an unrelated discipline. Include a statement of relevance to human or animal health, the advancement of knowledge, or the good of society.

4.0 Procedures

4.1 Experimental procedures: describe the use of animals in your project in detail. Use terminology that will be understood by individuals outside your field of expertise. Please write a detailed description of all animal procedures in a logical progression, beginning with receipt of the animals and ending with euthanasia or the study endpoint. List each study group and describe all the specific procedures that will be performed on each animal in each study group. If animals in the wild will be used, describe how they will be observed, any interactions with the animals, whether the animals will be disturbed or affected, and any special procedures anticipated. Indicate if Federal or State permits are required and whether they have been obtained.

4.2 Study groups and numbers: define the numbers of animals to be used in each experimental group described above. The table may be presented on a separate page as an attachment to this protocol if you prefer. The number of rows should follow from the number of study groups: you may add rows as you require. The chart must fully account for the number of animals you intend to use under this protocol. Assign each group to a pain and distress category according to the chart below. See descriptions of each pain and distress category here: https://www.aphis.usda.gov/publications/animal_welfare/ac-tech-note-categorizing-animal-pain-or-distress.pdf

Study group	Procedures and drugs	Number of animals	Category of pain and distress

4.3 Drugs to be used (except for euthanasia); anesthetics, analgesics, tranquilizers, neuromuscular blocking agents, or antibiotics: post-procedural analgesics should be given whenever there is possibility of pain or discomfort that is more than slight or momentary.

Provide the following information about any of these drugs that you intend to use in this project.

Species	Drug and vehicle	Dose (mg/kg)	Route	Volume	When and how often will it be given?

4.4 Will surgery be conducted? _____

If so, where will the surgery be conducted (Building and room)? _____

Who will be the surgeon? _____

Describe the surgical procedure(s) in the space below.

4.5 Will this project involve Multiple Major Surgical Procedures? _____

If yes, provide a scientific justification:

4.6 Post-surgical monitoring: please complete the following:

Please identify the physiologic parameters monitored, and interval(s) and for what duration of monitoring.

When will analgesics be administered and at what interval(s)?

If post-operative analgesics cannot be given, please provide scientific justification.

4.7 Will anesthesia be given (for surgery or otherwise)? _____
Please identify the physiologic parameters monitored during the procedure to assess adequacy of anesthesia and when additional anesthesia will be administered.

4.8 Will food or fluid be restricted?_____
Length of food/fluid restriction(s): _____
Amount (partial or complete deprivation)? _____

4.9 Will neuromuscular blocking agents be used? _____
These agents can conceal inadequate anesthesia and therefore require special justification. If using a neuromuscular blocking agent, please complete the following:
Why do you need to use a neuromuscular blocking agent?

What physiologic parameters are monitored during the procedure to assess adequacy of anesthesia?

Under what circumstances will incremental doses of anesthetics-analgesics be administered?

5.0 Adverse effects: describe all significant adverse effects that may be encountered during the study (such as pain, discomfort, reduce growth, fever, anemia, neurological deficits, behavioral abnormalities, or other clinical symptoms of acute or chronic distress or nutritional deficiency). If genetically-altered animals are used, please describe any potential adverse effects that could be associated with the desired genotype, if known.

Describe criteria for monitoring the well-being of animals on study and criteria for terminating/modifying the procedure(s) if adverse effects are observed.

How will the signs listed above be ameliorated or alleviated? Please provide scientific justification if these signs cannot be alleviated or ameliorated.

Note: if any significant adverse effects not described above occur during the course of the study, a complete description of these unanticipated findings and the steps taken to alleviate them must be submitted to the IACUC as an amendment to this protocol.

6.0 Disposition of animals: at what point in the study, if any, will the animals be euthanized?

6.1 Is death an endpoint in your experimental procedure? Enter "Yes" or "No": _____
"Death as an endpoint" refers to acute toxicity testing, assessment of virulence of pathogens, neutralization tests for toxins, and other studies in which animals are not euthanized, but die as a result of the experimental manipulation. If death is an endpoint, explain why it is not possible to euthanize the animals at an earlier point in the study. If you can euthanize the animals at an earlier point, describe the clinical signs that will dictate euthanasia.

6.2 Surplus animals: what will you do with any animals not euthanized at the conclusion of the project?

6.3 Methods of euthanasia: even if your study does not involve killing the animals, you should show a method that you would use in the event of unanticipated injury or illness. If anesthetic overdose is the method, show the agent, dose, and route.

Species	Method	Drug	Dose (mg/kg)	Route

7.0 Literature search for alternatives and unnecessary duplication: If your proposed AUP is categorized within pain category "D" or "E", you are required to conduct a literature search to determine that either (1) there are no alternative methodologies by which to conduct this class/lab, or (2) there are alternative methodologies, but these are not appropriate for your particular class/lab. “Alternative methodologies” refers to reduction, replacement, and refinement (the three R’s) of animal use, not just animal replacement. List a minimum of three databases searched and/or other sources consulted (e.g. veterinarian). Include the years covered by the search. The literature search must have been performed within the last six months.

Database Name	Years Covered	Keywords/Search Strategy

Please comment on the application(s) of any identified alternatives, including how these alternatives may be or may not be incorporated to modify a procedure to either lessen or eliminate potential pain and distress.

