CHULALONGKORN UNIVERSITY LABORATORY ANIMAL CENTER

CHULALONGKORN UNIVERSITY LABORATORY ANIMAL CENTER

ANIMAL CARE AND USE PROTOCOL (CULAC-ACUP)

…..……

Protocol Review No. | | | 7 | 3 | | | | R | |

Protocol review numbers are composed of the last two digits of Christian Era, followed by two digits of faculty code number, the last three digits run by faculty IACUC on queue. In case of a renew protocol, R and one digit run from 1-3 will be applied.

Protocol should be written in EnglishHand written forms will not be accepted***

OFFICE USE ONLY	**DATE RECEIVED:**	**DATE REQUEST MODIFICATION:**	**DATE RESUBMITTED:**
	DATE APPROVED:	**DATE EXPIRED:**	**DATE COMPLETED:**

…..……

Faculty or Institute: ……..…….……...…...

1. Project or Proposal (if applicable): …….....

2. Animal Use Protocol Title:

(English) ……

(Thai).....

3. Submission of This Protocol as:

☐ New submission

☐ Renew CU-ACUP

Previous approved protocol number: ……

4. Principal Investigator (PI): ***MUST COMPLETE A PERSONNEL FORM***

Name: …….....

Degree: …….... Position: …….

Animal User ID: | U | | - | | | | | | - | | | | |

Department: ……..

Faculty/Institute: ……...

Tel: ……. Fax: …….

E-mail: ……..

5. Co-Investigator(s) and Person(s) Involving Animal Use:

Name/Surname	Affiliation Address	Position	Phone	Fax / E- mail

6. Secondary or Emergency Contact Information: ***MUST COMPLETE A PERSONNEL FORM***

Name: …….....

Degree: ……... Position: ……..

Animal User ID: U - -

CULAC Animal User ID: / / /

Department: ……..

Faculty/Institute: ……...

Mobile phone: ……Fax: …….

E-mail: ……..

7. Name of Attending Veterinarian

Name: Choopet Nitsakulthong

Degree: D.V.M.

Animal User ID : U 1 - 0 0 1 2 3 - 2 5 5 8

Department: Animal Health

Faculty/Institute: Chulalongkorn University Laboratory Animal Center (CULAC)

Tel: 02-218-9540; 086-898-1729 Fax: 02-218-9430

E-mail: Choopet.n@chula.ac.th

8. Nature of Protocol:

☐ Research in the field of ……..……..……..…

☐ Testing/ Monitoring, please specify: ……..……

☐ Teaching: Course ……..……

☐ Biological production, please specify: ……..……..…..…..

☐ Animal breeding, please specify: ……..……..……

☐ Other, please specify: ……..……

9. Funding Source/Budget

Grant has been: ☐ Submitted

Sponsor: ……..

☐ Approved

Sponsor: ……..……

Duration: ……..…….…….

Amount: ……..…….…….…….…….

☐ Other, please specify: ……..

DEPARTMENT ENDORSEMENT (Required)		
I endorse this protocol for review.		
Head of Department or Designee	*Signature*	*Date*
Comments:		

ATTENDING VETERINARIAN REVIEW (Required)		
I have reviewed this animal use protocol in regard to the proposed care and use of animals. The principal investigator has been informed of any concerns/comments I have regarding this protocol.		
Choopet Nitsakulthong		
Attending Veterinarian	*Signature*	*Date*
Comments:		

BODY OF ANIMAL USE PROTOCOL

10. Executive Summary: (limited 300 words)

11. Background and Rationale: ……..

12. Objective: ……..……..

13. Benefit of the Study: ……..……..……..

14. Justification for the Use of Animal and Consideration of Alternatives to Painful or Distressful Procedures:

14.1 Literature Search for Alternatives to painful/distressful procedure justification

As Principal Investigator, I have considered alternative to procedures that might cause more than momentary or slight pain or distress.

Keywords: (should relate to the painful procedures, pain or distress associated with the induced disease condition in this protocol, and species of animals)

……..

……..…….....

Databases: (at least 2 databases) ……..…….…… ……..

Date of search (D/M/Y):: ……..…….……..…….

Period of search (M/Y to M/Y, at least 10 years): …...…….…….….

Were any alternatives to procedures which may cause more than momentary or slight pain or distress discovered in the results of the search(s) indicated above?

