APPLICATION FOR VERTEBRATE ANIMAL USE (AVAU)

(REVISED 11.18.2022)

NOTE: BEFORE COMPLI	ETING THIS FORM, I	READ I <u>NSTRUCTIONS HER</u>	RE.
This application applies to	Resea	arch	Teaching
If this application covers a	clinical study involving	privately owned animals, ple	ease attach a copy of the client
consent form.			
If this application applies to activities are associated wit		h syllabus. The syllabus shoul	ld provide evidence that these
Title of project or activity:			
Submitted to (Name of Fun Agency Deadline:	ding Agency, if applica	able):	
If this project has been approand expiration date	roved previously by the	e Committee, please indicate t	he ID# of the previous application
		LL AUTOMATICALLY BE DENTIAL SECTION OF TH	
			tion to various University offices through which ect officer in the Funding Agency for your project.
DO NOT WRITE BELOV	V THIS LINE. APPL	ICATION CONTINUES ON	N NEXT PAGE.
Approved	Approved with	n modification (Attached)	Not approved
This institution has an Anin	nal Welfare Certificate	on file with APHIS.	
X IA	CUC Chair]]	IACUC#: Date Proposal Received: Date Sent to IACUC: Approval Date:

Expiration Date:



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CONFIDENTIAL

INFORMATION ON PAGES 2 AND 3 IS CONSIDERED PRIVATE AND NOT SUBJECT TO RELEASE UNDER THE PUBLIC RECORDS ACT. PLEASE PROVIDE THE APPROPRIATE INFORMATION IN THE SPACES PROVIDED BELOW. DO NOT INCLUDE THIS INFORMATION IN ANY OTHER PORTION OF THE APPLICATION. THE REST OF THE APPLICATION IS CONSIDERED PUBLIC AND IS SUBJECT TO RELEASE.

Principal Investigator	r or Instructor (P	T):		PI Phone Number
Department:				Fax Number
Mailing Address:				
E-mail address:				
After-hours emergence	cy contact and pl	hone numbe	r:	
Duration of Project/C	Course	to	(IACUC) appro	val is for 3-years maximum)
Have all personnel co AR-EHS for addition	*		aining? (An RCR refre	esher course is required annually – contact
Yes	No – Pleas	e explain wh	ny not.	
Have all personnel co	ompleted the <u>init</u>	ial risk asse	essment survey? (This	s assessment is required annually.)
Yes	No – Pleas	se explain		
To the best of your ki animal workers?	nowledge, are th	e animals to	be used in this project	t free of disease associated with health risk to
Yes	No – Pleas	se describe s	afety precautions that	will be used to protect personnel.
What type of animals	are involved in	this project	or activity?	
Livestock		Com	npanion Animals	Laboratory (mice, rats, etc.)
Wildlife Exc	otic animals	Othe	er, Specify	
Provide number of an	nimals and justif	cation for th	ne number of animals r	needed.

Provide a one-paragraph summary	of the project or activity.		
D 11 1 1 0 1 4 111	1 2 24 4 2 1		
Describe briefly what you will be	doing with the animals.		
List species chosen and the justific	cation for the species chosen	1.	
1. Animal Housing			
1a. Will animals be housed?	Yes	No	
If no, explain why not (i.e. field str	udies, client owned) For Fig	eld studies, give location. Please be s	pecific.
Cage	Indoor pen	Metabolism crate	Tie stall

Outdoor pen

Free range

Other - please specify

b. Wi	nat is the physical address of v	where the animals will be ho	oused?		
c. W	here will procedures (including er.)	surgeries) be performed? (Physical address, ir	ncluding build	ing and room
d. W	ill animals be maintained at any tin	ne in Investigator's lab or any	off-campus site?	Yes	No
	If yes, how long?	Building	Room Num	ber	
	If greater than 12 hours, pro	vide justification. These arr	angements must be	approved by t	he IACUC.
descri	r animals that are transported as be containment of animals, me portation must conform to all for	thod of transport and how i	t is appropriate for		



- 2. List <u>all personnel</u>; including the PI, who will care for and work with the animals. <u>For each person, please</u> include the following required information:
 - --Indicate their role in the project.
 - --List name, contact email, animal-related experience and training for procedures being performed in sufficient detail to allow the IACUC to determine that individuals are qualified; listing of degrees is not sufficient.
 - --Provide specific information for those performing euthanasia, and if applicable, for those performing anesthesia and/or surgery FOR SECTION A.

