Andrews University

OFFICE OF RESEARCH AND CREATIVE SCHOLARSHIP
INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE
Office: 269.471.6361 Fax: 269.471.6246

APPLICATION FOR USE OF ANIMALS IN RESEARCH AND/OR TEACHING

(Revised September 21, 2012)

Note to applicant- The Institutional Animal Care and Use Committee (IACUC) includes non-scientist members so please take this into account when completing this application.

Principal Investigator _____ Date _____

Position/Rank _____ Highest Academic Degree _____

Department _____ Telephone _____

Campus Address _____

Proposal Title/Course Title _____

Species, common name(s) of animals to be used in this protocol _____

Maximum number of animals_____ Dates: Start _____ Finish _____

The animals will be used for: check and complete either (a) or (b)

(a) Research ☐ Funding Agency(s) _____

New research project ☐ Continuation of research project ☐

New Submissions and Competitive Renewals: Initial applications and competitive renewal applications to outside funding agencies must be reviewed by the IACUC. A completed questionnaire should be submitted a minimum of 2 weeks prior to the submission date. If a review is not possible by the submission date, the IACUC has 60 days in which to notify the sponsor of approval.

Continuations: Assurances of IACUC review and approval of continuation applications must be made by the date of submission. Please submit the questionnaire 1-2 weeks prior to the grant submission date.

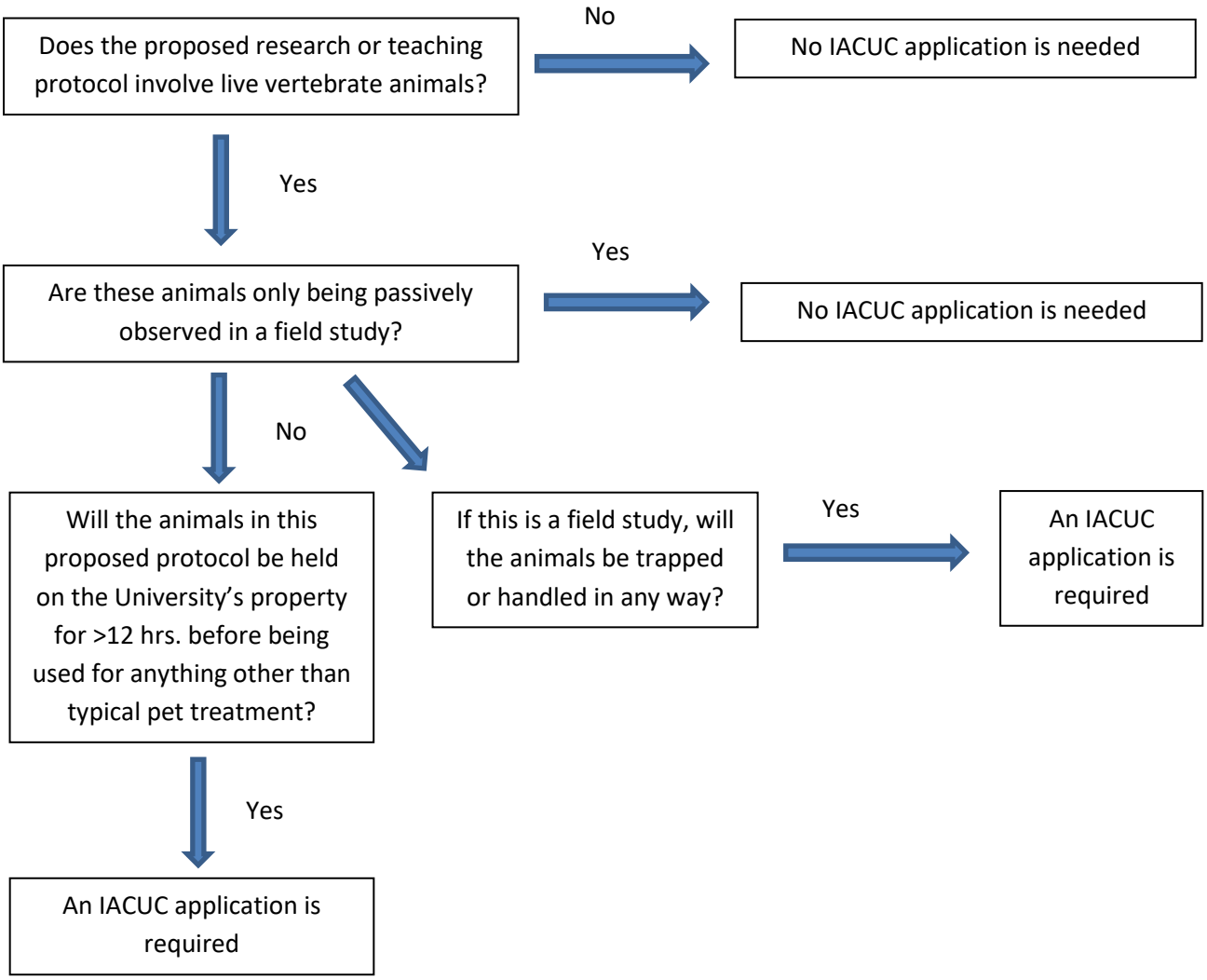
(b) Teaching ☐ Course (Department and Number)_____

