**ANIMAL STUDY PROTOCOL – SAINT ANSELM COLLEGE**

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| --- |
| Leave Blank |
| Protocol #: |  |
| Approval Date: |  |
| Expiration Date: |  |

####  ADMINISTRATIVE DATA

#### Princpal Investigator:       Department:

#### Contact: Mailing Address (or mailbox number):

Telephone:       Email:

#### Project Title:

#### Proposal Type: Initial Submission [ ]  Renewal [ ]  or Modification [ ]

#### Authorized Personnel: *List the names of all individuals authorized to conduct procedures involving animals under this proposal and identify key personnel (e.g. principal investigator, co-investigator(s), providing their department, telephone, and email*:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Role****(PI, student, etc)** | **Department** | **Phone** | **email** |
|       |       |       |       |       |
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* 1. Funding Source (or NA if not applicable):

#### ANIMAL REQUIREMENTS

#### Species: Scientific Name (e.g. *Lepomis gibbosus*):

#### Common Name (e.g. Pumpkinseed):

#### Approximate Age, Weight or Size:

#### Sex(es):

#### Bacteriological Status (*e.g., germfree (axenic), defined flora (gnotobiotic), specific pathogen free, conventional)*:

#### Viral status (*e.g., simian immunodeficency virus, simian retrovirus):*

#### Source(s) (*e.g., name of vendor or breeder, bred in-house)*:

#### Primary Housing Location(s). Note: *Facility manager/veterinarian must certify below that facility has the resource capability to support the study. If animals will be housed in lab or anywhere else outside central facility for more than 12 hours, provide building and room number.*

#### Location(s) Where Manipulation Will Be Conducted:

#### Total Number of Animals to be Used (if your proposal is for more than one year, please specify in section 2.i.i. how many animals will be used per year):

#### Year 1:       Year 2:       Year 3:

#### TRANSPORTATION

#### *Transportation of animals must conform to all institutional guidelines/policies and federal regulations. If animals will be transported on public roads or out of state, describe efforts to comply with USDA regulations. If animals will be transported between facilities, describe the methods and containment to be utilized. If animals will be transported within a facility, include the route and elevator(s) to be utilized*. Enter description below:

#### STUDY OBJECTIVES

*Briefly explain in language understandable to a layperson the aim of the study and why the study is important to human or animal health, the advancement of knowledge, or the good of society.*

####  RATIONALE FOR ANIMAL USE

#### Explain your rationale for animal use. The rationale should include reasons why non-animal models cannot be used.

* 1. Justify the appropriateness of the species selected. *[The species selected should be the lowest possible on the phylogenetic scale.]*

* 1. Justify the number of animals to be used. [The number of animals should be the minimum number required to obtain statistically valid results.]

#### DESCRIPTION OF EXPERIMENTAL DESIGN AND ANIMAL PROCEDURES

Briefly explain the experimental design and specify all animal procedures. This description should allow the IACUC to understand the experimental course of an animal from its entry into the experiment to the endpoint of the study. Specifically address the following:

* **Experimental injections or inoculations** (substances, e.g., infectious agents, adjuvants, etc.; dose, sites, volume, route, and schedules).
* **Blood withdrawals** (volume, frequency, withdrawal sites, and methodology).
* **Surgical procedures** (provide details of survival and non-survival surgical procedures in Section G.).
* **Radiation** (dosage and schedule)**.**
* **Methods of restraint** (e.g., restraint chairs, collars, vests, harnesses, slings, etc.). Include how animals are restrained for routine procedures like blood withdrawals. Prolonged restraint must be justified with appropriate oversight to ensure it is minimally distressing. Describe any sedation, acclimation or training to be utilized.
* **Animal identification methods** (e.g., ear tags, tattoos, collar, cage card, implant, etc.).
* **Other procedures** (e.g., survival studies, tail biopsies, etc.).
* **Resultant effect**s, if any, that the animals are expected to experience (e.g., pain or distress, ascites production, etc.).
* **Other potential stressors** (e.g., food or water deprivation, noxious stimuli, environmental stress) **and procedures to monitor and minimize distress**. If a study is USDA Classification E, indicate any non-pharmaceutical methods to minimize pain and distress.
* **Experimental endpoint criteria** (e.g., tumor size, percentage body weight gain or loss, inability to eat or drink, behavioral abnormalities, clinical symptomatology, or signs of toxicity) must be specified when the administration of tumor cells, biologics, infectious agents, radiation or toxic chemicals are expected to cause significant symptomatology or are potentially lethal. List the criteria to be used to determine when euthanasia is to be performed. Death as an endpoint must always be scientifically justified.