☐ No

☐ Yes (state what alternatives to the use of painful or distressful procedures were discovered and the scientific reason for rejecting use of these alternatives.)

……..

……..…….....

...……..…….....

14.2 Literature Search for Duplication

Keywords: (at least 5 words: e.g. species, disease/pathogen, condition studied)

...……..…….....

...……..…….....

Databases: (at least 2 databases) ……..…….…… ……..

Date of search (D/M/Y):: ……..…….……..…….

Period of search (M/Y to M/Y, at least 10 years): …...…….…….….

Does the purposed research duplicate any previous work?

☐ No

☐ Yes (explain why it is scientifically necessary to duplicate the experiment)

……..

……..…….....

...……..…….....

14.3 Briefly Describe How You Have Considered Each of the Following Regarding 3Rs or Why They Are Not Applicable:

14.3.1 Replacement of animals (e.g., with *in vitro* models, computer models or less sentient animals) and explain why the proposed species is/are the most appropriate.

…….....

……..…….....

……..…….....

……..…….....

……..…….....

14.3.2 Reduction in the number of animals (e.g., using appropriate statistical methods in the design analysis of the study, reduction in experimental variability by using animals of defined genetic or microbiological status, sharing tissue among investigators) and provide an explanation of how the numbers of animals to be used in each group or total were appropriate based on scientific and statistical requirement to achieve objectives.: ……

……..…….....

……..…….....

……..…….....

……..…….....

……..…….....

……..…….....

……..…….....

……..…….....

……..…….....

……..…….....

14.3.3 Refinement of experimental procedures to minimize pain or distress (e.g., early endpoint, use of analgesics, anesthetics or sedatives, techniques that reduce stress in the animal):

……..…….....

……..…….....

……..…….....

……..…….....

……..…….....

15. Description of Animals

Common Name (Scientific Name)	Breed/Strain	Age	Weight	Sex	Number

Source/Vendor: (Name of source/vendor and location) ……

Special consideration: (e.g. genetic modified animals, pregnant animals, lactating animals -- please provide information about special care and use) ……...……

16. Animal Facility and Laboratory: Please answer the 19.1 if the terrestrial animal will be used; the 19.2 if the aquatic animal will be used

Housing place: Building…… Floor ……..……..….Room…….

Experimental place: Building…… Floor ……..……..….Room…….

17. Housing System:

☐ Conventional ☐ Strictly hygienic conventional

☐ Barrier ☐ Biohazard containment

☐ Others, please specify: …….

18. Animal Care:

18.1 Husbandry Consideration:

18.1.1 Caging:

☐ Static filtered top cages ☐ Individual ventilated cage (IVC)

☐ Isolator ☐ Run

☐ Others, please specify: ……..…..

18.1.2 Caging materials:

☐ Plastic ☐ Stainless steel

☐ Polysulfone ☐ Others, please specify: …..……

18.1.3 Cage size (W x L x H):

☐ 19.35x38.13x13.03 cm (mice)

☐ 39.50x34.60x21.30 cm (rats)

☐ 46.2x40.3x40.4 cm (double decker for rats)

☐ 30x21x10 inches (guinea pigs)

☐ 71x71x45 cm (rabbits)

☐ 71.3x71.6x47.6 cm (rabbits)

☐ 92x150x90 cm (run for dogs or pigs)

☐ 75x105x90 cm (dogs)

☐ 100x120x50 cm (chicken)

☐ Others, please specify: …….

18.1.4 Number of animals/cage……....

18.1.5 Environmental requirements:

Temperature:

☐ 20 ± 1°C (rabbits)

☐ 21 ± 1°C (rodents and others)

Humidity: 50 ± 20%

Light: ☐ Standard fluorescent

☐ Others, please specify: ……

Light cycle: ☐ Standard 12:12

☐ Others, please specify: ……

18.1.6 Food:

Type of food: ☐ Rodent pellet feed (mice and rats)

☐ RD65 Rabbit/Guinea pig feed (rabbits and guinea pigs)

☐ Other, please specify: ……..……..

Source/Vendor: ☐ Teklad Global Rodent Diets (mice and rats)

☐ Perfect Companion (rabbits and guinea pigs)

☐ Other, please specify: ……..……..

Feeding schedule:

☐ Ad libitum

☐ Others, please specify: ……meal(s)/day

18.1.7 Water (if needed):

Type of water: ☐ Tap water

☐ Hyperchlorinated……ppm

☐ Acidified, pH…….