Teaching Protocols: Protocols dealing with classroom use of live vertebrate animals must be filed with the IACUC each year. No animals may be ordered until an approved protocol is on file. Therefore, a completed questionnaire should be filed before the start of the semester in order to allow sufficient time to review the protocols and to order the animals.

Do not write in this box -

Received by IACUC_____ **IACUC Decision** _____

ANDREWS UNIVERSITY IACUC DECISION TREE*



**The Andrews University IACUC follows the Public Health Service Policy expanded definition of an animal used in research and teaching to include all vertebrate animals without the exclusion of fish, reptiles, amphibians, birds, mice and rats bred for research, and farm animals used for food or fiber (These animals are excluded by the Animal Welfare Act.)*

CONSIDERATION OF ALTERVATIVES TO LIVE ANIMAL USE:

The Andrews University IACUC **may** request a search of current literature to determine that there are either non-animal or less painful/distressful animal models/methods with which to perform this research. If the IACUC makes such a request it will contact the PI in writing via email.

Briefly this literature search would include which databases (such as Medline, Biosis, or AWIC) were searched, which years were searched, the date that the search was conducted, and the keywords used one of which must be "alternatives" and others to include the species of animal, eg., rabbit, guinea pig, etc; and the procedures to be used – eg., antibody production, ascites, blood sampling, tumor growth, surgery, etc. The PI would need to provide a 1 or 2 sentence narrative describing the results of that search.

BRIEF SUMMARY OF PROPOSED PROTOCOL:

Mark which of the procedures or substances listed below will be used. Any 'Yes' answers need to include an explanation below.

	Yes	No		Yes	No
Isotope(s)	☐	☐	Surgery	☐	☐
Prolonged restraint	☐	☐	Survival surgery	☐	☐
Electric shock	☐	☐	Multiple surgeries on same animal	☐	☐
Water restriction	☐	☐	Pain or distress to animals without administration of an anesthetic or analgesic	☐	☐
Muscle paralyzing agents	☐	☐			
Controlled substances	☐	☐			
Potential for significant debilitation	☐	☐	Death as endpoint (justify in protocol)	☐	☐
Other (describe below)	☐	☐			

Explanation of 'Yes' answer(s):

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

Hazardous Agent	Agent	Date of IBC Approval	IBC no.
Biological Agents			
Hazardous Chemicals or Drugs			
Recombinant DNA			

Study Conducted at Biosafety Level: _____

PAIN OR DISTRESS CLASSIFICATION: *(See appended descriptions)*

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	

Procedures with animals should avoid or minimize discomfort, distress and pain to the animals, consistent with sound research design. Procedures that may cause more than momentary or slight pain or distress to the animals must be performed with appropriate sedation, analgesia, or anesthesia, unless the procedure is justified for scientific reasons in writing by the investigator.

Mark the boxes that apply to this proposed protocol. Those that do not apply, mark with NA. 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. (*Use additional sheets as necessary.)*

- ☐ **Experimental injections or inoculations** - substances such infectious agents, adjuvants, etc.; and information about dosages, sites, volume, route, and schedules.
- ☐ **Blood withdrawals** - volume, frequency, withdrawal sites, and methodology
- ☐ **Surgical procedures** - provide details of survival and non-survival surgical procedures as shown on the next page
- ☐ **Radiation** - dosage and schedules
- ☐ **Methods of restraint** - How will animals are restrained in the protocol (e.g., restraint chairs, collars, vests, harnesses, slings, etc.). and how they will be 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.
- ☐ **Other procedures** - e.g., survival studies, tail biopsies, etc.

Address all the following aspects of the proposed protocol: (*Use additional sheets as necessary.)*

- ☐ **Resultant effect**s – What are the animals are expected to experience (e.g., pain or distress, ascites production, etc.)?
- ☐ **Adverse reactions** - How will the researchers address unintended adverse responses to the research protocol (e.g. rapid, unexplained weight loss, development of harmful behaviors)?
- ☐ **Other potential stressors** (e.g., food or water deprivation, noxious stimuli, environmental stress)
- ☐ **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 –** When will the experiment end (e.g., tumor size, percentage body weight gain or loss, inability to eat or drink, behavioral abnormalities, clinical symptomatology, or signs of toxicity)? This 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).