* **Veterinary care** (indicate desired plan of action in case of animal illness, e.g., initiate treatment, call investigator prior to initiating treatment, euthanize).

#### SURGERY

Will you be conducting surgery? Yes [ ]  No [ ]  (*skip to section 8*)

* 1. Identify and describe the surgical procedure(s) to be performed. Include preoperative procedures (e.g., fasting, analgesic loading), and monitoring and supportive care during surgery. Include the aseptic methods to be utilized.

* 1. Who will perform surgery and what are their qualifications and/or experience?

* 1. Where will surgery be performed and postoperative care provided (building and rooms)?
	2. If survival surgery, describe postoperative care required, frequency of observation, and identify the responsible individual(s). Include detection and management of postoperative complications during work hours, after hours, weekends and holidays.

* 1. If non-survival surgery, describe how humane euthanasia is enacted and how death is determined.
	2. Are paralytic agents used during surgery?       If yes, please describe how ventilation will be maintained and how pain will be assessed.

* 1. Has major survival surgery been performed on any animal prior to being placed on this study? *[Major survival surgery penetrates and exposes a body cavity or produces substantial impairment of physical or physiologic functions (such as laparotomy, thoracotomy, crainotomy, joint replacement, or limb amputation).]*      If yes, please explain:

* 1. Will more than one major survival surgery be performed on an animal while on this study?       If yes, please justify:

#### PAIN OR DISTRESS CLASSIFICATION AND CONSIDERATION OF ALTERNATIVES

#### Pain or Distress Classification

|  |  |  |  |
| --- | --- | --- | --- |
| **Species**(common name) | **USDA Classification**\***B, C, D or E** | **Number of animals used each year** | **3 year total number of animals** |
|  |  | **Year 1** | **Year 2** | **Year 3** |  |
|       |  |       |       |       |       |
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|  |  |  |  |  |  |
| **Total number of animals - *should equal total from Section 2.i.*** |       |

**\* USDA Classifications and Examples**

**Classification B:** Animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery, but not yet used for such purposes.

**Examples:**

* Breeding colonies of any animal species (USDA does not require listing of rats, mice, birds) that are held in legal sized caging and handled in accordance with the *Guide* and other applicable regulations. Breeding colony includes parents and offspring.
* Newly acquired animals that are held in proper caging and handled in accordance with applicable regulations.
* Animals held under proper captive conditions or wild animals that are being observed.

**Classification C:** Animals upon which teaching, research, experiments, or tests will be conducted involving no pain, distress, or use of pain-relieving drugs.

**Examples:**

* Procedures performed correctly by trained personnel such as the administration of electrolytes/fluids, administration of oral medication, blood collection from a common peripheral vein per standard veterinary practice (dog cephalic, cat jugular) or catheterization of same, standard radiography, parenteral injections of non-irritating substances.
* Euthanasia performed in accordance with the recommendations of the most recent AVMA Panel on Euthanasia, utilizing procedures that produce rapid unconsciousness and subsequent humane death.
* Manual restraint that is no longer than would be required for a simple exam; short period of chair restraint for an adapted nonhuman primate.

**Classification D:** Animals upon which experiments, teaching, research, surgery, or tests will be conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs will be used.

**Examples:**

* Surgical procedures conducted by trained personnel in accordance with standard veterinary practice such as biopsies, gonadectomy, exposure of blood vessels, chronic catheter implantation, laparotomy or laparoscopy.
* Blood collection by more invasive routes such as intracardiac or periorbital collection from species without a true orbital sinus such as rats and guinea pigs.
* Administration of drugs, chemicals, toxins, or organisms that would be expected to produce pain or distress but which will be alleviated by analgesics.

**Classification E:** Animals upon which teaching, experiments, research, surgery, or tests will be conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs will adversely affect the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests.

**Examples:**

* Procedures producing pain or distress unrelieved by analgesics such as toxicity studies, microbial virulence testing, radiation sickness, and research on stress, shock, or pain.
* Surgical and postsurgical sequella from invasion of body cavities, orthopedic procedures, dentistry or other hard or soft tissue damage that produces unrelieved pain or distress.
* Negative conditioning via electric shocks that would cause pain in humans.
* Chairing of nonhuman primates not conditioned to the procedure for the time period used.

**NOTE REGARDING CLASSIFICATION E:** An explanation of the procedures producing pain or distress in these animals and the justification for not using appropriate anesthetic, analgesic or tranquilizing drugs must be provided on **Attachment 1**. This information is required to be reported to the USDA, will be available from USDA under the Freedom of Information Act, and may be publicly available through the Internet via USDA’s website.

