ORC USE ONLY

AUP #:

Date Received:

Vertebrate Animal Use Protocol for Research or Testing

TEXAS A&M UNIVERSITY CORPUS CHRISTI
RESEARCH COMMERCIALIZATION OUTREACH

Instructions and Researcher Certifications (Failure to follow may result in a delay in processing)

Complete this form for animal use in **research or testing**.

If the animal use involves **teaching**, complete the form entitled "Vertebrate Animal Use Protocol for Teaching," instead.

By signing this Vertebrate Animal Use Protocol for Research or Testing (AUP), all Principal Investigators (PI), co-PIs, and personnel (collectively, "Researchers") certify the following:

1. CITI Training "Animal Care and Use Course" has been completed and is current (expires after three years);

2. If the research or testing involves a **fish species as the animal subject(s)**, additional CITI Training "Working with Fish" has been completed and is current (expires after three years);

3. Have enrolled in or opted-out of the Occupational Health and Safety Program (OHSP) (annual requirement);

4. Have completed the Risk Assessment form for this AUP and included it as an attachment; have read and understood the risks associated with animal use in this research or testing as set forth in the OSHA Zoonotic Fact Sheet;

5. Have read and understood the "Responsibilities of the Principal Investigator" as set forth in TAMUCC Rule 15.99.07.C1;

6. Have read and reviewed this AUP; any applicable supporting documentation or third-party approval has been obtained from the appropriate authority and has been included as an attachment to the AUP (e.g., EHS field safety plan, permit, grant, institutional approval, third party permission, etc); have signed the AUP electronically;

7. Have submitted the AUP a **minimum of thirty (30) days in advance** of the anticipated start date; and

8. Will submit a Completion Report at the conclusion of research or testing under this AUP.

After completing the foregoing, submit the AUP with supporting documentation via email to:

IACUC@tamucc.edu

Attachments and Institutional Approvals

Indicate whether the research or testing involves any of the following, then complete the corresponding **Attachment** or obtain the appropriate **institutional approval** (as applicable):

- ☐ Decapitation without anesthesia
- ☐ Death (with non-traditional euthanasia) as an experimental endpoint
- ☐ Surgery (*Complete Attachment 1*)
- ☐ Multiple major survival surgery (*Complete Attachment 1*)
- ☐ Use of adjuvants or antibody production (*Complete Attachment 2*)
- ☐ Use of biohazardous materials *in vivo*
  - ☐ a) Hazardous chemicals, including chemical carcinogens *(Complete Attachment 3)*

☐ b) Radioactive materials *(Complete Attachment3)*

☐ c) Recombinant or synthetic nucleic acid molecules *(Obtain Institutional Biosafety Committee approval)*

☐ d) Biological agents or toxins (*Obtain Institutional Biosafety Committee approval)*

☐ Use of genetically-altered animal subjects *(Complete Attachment 4 and obtain Institutional Biosafety Committee approval)*

Animal Use Protocol (AUP)

Researcher Information

Principal Investigator

Name:

Address:

Phone Number:

Email Address:

College:

Department:

○ Faculty ○ Staff ○ Graduate Student ○ Undergraduate Student ○ Other

Specify Other:

Co-Principal Investigator

Name:

Address:

Phone Number:

Email Address:

College:

Department:

○ Faculty ○ Staff ○ Graduate Student ○ Undergraduate Student ○ Other

Specify Other:

Co-Principal Investigator

Name:

Address:

Phone Number:

Email Address:

College:

Department:

○ Faculty ○ Staff ○ Graduate Student ○ Undergraduate Student ○ Other

Specify Other:

Co-Principal Investigator

Name:

Address:

Phone Number:

Email Address:

College:

Department:

○ Faculty ○ Staff ○ Graduate Student ○ Undergraduate Student ○ Other

Specify Other:

Section I: Overview and Design

Title:

Start Date:

Estimated Completion Date:

External Funding

Indicate whether the research or testing is externally funded. ○ No ○ Yes *If **"no,"** go to "Emergency Contact for Animal Care."*

Proposal or Award Submission Deadline (if applicable):

Proposal or Project # (Maestro):

Emergency Contact for Animal Care

Name:

Work Phone:

Emergency Phone:

Email:

Abstract

Provide an abstract, in **layman's terms**, of the purpose(s) and objective(s) of the research or testing.