7.1 Animal numbers justification: Please describe the consideration given to reducing the number of animals required for this study; this could include any in vitro studies performed prior to the proposed animal studies. Please also provide information on how you arrived at the number of animals required. If preliminary data is available and if relevant, please provide a power analysis or other statistical method used to determine the number of animals necessary. For studies where a statistical method

such as a power analysis is not appropriate (such as pilot studies, tissue collection), please provide a brief narrative describing how the requested animal numbers were determined to be necessary.

7.2 Species rationale: Please provide the rationale for the species chosen, and any consideration given to the use of non-mammalian or invertebrate species, or the use of non-animal systems (e.g. cell or tissue culture, computerized models).

7.3 Has this study been previously conducted? Enter "Yes" or "No": _____
If the study has been conducted previously, explain why it is scientifically necessary to replicate the experiment.

8.0 Project Roster: Please provide the names of all the individuals who will work with animals on this project. Please provide a valid email address. Include all investigators, student employees, post-doctoral fellows, staff research associates, post-graduate researchers, and laboratory assistants who will actually work with the animals. This roster is specifically for individuals working with live vertebrate animals. Supervisors are responsible for ensuring that their employees are adequately trained both in the specifics of their job and in the requirements of the Federal Animal Welfare Act. Free training courses can be found here: https://www.aalaslearninglibrary.org/

Have all participants completed the "Working with the IACUC" AALAS training course?
Enter "Yes" or "No": _____

The principal investigator is responsible for keeping this roster current. You must amend the protocol when staff are added or subtracted from this project.

Last, First, MI	Title/Degree	EOU Email Address	Training and Experience

9.0 Materials Transfer Agreement
Does this AUP require the transfer of research material into or out of the Oregon University system? If yes, has a Memorandum of Agreement been made? Which party or individual(s) owns the animals under study? If the transfer of research material requires a Materials Transfer Agreement, please supply a copy of all pending or approved agreements.

10.0 Assurances for the Humane Care and Use of Vertebrate Animals
Principal Investigator's Statement: This project will be conducted in accordance with all applicable laws, policies, and regulations governing the use of animals including: the provisions of the PHS/NIH Guide for the Care and Use of Laboratory Animals in research and instruction and the National Academy of Sciences Guide for the Care and Use of Laboratory Animals Eighth Edition. These proposed research activities do not unnecessarily duplicate previous experiments. I will advise the IACUC in writing of any significant changes in the procedures or personnel involved in this project.

_____|_____|_____
Principal Investigator Rank/Title Submission Date

11.0 Hazardous Materials Information: complete this form if you will be using hazardous materials and reagents in your AUP. Contact Environmental Health and Safety for assistance in completing sections **2.0** and **11.0**. If this form indicates the use of radiation or chemical hazards, this form will be reviewed by EH&S for appropriate safety precautions

Protocol #: _____

Expires: _____

_____ Reviewed by EH&S

Identity of hazard: _____
Last Name:_____
First Name:_____
Email:_____
Laboratory Building and Room:_____
Vivarium and location:_____

Provide a short description of the reagent(s):

The material/reagent is hazardous for:
Humans only: _____
Animals only: _____
Humans and animals: _____
For which animal species? _____

The reagent can be spread by:
Blood: _____
Feces/urine: _____

Saliva/nasal droplets: _____
Does not leave animal: _____
Other: _____

Describe any human health risk associated with this agent:

The following items must be assumed to be contaminated with hazardous material and must be handled only by the researcher and/or technicians. Cages must be autoclaved before cleaning.
Cage: _____
Stall: _____
Water bottle: _____
Animal carcasses: _____
Bedding: _____
Other: _____

Animal carcasses must be labeled and disposed of as follows:
Incineration: _____
Bag and autoclave: _____
Biohazardous waste container: _____
EH&S pick-up: _____

All contaminated wasted (soiled bedding or other animal waste) must be properly labeled and disposed of as follows:
Incineration: _____
Bag and autoclave: _____
Biohazardous waste container: _____
EH&S pick-up: _____

Personal Protective Equipment required:

The following personal protective equipment must be worn/used in the room or when handling animals.
Lab coat/coveralls: _____
Shoe covers/booties: _____
Disposable or utility gloves: _____
Head cover: _____
NIOSH certified dust mask: _____
Disinfectant footbath: _____
Eye/face protection: _____
NIOSH certified fitted respirator: _____
Other: _____
Hands, arms, and face must be thoroughly washed upon leaving the room:

Full shower, including washing of hair, must be taken upon leaving the room: _____
Personal protective equipment must be discarded/decontaminated at end of project: _____
Personal protective equipment must be removed before leaving the room: _____

Provide any other information needed to safely work in designated area of research.

IACUC Use Only

IACUC Requirements for Post-Approval Monitoring (to be completed by the IACUC; Yes/No):_____
If "No" is entered, Post-Approval Monitoring is NOT required for this protocol. Laboratories and any animal use area may still be inspected by the IACUC at any time.

If "Yes" is entered, some procedures in this protocol WILL require Post-Approval Monitoring. The IACUC will use this box to describe the Post-Approval Monitoring requirements (procedures involved, timing and regularity of the monitoring).

Monitoring will be done by:

Final Disposition of this protocol:

_____ Approved by IACUC Review

_____ Not approved by IACUC Review

_____ Withdrawn by Investigator

Date of Action: _____

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