3. If applicable, list experts in the area of investigation with whom you have consulted. Provide name, position, and briefly describe area of expertise.



PRINCIPLE INVESTIGATOR ASSURES:

That she/he will abide by West Texas A&M University policies for the care and use of animals; the provisions of the Guide for the Care and Use of Laboratory Animals; and all federal, state and local laws and regulations governing the use of animals in research; and that she/he understands that emergency veterinary care will be administered to animals showing evidence of pain or illness, in addition to routine veterinary care as prescribed for individual species in the Standard Operating Procedures;

That all manipulations involving live animals will be performed under her/his supervision or that of another qualified individual listed on this protocol;

That all personnel having direct animal contact, including the investigator, have been trained in humane and scientifically acceptable procedures in animal handling, administration of anesthetics, analgesics, and euthanasia to be used in this project, and have completed the WTAMU Animal Welfare training module, or are under the direct (in-lab) supervision of a trained individual, and that employees will be allowed adequate time to attend training sessions;

That personnel with animal or animal tissue contact participate in the Occupational Health and Safety Program;

That this proposed animal use does not unnecessarily duplicate previous activities:

That she/he will obtain approval from the IACUC before initiating any changes in this study, including changes in personnel or location of animal use;

That she/he will notify the IACUC and the attending veterinarian regarding any unexpected study results that adversely impact the animals, including any unanticipated pain or distress, morbidity, or mortality.

I have read, understand, and will comply with the assurance statements.	
Signature of P.I.	Date

Any deviation from an approved protocol, violations of pertinent policies, guidelines or laws could result in immediate suspension of this project.

NON-CONFIDENTIAL SECTION

INFORMATION ON THE FOLLOWING PAGES IS CONSIDERED PUBLIC AND IS SUBJECT TO RELEASE UNDER THE PUBLIC RECORDS ACT. PLEASE DO NOT PROVIDE INFORMATION FROM THE SECTION ABOVE OR OTHER INFORMATION THAT SHOULD REMAIN CONFIDENTIAL.

ECTI	ON A. Animal Care and Use (Completion of this section is required for all applications)
1.	Describe in non-scientific terms the purpose and importance of this animal use activity.
2.	Describe in non-scientific terms how animals will be used. Include all manipulations and procedures. This description should allow the IACUC to understand what happens to an animal from the time of acquisition to the endpoint of the activity.
3.	Consideration of Alternatives

Are there procedures or conditions that may potentially cause more than momentary or slight pain or distress? (By definition, this includes all Category D and E studies.)

If yes, there must be a written narrative description of the methods and sources [e.g. biological abstracts, Index Medicus, Current Research Information Service, and/or the Animal Welfare Information Center operated by the National Agricultural Library (phone 301/504-6212)] which were consulted to determine the availability of alternatives (reduction, refinements, replacement).

- "Alternative" refers to methods, models, and approaches that result in the reduction of the number of animals used, that incorporate refinements of procedures which result in the lessening of pain or distress to animals, or that provide for the replacement of animals with non-whole animal systems or the replacement of one animal species with another, particularly if the substituted species is non-mammalian or invertebrate.
- a. Literature search for alternatives: list the databases, years searched in each database, keywords used, and date the search was performed (or attach the summary sheet with this information). Keywords should include those likely to yield information on alternatives to the potentially painful or distressful procedures or conditions that are part of this protocol.

L	Othor	information	com ilooc	utilized	(1;ct)	
D.	Other	iniormation	services	uumzea	(HSU)	÷

c.	Other methods or	r sources u	sed (briefly	describe).	Names	of consultants	should be	listed in th	e confid	ential
sec	ction of this applic	cation, iten	n number 3.							

- d. Summarize how the above methods and sources have helped you identify alternatives or determine that alternatives are not available.
- 4. Provide the following information for all animals in the table below. No animal should be listed more than once; count each in highest proposed category of use. (Note: The last page of the application lists category definitions.)
 - Category B Animals being bred or held but not yet used in research (i.e., not used for teaching or research)
 - Category C No stress, pain, or use of pain-relieving drugs (i.e., not more than momentary stress or pain without need for analgesics or anesthetics beyond normal handling for the animal for teaching and research)
 - Category D Involve pain or distress for which appropriate anesthetics or analgesics will be used
 - Category E Involve pain or distress for which appropriate drugs will adversely affect research results

Species and strain (include common name)*	Age and/or weight**	Source***	Category of use (above)	Total number requested for 3 years

^{*}For field studies involving capture methods, anticipated non-target (by catch) species should also be indicated by species or in aggregate as "miscellaneous."