☐ RO-UV Autoclave

☐ Others, please specify: ……..…….

Water provided:

☐ Ad libitum

☐ Others, please specify: …….

18.1.8 Bedding/Housing media:

☐ No

☐ Yes, please specify: ……..……

18.2 Husbandry Consideration for Aquatic Animals:

18.2.1 Water system (Hatchery/Laboratory only)

☐ Closed water system ☐ Opened water system

☐ Re-circulating system ☐ Flow-through (flow rate: ……..……..)

☐ Static non-renewal system ☐Static renewal system

18.2.2 Water filtered system (Hatchery/Laboratory only)

☐ Bio filter ☐ Solid filter

☐ Non-filter ☐ Other (please specify: ……..……..)

18.2.3 Air system

☐ Aeration ☐ Non-aeration

18.2.4 Caging

☐ Aquaria ☐ Cage

☐ Container ☐ Other (please specify: …….……..)

18.2.5 Caging material

☐ Glass ☐ Plastic

☐ Acrylic ☐ Other (please specify: ……..)

18.2.6 Cage size (WxLxH (D)) ……..……..

18.2.7 Density (number/cage) ……..

18.2.8 Environment requirement

☐ Freshwater ☐ Brackish water (…….. PSU)

☐ Seawater (…….. PSU)

Temperature (°C) ……...……

Light ☐ Natural

☐ Additional light (Light cycle: Light …….h / Dark ..….h)

☐ Other…….…….

18.2.9 Water quality (pH/Do/Inorganic ion)

☐ Determine (please specify: ……..…….……..)

☐ Not determine

18.2.10 Food

Food type ☐ Natural food ☐ Artificial food

☐ Live feed ☐ Moist pellet

☐ Dry pellet ☐ Other ….....

Food source ☐ Vender …….. ☐ Other …….……..

Feeding frequency ☐ Time/day …… ☐ Ad libitum

☐ Other (…%/g body weight/day)

19. Duration of the Protocol (M/Y to M/Y): From…… To ……

20. Materials and Methods:

20.1 Experimental Design:

……

……

……

……

……

……

……

……

……

……

20.2 Materials/Instruments/Agents/Chemicals/Solvent/Solute/Vehicle (Please provide Brand and Manufacturer; If non-pharmaceutical grade compounds or new investigational compound will be used in animals, please also provide the information in 20.4.4)

……

……

……

……

……

……

……

……

20.3 Special Procedure and/or Instrument to Be Used with Animals (If applicable):

……

……

……

……

……

……

……

……

……

20.4 Animal Procedure:

……

……

……

……

……

……

……

……

……

……

……

20.4.1 Blood or body fluid withdrawal/tissue collection/injections, tail clip, gavaging:

☐ Injection

Anatomic location…….

Needle size/Catheter and length…….

Volume administered…….

Frequency (per day) ……

Chemical/Drug……

☐ Gavaging

Needle size/Catheter and length……

Volume administered……

Frequency……..

Chemical/Drug ……..…

☐ Blood withdrawal:

Anatomic location……...

Needle size/Catheter and length……

Volume collected…….

Frequency ……

☐ Body fluid withdrawal:

Anatomic location……...

Needle size/Catheter and length……

Volume collected…….

Frequency ……

☐ Tissue collection:

☐ Dead animal ☐ Alive animal

Anatomic location/organ(s)…….……

Needle size/Catheter and length……

Biopsy size……..…….…….

Frequency …….……

☐ Infusion:

Anatomic location……..…….

Needle size/Catheter and length……..…….

Volume administered……..…….

Frequency (per day) ……..……

Chemical/Drug……..……

☐ Other, please specify: …….....

20.4.2 Restraint with mechanical devices (in conscious animals):

☐ No

☐ Yes, please answer the following questions:

Describe device, duration of restraint, frequency of observation, condition procedures, and steps to assure comfort and well-being.

……..……..……..……

……..……..……..……

……..……...……..……

If prolonged restraint is used, justification must be provided ……..……

…….……

…….……

20.4.3 Protocol involving food and water deprivation, or dietary manipulation:

☐ No

☐ Yes, please answer the following questions:

☐ Individual animal's weight is monitored every……..days.

☐ Individual animal's weight is not monitored.