* + - * 1. Consideration of Alternatives: *If any procedures fall into USDA's Classification D or E, causing more than momentary or slight pain or distress to the animals, describe your consideration of alternatives and your determination that alternatives are not available. Delineate the methods and sources used in the search. Database references must include databases searched, the date of the search, period covered, and the keywords used. Alternatives include methods that (1) refine existing tests by minimizing animal distress, (2) reduce the number of animals necessary for an experiment, or (3) replace whole‑animal use with in vitro or other tests. When ascites production is used to produce antibodies, justification needs to be given as to why in vitro systems cannot be used. Note that you must certify in Section Q.5. that no valid alternative was identified to any described procedures which may cause more than momentary pain or distress, whether relieved or not.*

#### ANESTHESIA, ANALGESIA, TRANQUILIZATION, OTHER AGENTS

Will you be using any anesthesia, analgesia, tranquilization or other agents? Yes [ ]  No [ ]  (if “No” *skip to section 10*)

For animals indicated in Section 6.a., Classification D, specify the anesthetics, analgesics, sedatives or tranquilizers that are to be used. Include the name of the agent(s), the dosage, route and schedule of administration. If information is provided in Section G. above, please cross-reference. Describe tracking and security of controlled drugs (Drug Enforcement Agency requirements).

#### METHOD OF EUTHANASIA OR DISPOSITION OF ANIMALS AT END OF STUDY

Will you be euthanizing or disposing of animals at the end of study? Yes [ ]  No [ ]  (*skip to section 11*)

Indicate the proposed method of euthanasia. If a chemical agent is used specify the dosage and route of administration. If the method(s) of euthanasia include those **not** recommended by the AVMA Panel Report on Euthanasia (e.g., decapitation or cervical dislocation without anesthesia), provide scientific justification why such methods must be used. Indicate the method of carcass disposal if not described in Section K. below.

#### HAZARDOUS AGENTS

Will you be using any hazardous agents? Yes [ ]  No [ ]  (*skip to section 12*)

Use of hazardous agents requires the approval of the institutional Biosafety Office/Committee. *Attach documentation of approval for the use of recombinant DNA or potential human pathogens.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Hazardous Agent** | **Yes** | **No** | **Agent** | **Date of Biosafety Approval** | **Tracking #** |
| Radionuclides | [ ]  | [ ]  |       |       |       |
| Biological Agents | [ ]  | [ ]  |       |       |       |
| Hazardous Chemicals or Drugs | [ ]  | [ ]  |       |       |       |
| Recombinant DNA | [ ]  | [ ]  |       |       |       |

Study Conducted at Animal Biosafety Level: 1 [ ]  2 [ ]  3 [ ]  4[ ]

Describe the practices and procedures required for the safe handling and disposal of contaminated animals and material associated with this study. Also describe methods for removal of radioactive waste and, if applicable, the monitoring of radioactivity.

* + - * 1. Additional safety considerations:

#### BIOLOGICAL MATERIAL/ANIMAL PRODUCTS FOR USE IN ANIMALS (e.g., cell lines, antiserum, etc.)

If proposed, complete the following (or indicate “NA”and skip to section 13):

Specify Material:

Source:       Material Sterile or Attenuated: Yes [ ]  No [ ]

If derived from rodents, has the material been MAP/RAP/HAP tested*? [MAP - Mouse Antibody Production; RAP - Rat Antibody Production; HAP - Hamster Antibody Production]*

 Yes [ ]  (Attach copy of results) No [ ]

I certify that the MAP/RAP/HAP tested materials to be used have not been passed through rodent species outside of the animal facility in question and/or the material is derived from the original MAP tested sample. To the best of my knowledge the material remains uncontaminated with rodent pathogens.

      **Initials of Principal Investigator.**

#### TRANSGENIC AND KNOCKOUT ANIMALS

Will you be working with transgenic or knockout animals? Yes [ ]  No [ ]  (*skip to section 14*)

#### If you answered yes to the above, describe any phenotypic consequences of the genetic manipulations to the animals. Describe any special care or monitoring that the animals will require.

#### EXEMPTIONS FROM ENVIRONMENTAL ENHANCEMENT FOR NONHUMAN PRIMATES

 **OR EXERCISE FOR DOGS**

Will you be working with non-human primates or dogs? Yes [ ]  No [ ]  (*skip to section 15*)

#### For nonhuman primates, are you seeking an exemption for scientific reasons from the institution’s plan for environment enhancement? Yes [ ]  No [ ]  If yes, provide the basis of the request.