Procedure(s)

Describe in narrative form and in **layman's terms** the surgical and/or non-surgical procedure(s) and manipulation(s) to be used.

Species Justification

Explain why this species was chosen for use in the research or testing.
(i.e., characteristics of the animal model. Cost, alone, does not suffice).

Experimental Design

Species	Number Per Experiment	Number of Replications	Number of Controls	Other

Additional Explanation:

Explain the number of animal subjects used per treatment condition.
(i.e., known variation of the dependent variable, subject losses, other justification of statistical significance).

Section II. Procurement; Housing; Maintenance or Endpoint

Procurement

Total for Duration of Research or Testing: Provide the total number of animal subjects to be used, by species, for the duration of the research or testing. If applicable, include offspring from the subsequent table.

Species	Total Number for Duration of Research or Testing

Species	Total Number for Duration of Research or Testing

Breeding: If the research or testing involves breeding, complete the table below. Include offspring produced in the table above.

Species	Total Number of Adult Breeders	Estimated Total Number of Offspring

Method of Procurement

Explain how the animal subject(s) will be obtained.
(For wild capture, provide method of capture and personnel risk assessment, in addition to any permit).

Housing: IACUC-Approved or Request for Approval

For **IACUC-approved** housing *used for a duration of 24 hours or longer*, provide building and room number.

For housing sites **not yet approved** by IACUC, provide the following information to **request approval**:

Contact information for individual providing veterinary medical care.

Describe hurricane and evacuation procedures and policies.

Special Housing (if applicable)

Describe any special housing, diet, environment, identification, or other requirements.
(Include identification of genetically-modified animals within 72 hours of birth or receipt via cage card or individual identification).

Maintenance or Endpoint

Explain the maintenance or endpoint chosen below.

☐ Internal Animal Transfer (within TAMUCC)
May require additional IACUC approval.

☐ External Animal Transfer (to a non-TAMUCC third party)
May require additional IACUC approval.

☐ Euthanasia

Method:	
Agent:	
Dose:	
Route:	
Justification of decapitation or cervical dislocation without anesthesia (if applicable).	
Name(s) of individual(s) administering euthanasia.	
Education, training, or experience, which qualifies the above-named individuals to administer euthanasia.	

Section III. Non-Surgical Procedures; Anesthesia or Analgesia; Pain and Distress

Provide location of **non-surgical** procedure(s). *(Building and Room).*	

Non-Surgical Procedures

Provide **non-surgical** procedure(s) to be used and applicable species below. *(Address surgical procedure(s) in Attachment 1).*

Method and duration of restraint:	
Method to obtain blood or other tissues: (*i.e., technique, volume of collection, frequency of collection, and interval between collections).*	
Agent(s) to be administered other than anesthetics or adjuvants: *(Include dose, volume, route, and frequency).*	
Other procedure(s): *(e.g., food or water deprivation, administration of noxious stimuli or substances, or procedures which might induce clinical illness).*	
Name(s) and qualification(s) of personnel to perform non-surgical procedures:	

Anesthesia or Analgesia

If anesthesia or analgesia will be used in non-surgical procedure(s), provide the agent, dosage, and route of administration for each species.

(Include any pre-anesthetic procedure(s) for each non-surgical procedure and/or species; e.g., duration of fasting).

Preanesthetic:	Dosage:	Route:
Anesthetic:	Dosage:	Route:

Preanesthetic:	Dosage:	Route:
Anesthetic:	Dosage:	Route:

Name(s) and qualification(s) of individual(s) who will administer and monitor anesthesia or analgesia.