^{**}Give ranges if the specific information is unknown.

^{***}Please choose from the following sources: commercial vendor, client-owned (teaching hospital, non-university farms), random source, university-owned teaching herds/flocks, university-owned research herds or flocks, rental or stock animals, purpose-bred, collected from wild, animals in natural habitat, other (define). DO NOT USE VENDOR OR COLLABORATOR NAMES.



a. Is this a laboratory exercise for the purposes of teaching students?	Yes	No
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b. Do you have data from prior studies that is sufficient to calculate the sample size? Yes No

c. How did you determine the number of animals to be used in this study? PI's decision (no outside resources)

CVM Population Medicine Statistics Consultant

Contractual Agreement with Grantor

Other. Please specify:

d. Using the specifics of your experimental plan (or demonstration or course syllabus, as applicable), demonstrate how the numbers of animals required to achieve your scientific (or teaching) objectives for this project (i.e., the numbers given in Sec. A.4.) were calculated. Include details of numbers of animals per group, control groups, treatment groups, pilot studies, and potential experimental failure. Information may be provided in the form of a table or flow chart. (NOTE: You must submit an amendment to exceed this allotment of animals.)

SECTION B. Invasive sample collection from live animals (blood/urine/feces/tissue/other [define])

Species	Sample	Site(s) of sample collection	Method(s)	Volume(s)	Frequency of collection

Provide details for any sample collection procedures that may not be clear from the table or Section A.2.

SECTION C. Substance Administration

Anesthetics, analgesics, tranquilizers and euthanasia agents should be listed in Sections D and F. Dietary manipulations should be described in detail in Section A.2., and Section D.8., if applicable.

1. Will anything be administered to animals? Yes No If Yes, list specific agents below and provide dosage information (mg/kg body weight and volume), unless provided in Section A.2.

Radioisotopes? List/dosage:

Pathogenic or viable organisms? List/dosage:

Toxic chemicals? List/dosage:

Carcinogens? List/dosage:

*Transplantable tumors? List/dosage:

Biological materials such as tissue, sera, or cell lines? List/dosage:

Recombinant DNA? List/dosage:

Others not listed above? List/dosage

*If materials have been derived or passed through rodent species, product must be free of infectious agents (Mouse Antibody Production (MAP]/Rat Antibody Production (RAP]/Hampster Antibody Production [HAP] testing are diagnostic assays used as indicators of viral contamination of rodent products).

	ve, describe in detail the precautions taken to protect people and animals in the environment, etices for contaminated excreta, bedding and toxic metabolites.
3. Describe the effects in Section D.	of these agents on the experimental animal. Potential for pain or distress should be addressed
4. Safety plan approve Yes	d by WTAMU Academic Research and Environmental Health and Safety? No
Yes	NO
5. Radiological approv	val needed?
Yes	No
	flect the location of this experiment and the experimental protocol? Yes No
If no, contact WTAMU	J Academic Research and Environmental Health and Safety, (phone: 806-651-2270).

SECTION D. Potential Pain and Distress

Use this section to discuss all procedures or conditions that may be accompanied by pain, distress, or discomfort.

Include discussion of infectious or spontaneous disease studies and transgenic animals, even if clinical signs or abnormal phenotypes are not expected. This section is applicable to animals listed in Categories, C, D, E.
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. Describe the monitoring plan for pain and distress, including frequency and duration of checking for health or behavioral abnormalities.
3. Describe how pain, distress, and discomfort will be minimized, consistent with scientific objectives. (Use Section D.6. to describe use of anesthetics, analgesics, tranquilizers, or other palliative therapies.) Include the actions to be taken, and the specific criteria/endpoints for euthanasia, if applicable. (Examples include not eating for >24 hours, loss of >15% of normal body weight, self-mutilation, non-weight bearing for >24 hours, etc. In some cases, it may be appropriate to euthanize animals at the first sign of clinical abnormality.) Describe euthanasia procedures in section F.
4. If painful or distressful procedures or conditions will NOT be relieved with anesthesia, analgesia, tranquilization, other palliative therapies or humane endpoints, provide scientific justification.