Item	Amount Restricted/Added	Duration	Compound Supplemented	Compound Deleted	Frequency
Food Restriction					

Fluid Restriction					
Nutrient Alterations					

20.4.4 Protocol involving the use of Non-Pharmaceutical Grade (NPG) compounds:

☐ No

☐ Yes, please provide the following information:

Scientific justification: …….

Purity: ……

Grade: ……

Sterility: …….

pH: …….

Pyrogenicity: …….

Osmolality: ……

Stability: ……

Compatibility: ……..

Method of preparation, labeling: …….

Storage condition: ……

Site and route of administration: ……..

Pharmacokinetics: ……

21. Surgery:

☐ No

☐ Yes, please answer the following questions:

21.1 Surgical Procedure is: ☐ Non-survival ☐ Survival ☐ One time ☐ Multiple ☐ Major surgery ☐ Minor surgery

21.2 Location/Room Number for Surgical Procedure Will be Conducted.

……..……..……

……..……..……

21.3 Surgeon/Qualification:

……..……..……

……..……..……

21.4 Procedure:

……..……..……..……

……..……..……

……..……..……

……..……..……

21.5 Detail the Provisions for Both Pre-and Post-operative Care

……..……..……

……..……..……

21.6 Describe Long-term Care of Any Chronic Survival Procedures

……..……..……

……..……..……

21.7 Multiple Survival Surgery Procedures: Please provide scientific justification

……..……...

……..……...

21.8 Who Will be Responsible for Post-surgical Care and Treatment?

……..……..……

22. Pain and Distress Assessment and Alleviation:

22.1 Pain or Distress Classification (USDA Classifications)

☐ Classification B

☐ Classification C

☐ Classification D

☐ Classification E

22.2 Justification for the Use of Animal in Classification E:

……..……

……..……

22.3 During the Study:

22.3.1 How often will the clinical condition of animals be monitored?

……..……

22.3.2 Who will monitor the clinical condition of the animals?

……..……..…

22.4 Are the Animals Expected to Experience Any Specific Study-induced Related Pain & Distress or Any Health Problems?

☐ No

☐ Yes, please describe the expected problems.

……..……

……..……

22.5 What Criteria Will be Used to Assess Pain, Distress, or Discomfort?

☐ Inactivity ☐ Loss of appetite

☐ Loss of mobility ☐ Red stain around the eyes of rats

☐ Unresponsiveness ☐ Labored breathing

☐ Restlessness

☐ Loss of weight: ☐5% ☐10% ☐15% ☐20% weight loss

☐ Abnormal resting postures, somnolence or hunched posture

☐ Licking, biting, scratching, or shaking a particular area

☐ Failure to show normal patterns of inquisitiveness

☐ Failure to groom, causing and unkempt appearance

☐ Guarding (protecting the painful area)

☐ Others, please specify…….....

23. Anesthetic/Analgesic:

23.1 Analgesic:

☐ No

☐ Yes, please answer the following questions:

23.1.1 Chemical method

Common Name	Drug Concentration	Dose	Route of Administration

23.1.2 Physical method, please specify…….

23.2 Anesthesia (Pre-anesthetic and Anesthetic):

☐ No

☐ Yes, please answer the following questions:

23.2.1 Chemical method

Anesthetic Name and (Commercial Name)	Drug Concentration	Dose	Route of Administration

23.2.2 Physical method, please specify…….……

23.2.3 Who is responsible for maintaining anesthesia…….....

23.2.4 Methods used to monitor anesthesia, frequency of monitoring……..…….....

……..……

……..……

……..……..…

23.2.5 What criteria will be used to assess level of anesthesia?

☐ Respiration rate ☐ Heart rate

☐ Toe pinch ☐ Tail pinch

☐ Corneal reflex ☐ Color of mucous membrane

☐ Others please, specify……..…..…..…….

23.2.6 Describe post-anesthetic treatment or intervention …….....

……..……

……..……

……..……

24. Animal Transport and Use Outside Facilities:

☐ No

☐ Yes, please answer the following questions:

24.1 Provide the Reason ……

24.2 Where the Animal Will be Used? ……..……

24.3 Duration of Animal be Outside the Facilities …….……..…

24.4 Methods of Transportation ……..……..……..……

24.5 Will the Animal be Returned to the Facilities? ……..……

☐ No

☐ Yes (please follow CULAC SOP)

24.6 Will the Animal be Euthanized at the Destination? …….……

☐ No

☐ Yes

25. Experimental Endpoint:

25.1 Study Endpoint: Please specify

…….…….....…….....…….....