Assessment of Pain and Distress

Indicate whether any painful non-surgical procedures or paralytic drugs will be used **without** the benefit of anesthetics or analgesics. ◯ Yes ◯ No

If "yes," explain why the use of anaesthetics or analgesics is inappropriate for this non-surgical procedure(s).

Indicate whether the non-surgical procedure(s) may reasonably be expected to cause **more than** slight or momentary pain or distress to animal subject(s).

☐ No.

☐ Yes, but any potential pain or distress will be relieved through use of anesthetics and analgesics, and alternatives are not available.

☐ Yes, but as described above, anesthetics and analgesics are inappropriate for these procedures, and alternatives are not available.

If "yes" to either, describe the methods and/or sources used to determine the inappropriateness of alternatives.
(e.g., Medline).

Databases searched:

Dates searched (inclusive):

Keywords:

Summary of results of search:

Indicate whether any illness, debilitation, or abnormality is expected in the animal subject(s) as a result of the non-surgical procedure(s).

◯ Yes ◯ No

If "yes," describe the effects. Explain at what point and by which objective criteria (e.g., clinical condition) the animal subject(s) may be euthanized or permanently removed from the research or testing.

If "yes," describe the frequency per day that personnel will observe the animal subject(s) after treatment.

"If yes," describe the monitoring and recording procedure(s) for determining physiological or behavioral abnormalities.	

Indicate whether death **without** euthanasia is an endpoint of the study. ◯ Yes ◯ No

If "yes," explain why an earlier endpoint is not acceptable.	

Researcher Signatures

By signing this AUP, the Researcher(s) certifies that he/she has read and understood the requirements and responsibilities set forth in the section entitled "Instructions and Researcher Certifications" in relation to the research or testing. In addition, the Researcher(s) certifies that he/she will abide by any and all applicable federal, state, and/or institutional regulations, including any requirements from the Institutional Animal Care and Use Committee (IACUC) and/or the Office of Research Compliance (ORC).

Principal Investigator

Name:

Date:

Signature:

Co-Principal Investigator

Name:

Signature:

Date:

Co-Principal Investigator

Name:

Signature:

Date:

Co-Principal Investigator

Name:

Signature:

Date:

Attachment 1

Surgical Procedure(s)

Instructions
Complete a copy of Attachment 1 for **each** surgical procedure.

Only the personnel listed below will be authorized to perform the listed procedure(s).

All survival surgical procedures require use of aseptic technique.

Surgical Procedure(s)

Provide the location(s) of the surgical procedure(s).
(Building and Room).

Indicate the type of surgical procedure(s).

- ☐ Non-survival
- ☐ Survival
- ☐ Multiple Major Survival

Provide justification of use.

Provide a brief description of the surgical procedure(s).
(Include initial incision to wound closure).

Name(s) and qualification(s) of personnel to perform surgical procedure(s).
(e.g., previous experience, education, or specific training. An academic degree, alone, does not suffice).

Post-Operative Care

Provide the location(s) of the recovery area.
(Building and Room).

List anticipated post-surgery complication(s). Provide a management plan.

Name(s) of personnel who will monitor post-operative recovery. Provide frequency of observation.

Post-Operative Medication
(e.g., agent, dosage, route, frequency of administration. If no analgesic will be given, please justify the withholding).

Analgesics:

Antibiotics:

Other:

Use of Adjuvants or Antibody Production

Instructions
Minimization of volume for injection and maintenance of sterile material to be injected are required.

Per the US Department of Agriculture, Freund's complete adjuvant has the potential to cause more than momentary or slight pain or distress due to contribution to tissue damage. If applicable, address the use and inappropriateness of alternatives in "Assessment of Pain and Distress" (page 7).

Contact the Attending Veterinarian or ORC with questions.