5.	If death is	s intended to	serve as an	endpoint (i.	e., if animal	s must be al	llowed to d	die from an	experimental
co	ndition or	procedure),	provide scie	ntific justifi	cation.				

- 6. If painful or distressful procedures or conditions are relieved with anesthesia, analgesia, tranquilization, or other palliative therapies:
- a. For each species to be used, list procedure or condition in which anesthesia, analgesia, tranquilization or other palliative therapies will be used. Providing drug, dose, route, frequency of administration, and anticipated duration of therapeutic effect. Include all medications, such as pre- and post-anesthetics, antibiotics, paralytics, etc. (If applicable, describe surgery in next section.)

Species	Procedure or Condition	Agent	Dosage, route	Frequency	Duration

b.	Describe moni	toring procedures t	o ensure ac	dequacy and	safety of	anesthesia or	tranquilization
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- c. Describe monitoring procedures for recovery from anesthesia or tranquilization.
- d. How will adequacy of post-operative/post-procedural analgesia or other pain-relieving therapies be ensued?

7.	Physical	restraint (more	e than one hou	r): Describe	physical 1	restraint	methods.	How will	potential	distress 1	be
mi	nimized ((e.g., sedation,	acclimation/tr	aining)?							

- 8. <u>Field Studies Only</u>. Describe trapping or other capture methods used in field studies, unless discussed in Section A.2. Explain how pain, distress and discomfort are minimized.
- 9. Exceptions to standards: Describe and justify any exceptions to federal regulations or standards, and give the species of animal and number to be used. (Examples of exceptions: use of animal in more than one protocol involving a major operative procedure from which it is allowed to recover, deprivation of food or water; maintaining animals at temperatures and/or humidities outside the ranges specified by the standards; not cleaning and/or sanitizing at required frequencies; not providing diurnal lighting as required; not meeting space requirements; exceptions from the exercise plan for dogs.)

SECTION E. Surgery

Surgery and postoperative monitoring and records must be in accordance with IACUC guidelines. Refer to the IACUC Guidelines on Intra and Post-Operative Monitoring and Record Keeping. Contact the University Attending Veterinarian (see committee information for additional information or forms.) Be sure personnel qualifications for those performing surgery and postoperative care are adequately trained; described in the Confidential Section, number 2.

- Will surgery be survival or non-survival?
 Survival Non-Survival (animal does not recover from anesthesia prior to euthanasia)
- 2. Describe, in detail, the surgical procedure(s) for each species to be used. Include description of presurgical preparation and method of closure, if applicable.

3. If the animal will recover from ane	sthesia, how long will the animal be r	naintained after 1	recovery?
4. Describe, in detail, the postoperative in Section D., above.)	re care, including any specialized care	e. (Use of analge:	sics should be described
5. Will individual animals undergo months of the second second of the se		Yes ould be justified	No in Section D.9.)
SECTION F. Euthanasia/Disposition 1. Provide the following information to Complete this section regardless of whis required to relieve pain or suffering	for all euthanasia of animals. (Death in the euthanasia is an expected endpodue to unexpected injury or illness.	oint of the study,	or whether euthanasia
Species	Method/Agent	D	losage, route
 Justify methods that vary from thos Association (AVMA) Panel on Euthan If these animals are not to be euthan 	asia. Decapitation and cervical disloc	ation require just	tification.
3. If these animals are not to be euthar	nized as part of your protocol, what w	/Ill become of the	em'?



Categories:

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

<u>Examples:</u> Breeding colonies of any animal species (USDA does not require listing of rats, mice, birds) that are handled in accordance with IACUC approval, the *Guide* and other 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.

<u>Examples</u>: Procedures performed correctly by trained personnel such as the administration of electrolytes/fluids, administration of oral medication, blood connection 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. 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.

<u>Examples:</u> Surgical procedures conducted by trained personnel in accordance with standard veterinary practice such as biopsies, gonadectomy, exposure of blood vessels, chronic catheter implantation, and laparotomy or laparoscopy.

Blood collection by more invasive routes such as intracardiac or periorbital collection from species without a true orbital sinus [e.g. 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, anesthetics, tranquilizers, or supportive care.

Classification E: 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 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 stress.

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.