……..…….

25.2 Early Endpoint/Humane Endpoint:

☐ No

☐ Yes, please specify: ……………….……………………..................……......……........

……………………………..………………………………………………………................…

25.3 Justification of Dead as an Endpoint: ……………………..…………………………………

……………………………..………………………………………………………................…

26. Disposition of Animals After Completion of Activity:

☐ Euthanized

☐ Return to owner/ production / breeding unit / facility inventory

(please justify)..……………………………….…….….…

☐ Transfer to another research project:

(please list protocol number; PI; and justification) ……………………………………………...

☐ Others, please describe………………………………………….……………………….……….

27. Euthanasia (If applicable):

27.1 Methods and Reference(s): ……………………………………………….………………

……………………………..………………………………………………………..............…….........……......

……………………………..………………………………………………………..............………......……......

27.2 Chemicals/Drugs Used for Euthanasia

Common Name	Dose	Route of Administration	Other (please describe)

27.3 Physicals, please specify: ………………………………………………….……………………

27.4 Where Animal be Euthanized: ……………………….………………….…...…………

27.5 Confirm of Euthanasia:

(Regardless of the method of euthanasia, indicate how death will be confirmed)

☐ Not applicable ☐ Absence of cardio-vascular function

☐ Create pneumothorax ☐ Decapitation

☐ Removing vital organs ☐ Exsanguination

☐ Cervical dislocation ☐ Other (please describe): ……………………………

28. Necropsy:

☐ No

☐ Yes, please specify: ……………………………………………………………………...........

……………………………..………………………………………………..............……......……......

……..…….....……..…

……..…….....……..

29. Carcass and Waste Disposal:

29.1 Carcass disposal:

☐ No

☐ Yes, please specify: …….....

……..…….....……..….....

……..…….....……..….....

……..…….....……..….....

29.2 Waste disposal:

Please describe how will contaminated materials be decontaminated and disposed.

….....…

.....

.....

.....

.....

Please explain how will the contaminated carcasses be disposed after termination (if applicable):

….....

.....

.....

.....

.....

30. Is the Study Involving the Use of Pathogen, Biological Toxin, Animal Toxin?

☐ No

☐ Yes, please provide details below.

30.1 Protocol Title

……..

30.2 Pathogen and toxin Identification:

30.2.1 Please specify any pathogen, biological toxin, animal toxin or radioactive to be used in this protocol. List each biohazard in the appropriate box (including genus, species, strain, subtype)

☐Virus: ……..……

☐ Bacteria: ……..……

☐ Rickettsia: ……..……

☐ Fungi: ……

☐ Parasite: ……..……

☐ Biological toxin: ……..

☐ Cell line: ……

☐ Animal toxin: …….

☐ Human source material: ……

☐ Recombinant agent(s): ……...……

☐ Hazardous chemical(s)/carcinogen(s)/radioactive material(s): ……

30.2.1 Please specify all possible highly contagious and/or zoonotic pathogens, which might involve in the protocol (for example, cell line containing human or primate virus, ex. HEK293T, which contain Simian Virus 40, etc.): ……..

30.3 Risk Group (refer to the levels of risk in pathogens and animal toxins list in Pathogens and Animal Toxins Act, B.E.**2558 (2015)**):

Pathogen and Biological Toxin:	☐ Risk Group 1	☐ Risk Group 2
	☐ Risk Group 3	☐ Risk Group 4
Animal toxin:	☐ Risk Group 1	☐ Risk Group 2
	☐ Risk Group 3	

If the pathogen or toxin is not on the list, please provide currently available biosafety detail such as LD50.

30.4 Descriptive Summary: (please provide a detailed procedure of the proposed protocol (only the protocol that will be conducted at CU LAC), including descriptions of methodologies, definitions of all acronyms and a list of recombinant DNA construct (if applicable))

.....

.....

.....

.....

.....