Describe the immunization protocol. *(Include adjuvant with justification; route, volume, and number of sites for injections; intervals between injections).*	
Describe the route and volume of blood collection and interval between collections. (*Volume and frequency of collection must be limited to that which causes no anemia or hypovolemia. Exsanguination must be performed under general anesthesia. Bleeding from the orbital sinus of rodents should be performed under anesthesia. Special authorization may be provided to individuals with experience and technical expertise for performance of orbital sinus bleeds without anesthesia).*	
Describe the ascites fluid collection procedure(s). *(After inoculation for ascites production, animals should be observed at least 3 times per week the first week and daily thereafter by the PI or personnel to monitor the degree of abdominal distention and illness. Fluid should be removed when distention is comparable to a term pregnancy. Only one survival tap followed by one terminal tap under anesthesia is recommended. Euthanasia should be performed on any animals showing signs of poor condition. NIH expects that if the ascites method is to be used, justification is provided for why in vitro alternatives are not suitable).*	
Name(s) and qualifications of individual(s) performing the procedure(s), including injections, abdominal taps, anesthesia, and blood collection. *(Include education, training, and experience).*	

Attachment 3

Use of Biohazardous Materials *In Vivo*

Instructions
Complete if any biohazardous materials, excluding biological agents, toxins, or recombinant or synthetic nucleic acid molecules, will be used in animal subjects *in vivo* in the research or testing.

Approval for use or posession of biological agents, toxins, or recombinant or synthetic nucleic acid molecules must be obtained separately from the Institutional Biosafety Committee (IBC) via a Biohazardous Use Protocol (BUP).

Principal Investigator:

Department:

AUP Number:

AUP Title:

Biohazardous material(s) to be used:

Species to be used:

Animal housing site(s):
(Building and Room).

Location of laboratory:

Description of proposed activity:

Indicate the method by which the biohazardous material will be introduced into the animal subject(s).

- ☐ Topical
- ☐ Oral
- ☐ Inhalation
- ☐ Injection

Provide route, volume, and concentration.

List biosafety containment equipment to be used.

Indicate the personal protective equipment (PPE) to be used.

☐ Face Shield ☐ Goggles ☐ Face Mask ☐ Full Face Respirator ☐ Shoe Covers ☐ Lab Coats

☐ Rubber Coats/Coveralls ☐ Other Other (describe):

Type and quantity of biohazardous waste to be generated. Method of disposal.

Describe how contaminated materials will be treated after usage. *(e.g., animal subject(s), bedding, glassware, benchtops, hoods).*	

Indicate which of the following are available where the procedure(s) will be performed:

☐ Fire Extinguisher ☐ Eyewash Station ☐ Spill Kit ☐ Emergency Shower

Describe procedures to be followed in the event of an emergency.	
Last date of certification for any hood:	

Attachment 4

Use of Genetically-Altered Animal Subject(s)

Instructions
Complete if the research or testing involves genetically-altered animal subject(s), or if experimental strains of genetically-altered animal subject(s) will be obtained or used.

Animal subject(s) with potential genetic alterations must be identified within 72 hours of birth via cage card or individual identification.

A **separate** Animal Use Protocol (AUP) must be submitted for the use of the genetically-altered animal subject(s) once phenotype and genotype have been established.

Species:	
Background Strains:	
List any recombinant DNA or transgene to be used.	
Describe any anticipated, clinically-significant side effects that may result from the genetic manipulation(s). Provide measures to minimize or alleviate associated side effects.	

Indicate how genetically-altered animal subject(s) will be identified.

☐ Cage Card ☐ Tattoo ☐ Microchip ☐ Other

Other (describe):

Indicate how genetically-altered animal subject(s) will be contained.

Provide procedure(s) to assure containment of genetically-altered animals. (*e.g., housing facility, euthanasia with proper disposal, procedures in transfer to other protocols).*	