Surgical procedures to be performed? **Yes / No** If yes, answer the questions/statements below.

- 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.
- Who will perform surgery and what are their qualifications and/or experience?
- Where will surgery be performed and postoperative care provided (building and rooms)?
- 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.
- Records of post-operative care must be maintained and made available to the FLSC veterinary staff as needed. Records may take the form of notations in a data book or on separate forms designed for this purpose. Please indicate how these records are to be maintained.
- If non-survival surgery, describe how humane euthanasia is enacted and how death is determined.
- Are paralytic agents used during surgery? If yes, please describe how ventilation will be maintained and how pain will be assessed.
- 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, craniotomy, joint replacement, or limb amputation).) If yes, please explain.
- Will more than one major survival surgery be performed on an animal while on this study? If yes, please justify:

Animals that would otherwise experience severe or chronic pain or distress that cannot be relieved must be painlessly sacrificed at the end of the procedure or, if appropriate, during the procedure. Indicate method(s) of euthanasia to be used. Methods of euthanasia used must be consistent with the recommendations of the American Veterinary Medical Association Panel on Euthanasia, unless a deviation is justified for scientific reasons in writing by the investigator. Indicate if euthanasia is to be performed without anesthesia (explain as needed in below):

☐ Animals will not be euthanized. What is the ultimate fate of the animals?_____

_____

☐ Overdose of barbiturates (name agent, dose and route of administration)_____

_____

☐ Cervical dislocation
☐ Decapitation
☐ Carbon dioxide followed by cervical dislocation or bilateral pneumothorax
☐ Overdose of inhalant anesthetic followed by cervical dislocation or bilateral pneumothorax
(Name of anesthetic agent)_____
☐ Cardiac perfusion for histology during anesthesia
(Name anesthetic agent) _____

☐ Other (Please describe) _____

ANIMAL EXPERIENCE OF THE RESEARCH PERSONNEL

List the names, rank, and cell phone numbers of all those who will be involved in the proposed animal-related activity as well as the extent of their experience handling this type of animal.

Name, rank, phone	Experience

SAFETY OF LABORATORY AND RESEARCH PERSONNEL

Are all personnel listed enrolled in the Occupational Health Program? Yes ☐ No ☐

If the reply is No, please contact _____ for information.

Have all personnel been properly trained in the procedures they will conduct and have they completed the Laboratory Animal Training Program administered by _____ personnel? Yes ☐ No ☐ If the reply is No describe how and when the proper training will be provided.

Category A –

Below list all members of your laboratory who will be using whole animals (live or dead), infectious or hazardous biological, chemical or other materials in conjunction with animals.

All persons in **Category A** are required to fill out and submit annually a confidential Medical/ Occupational History Form to be reviewed by a board certified occupational health physician. Failure to comply with this requirement will result in either a delay in approval of the animal protocol, removal of the individual from the protocol and/or termination of animal facility access. Non-compliance with this requirement is a NIH/ OLAW/ USDA reportable deficiency. **Expenses incurred will be charged to the submitting Principal Investigator.**

Category B –

Below list all members of your laboratory who will be using ONLY aquatic species or only fresh tissues/fluids from non-biohazardous animals (include those who will be entering the animal facility to observe only

All persons listed in **Category B** have the option to sign the Category B Certification Form or submit annually a Medical/ Occupational History Form. Failure to comply with this requirement will result in either a delay in approval of the animal protocol, removal of the individual from the protocol and/or termination of animal facility access. Non-compliance with this requirement is a NIH/ OLAW/ USDA reportable deficiency. **Expenses incurred will be charged to the submitting Principal Investigator.**

STATEMENT OF COMPLIANCE

The federal government and university policy require that the care and use of all vertebrate laboratory animals be monitored by the Institutional Animal Care and Use Committee (IACUC). The information on this questionnaire must be provided when animals are used in research studies and instructional programs, whether internally funded, externally funded, or unfunded. Federal requirements and university policy state that research or instruction in which animals are used may not be initiated without prior IACUC approval.

The principal investigator whose signature appears below is familiar with and agrees to comply with the NIH Guide for the Care and Use of Laboratory Animals, the Federal Animal Welfare Act, and the euthanasia guidelines established by the American Veterinary Medical Association Panel on Euthanasia. The undersigned also certifies that to the best of their knowledge, the activities proposed in this protocol do not unnecessarily duplicate any previous experiments.

_____ _____

Signature of Principal Investigator *Date*

Email the completed form to the Chair of the IACUC:

Dr. Katherine Koudele
Department of Sustainable Agriculture
Office: Smith Hall 109
Phone: (269) 471-6299
Email: koudelej@andrews.edu

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.