30.5 Place of experiment: (please specify activity and containment level according to ประกาศกระทรวงสาธารณสุข เรื่อง ลักษณะของสถานที่ผลิตหรือมีไว้ในครอบครอง และการดำเนินการเกี่ยวกับเชื้อโรคและพิษจากสัตว์ พ.ศ. 2561)

Laboratory room number: …… Biosafety level: ……...…

Activity:……

Laboratory room number: …… Biosafety level: ……...…

Activity:……

Laboratory room number: …… Biosafety level: ……...…

Activity:……

30.6 Transport of pathogen and toxin: (please provide a detailed procedure of how will pathogen or toxin be transported to CU LAC according to ประกาศกระทรวงสาธารณสุข เรื่อง การขนส่ง การส่งมอบ การทำลาย และการทำให้สิ้นสภาพเชื้อโรคและพิษจากสัตว์ พ.ศ. 2561

.....

.....

.....

.....

.....

30.6.1 Will you transfer any contaminated animal materials, including blood, body fluid, tissues, organs etc. to other laboratories?

☐ No

☐ Yes, from……to…….

please provide containment details below according to ประกาศกระทรวงสาธารณสุข เรื่อง การขนส่ง การส่งมอบ การทำลาย และการทำให้สิ้นสภาพเชื้อโรคและพิษจากสัตว์ พ.ศ. 2561

.....

.....

.....

.....

.....

30.7 Exposure Assessment and Personal Protective Equipment (PPE):

30.7.1 Please describe possible occupational and environmental consequences (i.e. symptoms in affected persons/animals, impact on plants, crops, and livestock in surrounding areas, etc.), if a loss of containment or spill of the agent were to occur, and humans, animals, or plants in the immediate or surrounding area were exposed

.....

.....

.....

.....

30.7.2 Please indicate the Personal Protective Equipment (PPE) that will be used:

☐ Gown ☐ Gloves

☐ Mask ☐ Safety glasses

☐ Shoe cover ☐ Hair bonnet

☐ Tyvek ☐ Other, please specify ……..

30.7.3 Please indicate how will the PPE be decontaminated, laundered or disposed:

.....

.....

.....

30.7.4 Occupational Exposure Assessment

☐ Injection/Needle stick ☐ Inhalation

☐ Splash ☐ Ingestion

☐ Cut/Abrasion ☐ Other, please specify: …….

Which of the following present exposure risks to the investigator or animal?

(check at least one)

☐ Aerosols ☐ Animal bite/Scratch

☐ Bedding ☐ Blood

☐ Feces ☐ Saliva

☐ Urine ☐ Contact with lesions on the animal

☐ Mucous membrane contacts with secretions or excretions

☐ Other, please specify …….……...

30.7.5 Please provide a procedure in case of accidental exposure?

.....

.....

.....

30.7.6 Please list relevant occupational medical health provision (if applicable):

….....

.....

.....

.....

.....

30.7.7 Will it be necessary to vaccinate workers against the pathogen? If so, please describe the vaccination plan**:**

.....

.....

.....

.....

PRINCIPAL INVESTIGATOR ASSURANCES	
Protocol Number:	**Approval Date:**

1. I agree to abide by Animal for Scientific Purposes Act and all relevant institutional policy and regulations regarding animal care and use at Chulalongkorn University.
2. Should I use the work described in this protocol for a proposal for funding, I assure the description of the animal use in such funding proposal to be identical to that contained within this protocol.
3. I understand that the use of hazardous agents may only be initiated after approval from the IACUC, Institutional Biosafety Committee (IBC), and/or Environmental health and Safety.
4. I assure that I will complete and submit "AUP for Renewal" prior to the annual anniversary of protocol approval to avoid expiration of such approval and cessation of all research activities.
5. I declare that to the best of my knowledge the work described in this protocol does not unnecessarily use animals nor is unnecessarily duplicative of previous work. I am aware of the principles of "replacement, reduction, and refinement," and assure that I have sought alternatives to animal use.
6. I assure that the work described within this protocol will not be initiated until notification of IACUC approval has been received.
7. I assure that I will notify IACUC of any proposed changes regarding the work described within this protocol and agree that no such changes will be implemented until approved by the IACUC (except where absolutely necessary to eliminate apparent immediate hazards to individual(s) and/or animal(s)).

I verify that the information provided in this Animal Use Protocol is accurate and complete. I understand that as Principal Investigator I have ultimate responsibility for the ethical performance of the research, the welfare of the animals involved, and strict adherence to any condition imposed by the IACUC.