#### For dogs, are you seeking an exemption for scientific reasons from the institution’s plan to provide dogs with the opportunity for exercise? Yes [ ]  No [ ]  If yes, provide the basis of the request.

#### FIELD STUDIES

Will you be conducting any field studies? Yes [ ]  No [ ]  (*skip to section 16*)

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 permits are required and whether they have been obtained.

#### SPECIAL CONCERNS OR REQUIREMENTS OF THE STUDY

Are there any special concerns or requirements? Yes [ ]  No [ ]  (*skip to section 17*)

If yes, list any special housing, equipment, animal care (e.g., special caging, water, feed, or waste disposal, environmental enhancement, etc.).

#### REPORTING OF ANIMAL WELFARE CONCERNS

Principal Investigators are asked to post contact information for reporting any animal welfare issues. The contact information will be posted outside room(s) housing animals and will include phone numbers and emails of i) the investigator, ii) Chair of the investigator’s department, iii) Chair of the IACUC, iv) Dean of the College, and v) the Institutional Officer. If a concern is expressed by a staff member, student, or faculty member regarding an animal activity at the College, the Veterinarian will review the concern with the principal investigator. The posting should indicate that under all circumstances the anonymity of the individual or individuals that file a complaint will be upheld strictly and confidentially by all involved. **Include below a copy of the information you will be posting, complete with location(s) of said posting and all contact information**.

#### PRINCIPAL INVESTIGATOR CERTIFICATIONS (initial each section)

####       I certify that I have determined that the research proposed herein is not unnecessarily duplicative of previously reported research.

####       I certify that all individuals working on this proposal who are at risk are participating in the Institution's Occupational Health and Safety Program.

####       I certify that the individuals listed in Section A are authorized to conduct procedures involving animals under this proposal, have completed the [Animal Care and Use](https://www.citiprogram.org/index.cfm?pageID=91) course through the [Collaborative Institutional Training Initiative program](https://www.citiprogram.org), and received training in: the biology, handling, and care of this species; aseptic surgical methods and techniques (if necessary); the concept, availability, and use of research or testing methods that limit the use of animals or minimize distress; the proper use of anesthetics, analgesics, and tranquilizers (if necessary); and procedures for reporting animal welfare concerns.

####       For all USDA Classification D and E proposals (see section H.1.): I certify that I have reviewed the pertinent scientific literature and the sources and/or databases as noted in Section H.2. and have found no valid alternative to any procedures described herein which may cause more than momentary pain or distress, whether it is relieved or not.

####       I certify that I will obtain approval from the IACUC before initiating any significant changes in this study.

####       I certify that I will notify the IACUC regarding any unexpected study results that impact the animals. Any unanticipated pain or distress, morbidity or mortality will be reported to the attending veterinarian and the IACUC.

####       I certify that I am familiar with and will comply with all pertinent institutional, state, and federal rules and policies.

**Principal Investigator:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name:       | Signature:  |  | Date: |  |

#### CONCURRENCES

PROPOSAL NUMBER \_\_\_\_\_\_\_\_\_\_\_\_\_(leave blank)

a. Supervisory concurrence as applicable:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name:       | Signature:  |  | Date: |  |

b. Safety Office/CommitteeCertification of Review and Concurrence (*Required of all studies utilizing hazardous agents*.):

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name:       | Signature:  |  | Date: |  |

c. Facility Manager/Veterinariancertification of resource capability in the indicated facility to support the proposed study:

Facility:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name:       | Signature:  |  | Date: |  |

d. Attending Veterinarian certification of review and consultation on proper use of anesthetics and pain relieving medications for any painful procedures:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name:       | Signature:  |  | Date: |  |

**S. FINAL APPROVAL:**

Certification of review and approval by the Institutional Animal Care and Use Committee:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name:       | Signature:  |  | Date: |  |

**Attachment 1**

**Explanation for USDA Classification E**

(This report is required to accompany USDA Form 7023 to support any USDA Classification E listings.)

This document must be typed.

Name of investigator:

Animal Study Proposal Title:

Species and number of animals listed in Classification E for each year:

 Species:

 Number of animals:

 year 1 -

 year 2 -

 year 3 -

 Total:

Description of project including reason(s) for species selection:

Provide a scientific justification to explain why the use of anesthetics, analgesics, sedatives or tranquilizers during and/or following painful or distressing procedures is contraindicated:

Signature of investigator: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature of IACUC Chairperson: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_