Principal Investigator	**Signature**	**Date**

	PERSONNEL FORM **CHULALONGKORN UNIVERSITY LABORATORY ANIMAL CENTER** **ANIMAL CARE AND USE PROTOCOL (CULAC-ACUP)**

OFFICE USE	**DATE RECEIVED:**	**APPROVAL DATE:**	**PROTOCOL NUMBER:**

Section I: Protocol Information

Principal Investigator: _____

Title of Project: _____

Section II: Status

☐ **Principal Investigator** ☐ **Co-Investigator** ☐ **Personnel**

Name: …….....

Degree: ……... Position: …….

Animal User ID: | U | | - | | | | | - | | | | |

CULAC Animal User ID: | | | / | | | | / | | | / | | | |

Department: ……..

Faculty/Institute: ……...

Tel: ……. Fax: …….

E-mail: ……..

Responsibility**: ……...**

Section III: Handling of animals and procedures

List all species this individual will be handling and all procedures this individual will be performing under this protocol. Indicate **N/A** only if the individual will have **no animal contact** under protocol.

SPECIES			
_____	☐ Animal Handling	☐ Animal Husbandry	☐ Anesthesia
	☐ Behavior Test	☐ Euthanasia	☐ Field Observation

_____	☐Injection/Fluid Withdrawal	☐Non-Survival Surgery	☐Perfusion
_____	☐Tissue Sampling	☐Trapping/Tagging	☐Survival Surgery
_____	☐Other(s), please specify ……..……..		

Section IV: Experience and Training *(Attached Certificate of Training, if applicable)*

Describe this individual's experience and training in regards to the species involved and the procedures performed under this protocol.

……...

……...

……...

……...

……...

……...

Section V: Personnel Assurances

I verify that the information provided in this personnel form is accurate and complete. I understand that, along with the Principal Investigator, I have a responsibility for the ethical performance of the research, the welfare of the animals involved, and adherence to any IACUC imposed conditions.

……	……	…….
Name	Signature	Date

AMENDMENT REQUEST FORM

CHULALONGKORN UNIVERSITY LABORATORY ANIMAL CENTER

ANIMAL CARE AND USE PROTOCOL (CULAC-ACUP)

OFFICE USE	DATE RECEIVED:	APPROVAL DATE:	DATE EXPIRED:

Section I: Protocol Information

Principal Investigator:_____ Protocol Number: _____

Title of Project: _____

Section II: Requested Changes (Choose all that pertain)

- ☐ Animal Species
- ☐ Number of Animals
- ☐ Experimental Procedure
- ☐ Change in Anesthetics, Analgesics
- ☐ Change in Endpoint Criteria
- ☐ Pain or Distress
- ☐ Principal Investigator/Co-investigator
- ☐ Other

Section III: Requested Change Summary (Complete the item for each requested change above)

1. **Additional Animal Species:** [Please provide a) the reason for additional species; b) the determination that the new species is the most appropriate; c) how this new species connects with those previously approved.]

2. **Number of Animals:** [Please provide a) reason for requesting additional animals, and b) description of how this number was derived (i.e. statistical basis, current standards in literature, specialized experimental requirements).]

3. **Experimental Procedures:** [please provide a) description of changes (i.e. surgical procedures, # of blood draws, etc) and b) how they relate to work originally approved. Attach addition page if necessary.]

4. **Change in Anesthetics, Analgesic:** [Please provide agent name, dose, method of administration, volume of administration and time of use (i.e. pre-op, op, post-op) and provide rationale for change.]

5. **Endpoint Criteria:** [Please provide revised Endpoint Criteria appropriate for the amendment requested if the criteria given in the original protocol are insufficient.]

6. **Pain and Distress:** [Please provide methods for recognizing and alleviating any additional pain and distress not described in the original protocol. Also provide search for alternatives to this painful or distressful procedure.]

7. **Complete only if there is a change from the original approval**

☐ Principal Investigator ☐ Co-Investigator ☐ Personnel

Name: ……..…….....

Degree: ……... Position: …….

Department: ……...……..

Faculty/Institute: ……...……...

Tel: ……. Fax: …….

E-mail: ……...……..

8. Other, please describe:

Section IV: Assurance

The above information is accurate, and the assurances given in my original application are still valid. Any changes involving the use and care of animals for research and/or teaching may not be made without prior IACUC approval.

…….. …….

Signature of Principal Investigator Date